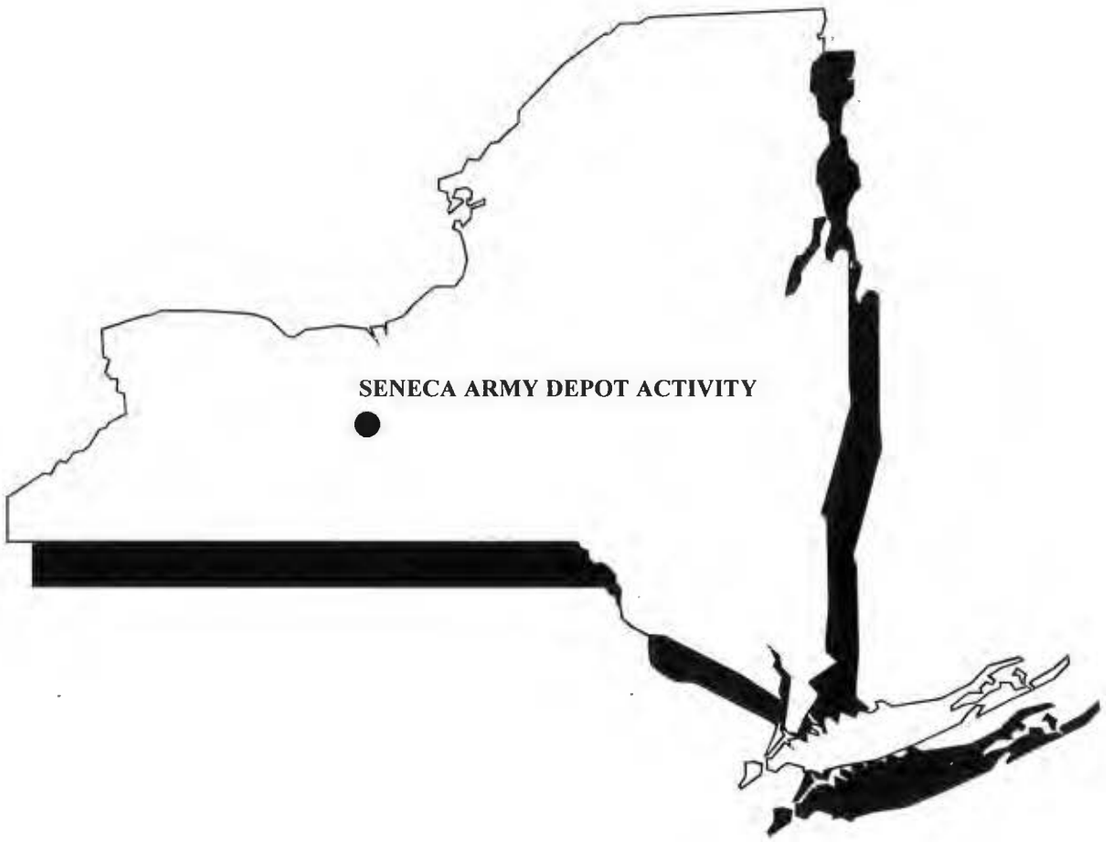
U.S. ARMY ENGINEER DIVISION
HUNTSVILLE, ALABAMA

00749

36



FINAL

REMEDIAL INVESTIGATION REPORT AT THE RADIOLOGICAL WASTE BURIAL SITES (SEAD-12) VOLUME II OF III - APPENDICES A THROUGH G

CONTRACT NO. DACA87-95-D-0031
DELIVERY ORDER NO. 0005

REVISED AUGUST 2002

SENECA ARMY DEPOT ACTIVITY
REVISED FINAL RI REPORT – AUGUST 2002
Instructions to Complete Edit/Update to Revised Final Document

Please find enclosed the following items to update the February 2002 final document to the August 2002 revised final document.

A. Update cover and spine for the Remedial Investigation Report.
B. Contents: Reissued content pages x, xix, and xiv. Replace previous pages. Replace the front pages of Volume II and Volume III with page xiv.
C. Section 7: Reissued Tables 7-2 through 7-8. Replace the previous tables. Reissued Section 7 starting from page 7-34 (including Table 7-9). Replace the previous pages (page 7-34 through the end of Section 7).
D. Appendix M: Reissued the cover pages and Tables M.106 through M.115. Replace the previous Tables M.106 through M.111.
E. Appendix N: Please add the tab for Appendix N between the last page of the field notes in Appendix M and the first page of response to comments (response to August 1, 2000 Comments)
F. Please add the responses to comments dated August 27, 2002 to the end of Appendix N.

If you have any questions please contact Jacqueline Travers at (781) 401-2535.

PARSONS

30 Dan Road • Canton, Massachusetts 02021 • (781) 401-3200 • Fax: (781) 401-2575 • www.parsons.com

August 28, 2002

Commander
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
ATTN: CEHNC-FS-IS (Marshall Greene)
4820 University Square
Huntsville, AL 35816-1822

SUBJECT: **Seneca Army Depot Activity – Revised Final Remedial Investigation Report for Building 804 and Associated Radioactive Waste Burial Sites (SEAD-12)**
Contract DACA87-95-0031

Dear Mr. Greene:

Parsons is pleased to submit responses to comments from USEPA on the Final Remedial Investigation Report for Building 804 and the Associated Radioactive Waste Burial Sites (SEAD-12) at the Seneca Army Depot Activity located in Romulus, New York dated July 2002. Please find enclosed replacement pages to update the RI report and Appendices. Instructions are provided.

This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 0005 to the Parsons Contract DACA87-95-0031.

Parsons appreciates the opportunity to provide you with this report. Should you have any questions regarding these replacements to the final document, please do not hesitate to call me at (781) 401-2535 to discuss them.

Sincerely,

Jacqueline Travers

Jacqueline Travers, P.E.
Task Order Manager

cc: S. Absolom, SEDA
J. Mullikin, USACHPPM
T. Sydelko, Argonne Nat'l Lab
Document Distribution, MRD
K. Healy, USACE
K. Hoddinott, USACHPPM
T. Enroth, USACE
C. Kim, USAEC
B. Wright, USAIOC

PARSONS ENGINEERING SCIENCE, INC.
30 Dan Road • Canton, Massachusetts 02021-2809 • (781) 401-3200 • Fax: (781) 401-2575

February 11, 2002

Commander
U.S. Army Corps of Engineers
Engineering and Support Center, Huntsville
ATTN: CEHNC-FS-IS (Marshall Greene)
4820 University Square
Huntsville, AL 35816-1822

SUBJECT: Seneca Army Depot Activity – Revised Final Remedial Investigation Report for Building 804 and Associated Radioactive Waste Burial Sites (SEAD-12).

Dear Mr. Greene:

Parsons Engineering Science (Parsons) is pleased to submit responses to comments from USEPA on the Final Remedial Investigation Report for Building 804 and the Associated Radioactive Waste Burial Sites (SEAD-12) at the Seneca Army Depot Activity located in Romulus, New York dated November 2001. Please find enclosed replacement pages to update the RI report and Appendices. Instructions are provided.

This work was performed in accordance with the Scope of Work (SOW) for Delivery Order 0005 to the Parsons ES Contract DACA87-95-0031.

Parsons appreciates the opportunity to provide you with this report. Should you have any questions regarding these replacements to the final document, please do not hesitate to call me at (781) 401-2535 to discuss them.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.

Jacqueline Travers

Jacqueline Travers, P.E.
Task Order Manager

cc: S. Absolom, SEDA
J. Mullikin, USACHPPM
T. Sydelko, Argonne Nat'l Lab
Document Distribution, MRD
K. Healy, USACE
K. Hoddinott, USACHPPM
T. Enroth, USACE
C. Kim, US AEC
B. Wright, USAIOC

P:\PIT\Projects\SENECA\S12RI\REPORT\Final_Feb_02\CVRLTRD2.DOC

PARSONS

SENECA ARMY DEPOT ACTIVITY
REVISED FINAL RI REPORT – FEBRUARY 2002
Instructions to Complete Edit/Update to revised final document

Please find enclosed the following items to update the November 2001 final document to the February 2002 revised final document.

A. Update cover and spine for the Remedial Investigation Report.
B. Contents: Reissued content pages x and xix. Replace previous pages.
   Reissued all the reference pages. Replace the previous pages.
C. Section 7: Reissued Table 7-2. Replace the previous table.
   Reissued Section 7 starting from page 7-33 (including Table 7-9).
   Replace the previous pages (page 7-33 through the end of Section 7).
D. Appendix G: Reissued Table G-1. Replace the previous table.
E. Appendix M: Reissued the cover pages and Tables 18, 19, 23, 40, 44, 60, 61, 99, 102, 103, and 106-111. Replace the previous tables and discard Tables 112-117.
F. Please add the responses to comments to the end of Appendix N.

If you have any questions please contact Jacqueline Travers at (781) 401-2535.

SENECA ARMY DEPOT ACTIVITY
FINAL RI REPORT – NOVEMBER 2001
Instructions to Complete Edit/Update to revised final document

Please find enclosed the following items to update the January 2001 draft final document to the November 2001 final document.

A. Update cover and spine for the Remedial Investigation Report.
B. Contents: Reissued Contents. Replace previous Contents.
C. Section 4: Reissued Pages 110 and 118. Replace previous pages.
D. Section 6: Reissued Page 6-68, Table 6-5A, and all the sections (including tables) following Section 6.3.5.5 (including Section 6.3.5.5, Page 6-94). Replace previous pages and tables.
E. Section 7: Reissued Section 7. Replace previous section.
F. Appendix G: Reissued one cover page and Figure G-1. Replace previous cover page and insert Figure G-1 to the end of the cover pages.
G. Appendix L: Reissued Tables L-3A, L-3B, L-3C, L-3D, L-3E, L-3F, L-3G, L-3H, L-4A, L-4B, L-4C, L-4D, L-4E, L-4F, L-4G, L-4H, L-8, and L-9. Replace previous tables.
H. Appendix M: Reissued the cover pages and tables M.40 through M.117. Replace previous cover pages and tables.
I. Please add the responses to comments to the end of Appendix N.

If you have any questions please contact Jacqueline Travers at (781) 401-2535.

PARSONS ENGINEERING SCIENCE, INC.

30 Dan Road • Canton, Massachusetts 02021-2809 • (781) 401-3200 • Fax: (781) 401-2575

February 13, 2001

Mr. Julio Vazquez
USEPA Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Ms. Alicia Thorne
New York State Department of Environmental Conservation (NYSDEC)
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, NY 12233-7010

SUBJECT: **Seneca Army Depot Activity - Draft Final Remedial Investigation Report for Building 804 and Associated Radioactive Waste Burial Sites (SEAD-12) - Replacement Section 6 and Replacement Pages to Appendix L.**

Dear Mr. Vazquez/Ms. Thorne:

Parsons Engineering Science (Parsons ES) is submitting a replacement Section 6 to the Draft Final Remedial Investigation Report for Building 804 and the Associated Radioactive Waste Burial Sites (SEAD-12) at the Seneca Army Depot Activity located in Romulus, New York. The draft final report was sent to you on February 2, 2001.

Parsons ES inadvertently sent an earlier version of Section 6 with the draft final report you received last week. This version did not adequately address US EPA's specific comment #4 on the human health risk assessment, concerning the exposure pathways considered in the risk assessment. The enclosed replacement Section 6 has been modified to address US EPA's comment. In addition, replacement pages for Appendix L are provided as well as an updated response to US EPA's comment.

Should you have any questions concerning these replacements to the draft final document, please do not hesitate to call me at (781) 401-2492 to discuss them.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.

Madeline Davis/fgs

Michael Duchesneau, P.E.
Project Manager

Cc: S. Absolom, SEDA
K. Hoddinott - USACHPPM
J. Mullikin - USACHPPM
Document Distribution, MRD
T. Enroth, USACOE – NY District
Maj. Sheets, USACOE
C. Kim, USAEC

P:pit\projects\Seneca\s12ri\report\draftfinal\cvrltrd2.doc
02/13/01

PARSONS

SENECA ARMY DEPOT ACTIVITY
DRAFT FINAL - REMEDIAL INVESTIGATION REPORT - February 2001
Instructions to Complete Edit/ Update to draft final document

Please find enclosed the following items to update the February 2001 draft final document:

1) Section 6, reissued in total. Disregard previous Section 6.

2) Appendix L, reissued tables L-R1 through L-R11. This is the section of tables at the end of Appendix L after the blue divider sheet. Disregard previous L-R1 through L-R12 tables.

3) Section 8, reissued Figure 8-3. Disregard previous Figure 8-3.

4) The Updated Response to Specific Comment #4 on the Human Health Risk Assessment should be added to the end of Appendix N.

If you have any Questions please contact Jacqueline Travers (781-401-2535) or Clifford Lippitt (781-401-2272)

PARSONS ENGINEERING SCIENCE, INC.

30 Dan Road • Canton, Massachusetts 02021-2809 • (781) 401-3200 • Fax: (781) 401-2575

February 2, 2000

Mr. Julio Vazquez
USEPA Region II
Superfund Federal Facilities Section
290 Broadway, 18th Floor
New York, NY 10007-1866

Ms. Alicia Thorne
New York State Department of Environmental Conservation (NYSDEC)
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, NY 12233-7010

SUBJECT: **Seneca Army Depot Activity - Draft Final Remedial Investigation Report for Building 804 and Associated Radioactive Waste Burial Sites (SEAD-12).**

Dear Mr. Vazquez/Ms. Thorne:

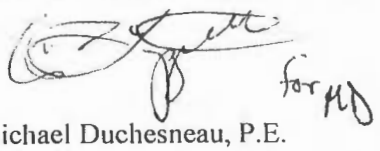
Parsons Engineering Science (Parsons ES) is pleased to submit the Draft Final Remedial Investigation Report for Building 804 and the Associated Radioactive Waste Burial Sites (SEAD-12) at the Seneca Army Depot Activity located in Romulus, New York.

In addressing comments from US EPA and NYSDEC, we are re-issuing Volume 1. Three replacement appendices (part of G, L, M) and one new appendix (N) have also been re-issued. Instructions for updating the RI document are attached.

Should you have any questions, please do not hesitate to call me at (781) 401-2492 to discuss them.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.



Michael Duchesneau, P.E.
Project Manager

Cc: S. Absolom, SEDA
K. Hoddinott - USACHPPM
J. Mullikin - USACHPPM
Document Distribution, MRD
T. Enroth, USACOE – NY District
Maj. Sheets, USACOE
C. Kim, USAEC

LIST OF APPENDICES

Appendix A	Radiation Scanning Survey
Appendix B	Field Logs
Appendix C	Survey Data
Appendix D	Hydraulic Conductivity Results
Appendix E	RESRAD Model Inputs and Output for DCGL Development (RESRAD Backup for Risk Assessment is found in Appendix L)
Appendix F	Radiation (Gamma) Scanning Survey
Appendix G	Background and Phase I RI Data Soil Chemical Inorganics Data-Soil
Appendix H	Background, Phase I RI Chemical and Radiological Data-Sediment
Appendix I	Background, Phase I RI Chemical and Radiological Data-Surface Water
Appendix J	Background, Phase I RI Chemical and Radiological Data-Ground Water
Appendix K	Soil Gas Data
Appendix L	Human Health Risk Assessment Calculation Tables
Appendix M	Ecological Risk Assessment

APPENDIX A

RADIATION SCANNING SURVEY

- CERTIFICATES OF INSTRUMENTATION & SOURCE CALIBRATION
- DAILY FUNCTION CHECK PROCEDURE
- DAILY FUNCTION CHECK LOGS

- **CERTIFICATES OF INSTRUMENTATION & SOURCE CALIBRATION**

DEPARTMENT OF THE ARMY
UNITED STATES ARMY MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA

REPLY TO
ATTENTION OF

AMSAM-TMD-SRN

U.S. Army Primary Standards Laboratories
Radiation Standards and Dosimetry Laboratory

REPORT OF CALIBRATION

Radiation Survey System

Consisting of

Bicron Model ANALYST Survey Meter, S/N A983P
Bicron Model G5 FIDLER Probe, S/N A394Q

For

Radiological Assistance Team - Seneca
5786 State Route 96
Romulus, NY 14541-5001

The instrument was electronically calibrated using a Ludlum Model 500 pulse generator, then checked with ^{241}Am and ^{226}Ra sources with calibration traceable to the National Institute of Standards and Technology (NIST). This instrument calibration, traceable to NIST, has an uncertainty of +/- 10 percent.

Steve Rogers
Team Leader, Nucleonics Section
In Charge of Calibration
DSN 746-1302

Calibration Rept No. W0MGAA200R
Date: 14 August 1997

Richard McGeorge
Rad Stds and Dos Lab
U.S. Army Pri Stds Lab Dir

CALIBRATION RESULTS

Electronic Calibration

Meter Range	Applied (CPM)	Init Meter Reading	Adjust? (Y/N)	Final Meter Reading	Corr Factor	Avg Corr Factor
1000	400K			410K	0.98	0.99
	100K	90K	Y	100K	1.0	
100	40K	39K			1.03	1.015
	10K	10K	N		1.0	
10	4K	3.9K			1.03	1.015
	1K	1.0K	N		1.0	
1	400	390			1.03	1.015
	100	100	N		1.0	

CALIBRATION RESULTS

Radioactive Source Checks

The activity of the ^{241}Am source is 7 μCi. The activity of the ^{226}Ra source is 10 μCi. The distance from the source to the bottom face of the probe was 12 inches. The cardboard protective cover (if present) was removed from the probe face.

1. ^{241}Am: Analyzer switch set to Channel 1

Gross Count Rate:	109	KCPM
Background Count Rate:	6.6	KCPM
Net Count Rate:	102.4	KCPM
Detector Sensitivity:	14.64 KCPM / μCi	

2. ^{226}Ra: Analyzer switch set to Channel 2

Gross Count Rate:	34.2	KCPM
Background Count Rate:	0.7	KCPM
Net Count Rate:	33.5	KCPM
Detector Sensitivity:	3.35 KCPM / μCi	

3. ^{241}Am and ^{226}Ra together: Analyzer switch set to Out

Gross Count Rate:	272	KCPM
Background Count Rate:	7.4	KCPM
Net Count Rate:	264.6	KCPM

$17\ \mu Ci = 3.774 \times 10^7$ dpm

3.774×10^7 dpm

1 dpm = 142.65 dpm

No ^{241}Am activity was identified with the analyzer set to channel 2.

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
19 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(203) 228-0721 Fax (203) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 12**	Inst. Type **Count Rate Meter**	Inst. s/n **102850**
Det. Mfr. & Model **Ludlum 44-62-2**	Type **Gamma Scintillator**	Det. s/n **144955**
Cal. Date **29 September 1997**	Due Date **29 March 1998**	Cal. Interval **6 Months**

Environmental conditions: Temperature: 79°F Relative Humidity 48% Atmospheric Pressure 28.67 inches Hg

Pre-calibration Checks:

■ Contamination survey	■ Battery check	■ Slow response check	
■ Mechanical check	■ Audio check	□ Window operation	■ Det. volts 950 Vdc
■ Meter zero	■ Reset check	■ Plateau check	
■ Geotropism check	■ Fast response check	□ Alarm set	■ Input sens. 10 mV

■Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■HV Readout (2 points) Ref./Inst. 500V/ 500V Ref./Inst. 1500V/ 1500V

Comments: **Local background ≈ 900 cpm. Response to ^{137}Cs ≈ 66 cpm per mR/h. Response to ^{226}Ra ≈ 15 cpm per mR/h. Check source (^{137}Cs #4) ≈ 24,000 cpm in contact with "yellow" side of source.**

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? □Yes ■No
Reading #1 17,000 cpm Reading #2 17,000 cpm Reading #3 17,000 cpm Mean 17,000 cpm
Precision: ■± <10% □±10-20% □Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	Instrument Efficiency (%)
x 10	I-125 (mock) #NES-186S-081963	129,870	1,200	0.23%
x 1000	Co-57 #DZ 994 (point source)	11,877,000	440,000	3.7%
x 100	Ba-133 #1652 (wide source)	1,422,646	39,000	2.7%
x 100	Cs-137 #A745 (wide source)	2,489,119	26,000	1.0%
x 10	Cs-137 #2887 (point source)	153,652	2,800	1.2%
N/A	Ra-226 (calculated for wide source)	N/A	N/A	0.22%
N/A	Ra-226 (calculated for point source)	N/A	N/A	0.26%

RSA Laboratories ID# **1527**. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Paul R. Steinmeyer Date 29 Sept 97

Reviewed by: Date 30 Sept 97

U. S. ARMY TMDE SUPPORT CENTER
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
ALPHA AND X-RAY SURVEY METER

MODEL: AN/PDR77 SERIAL NO.: 0034A
ALPHA DETECTOR MODEL: DT-669/PDR-77 SERIAL NO.: 0034A
X-RAY DETECTOR MODEL: DT-674/PDR-77 SERIAL NO.: 0034A
SUBMITTED BY: W45916

This instrument was calibrated in accordance with TB9-6665-285-15 Army Calibration Program for Radiac Meters, TM11-6665-248-10 Operators Technical manual for Radiac Calibrator AN/UDM-6, and USATA 858 Calibration Procedure for Radiac Set AN/PDR-77.

The reference standards for this calibration are:
a. AN/UDM-6, Pu^{239}, 5.12 MeV Alpha, serial number A-1045.
b. AN/UDM-11, AM^{241}, 17 KeV and 60 KeV X-Ray, serial number EN468.

The measurements were performed under ambient conditions of approximately 20 degrees Celcius and 35 percent relative humidity.

Calibration uncertainty, including measurement errors and accuracy of reference standard(s), is estimated to be +/- 10 %.

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Report No. W45916-708D
Cal Date: 03 April 1997
Cal Due: 30 September 1997
Phones: DSN 795-7255/7820
Comm (717) 895-7255/7820

THOMAS E. DAVIS
LRPO
USATSC-Tobyhanna

CRAIG A. GREDLEIN
Chief, ACL
USATSC-Tobyhanna

Alpha Probe (DT-669/PDR-77)

Radionuclide: Pu-239 Serial No. 0034A

Applied	Reading	Correction Factor
44.8 K-cpm	44.7 K-cpm	1.0022
7.37 K-cpm	6.50 K-cpm	1.1338
471 cpm	410 cpm	1.1488
* Check Source	5.03 K-cpm	N/A

** Check Source (TH-232) measurement obtained with Alpha Side up, centered, and flush against the detector.*

X-Ray Probe (DT-674/PDR-77)

Radionuclide: Am-241 Serial No. 0034A

Energy Select Position	Source Position	*Applied	*Reading	Correction
17 KeV	** Center	25.7 K-cpm	25.2 K-cpm	1.0198
17 KeV	***	Check source	1.26 K-cpm	N/A
60 KeV	** Center	45.8 K-cpm	45.3 K-cpm	1.0110
60 KeV	***	Check Source	2.93 K-cpm	N/A

Recorded values INCLUDE local background at TSC-Tobyhanna. Local backgrounds at time of test were:

17 KeV: 0.298 K-cpm 60 Kev: 1.11 K-cpm

*** Center measurements were obtained 12 inches directly above source.*

**** Check Source (Th-232) neasurement obtained with X-Ray side up, centered, and flush against detector.*

Report No. W45916-708D
Cal Date: 03 April 1997
Cal Due: 30 September 1997

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: IM263 AN/PDR77 SERIAL NO: 0034A
DETECTOR MODEL: DT616/VDR2 DETECTOR SERIAL NO: 0034A
SUBMITTED BY: W45916

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

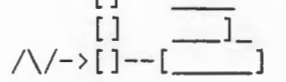
GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: TSC-SENECA OUIC: W45916 PUIC: W459TD
Manufacturer: IM263 Meter Mdl: AN/PDR77 SERIAL NO: 0034A

DETECTOR TYPE: G-M MODEL #: DT616/VDR2 SERIAL # 0034A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137

CHECK SOURCE: NO DEDICATED SOURCE INDICATES:
FLUSH AGAINST DETECTOR: DISTANCE: 0 CM BATTERY CHECK: OK

GEOMETRY



WINDOW: CLOSED

METER RANGE	APPLIED UNITS MR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
Low mR	0.0800	0.0000		0.0830	0.9638	0.9745
	0.8000	0.0000		0.8120	0.9852	
Low mR	8.0000	0.0000		8.1400	0.9828	0.9914
	20.0000	0.0000		20.0000	1.0000	
Low mR	80.0000	0.0000		80.3000	0.9962	1.0244
	200.0000	0.0000		190.0000	1.0526	
Low R	2.0000	0.0000		2.0000	1.0000	.N/A
High R	8.0000	0.0000		7.8200	1.0230	1.0296
	20.0000	0.0000		19.3000	1.0362	
High R	80.0000	0.0000		80.7000	0.9913	0.9931
	200.0000	0.0000		201.0000	0.9950	

*NOTE: Meter indications in MR/HR

High Voltage: Sensitivity:
DEAD TIME: Cal constant: Date Calibrated: 3 Apr 97
Calibration Report No. W45916708D Calibration Due:30 Sep 97

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 3**	Inst. Type **Survey Meter**	Inst. s/n **94360**
Det. Mfr. & Model **Ludlum 44-9**	Det. Type **G-M Pancake**	Det. s/n **092307**
Cal. Date **17 October 1997**	Due Date **17 April 1998**	Cal. Interval **6 months**

Environmental conditions: Temperature: 70°F Relative Humidity 43% Atmospheric Pressure 29.53 inches Hg
Pre-calibration Checks:

■ Contamination survey	■ Battery check	■ Slow response check	
■ Mechanical check	■ Audio check	□ Window operation	■ Det. volts 900 Vdc
■ Meter zero	■ Reset check	□ Plateau check	
■ Geotropism check	■ Fast response check	□ Alarm set	■ Input sens. 33 mV

■ Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
□ HV Readout

Comments: **Th-230 efficiency determined with source in near-contact with detector grill. Local background ≈ 50 cpm.**

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? □Yes ■No
Reading #1 30,000 cpm Reading #2 30,000 cpm Reading #3 30,000 cpm Mean 30,000 cpm
Precision: ■± <10% □± 10-20% □Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm

All ranges calibrated electronically.

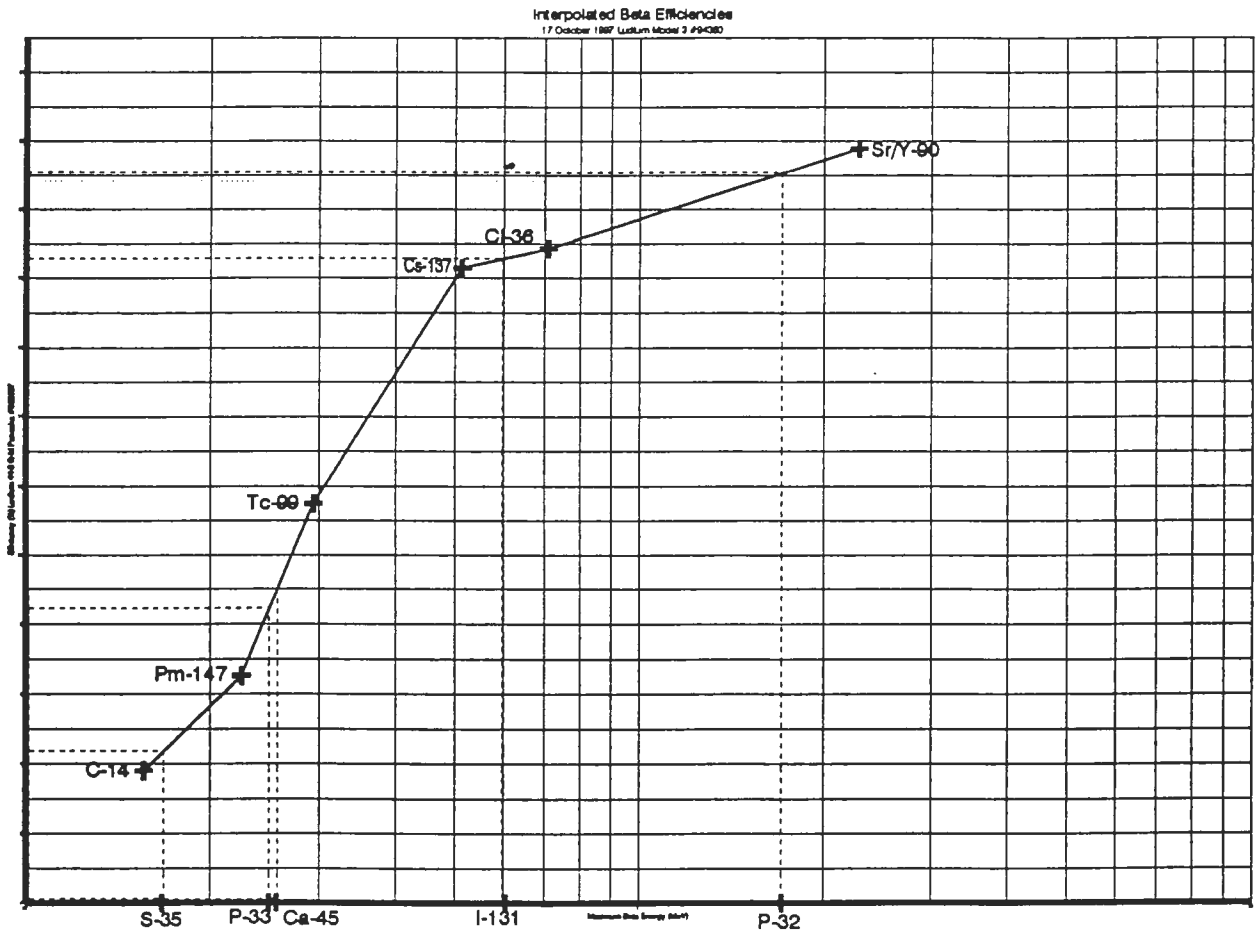
Local background (cpm) ≈ 50

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	C-14 #D699	208,620	8000	3.81
x 1	Pm-147 #D703	16,101	1100	6.52
x 1	Tc-99 #D702	23,064	2700	11.49
x 1	Cs-137 #2886	21,039	3900	18.30
x 1	Cl-36 #D700	23,598	4500	18.86
x 10	Sr/Y-90 #D711	54,876	12,000	21.78
x 1	Th-230 #91TH2200210	38,900	6000	15.41

RSA Laboratories ID# 1567. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Paul R. Steinmeyer Date 17 Oct 97

Reviewed by: DAVID L. JUDD Date 17 OCT 97



RSA Laboratories ID# 1567.

Calibrated by: Paul R. Steinmeyer Date 17 Oct 97

Reviewed by: DAVID L. JUDD Date 17 OCT 97

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 3 SERIAL NO: 61402
DETECTOR MODEL: 44-9 DETECTOR SERIAL NO: PR051754
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
ALPHA RADIAC SURVEY METER

MODEL: LUDLUM 3 SERIAL NO: 61402
DETECTOR MODEL: 44-9 DETECTOR SERIAL NO: PR051754
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15 Army Calibration Program for Radiac Meters and TM-11-6665-248-10 Operators Technical Manual for Radiac Calibrator AN/UDM-6.

The reference standard for this is an AN/UDM-6 Plutonium 239 (Pu 239: 5.12 MeV. Alpha Particle) standard, serial number A-1501.

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10 %.

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
ALPHA RADIAC SURVEY METER

MODEL: LUDLUM 3 SERIAL NO: 61402
DETECTOR MODEL: 44-9 DETECTOR SERIAL NO: PR051754
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the
MP-2 Eberline Mini Pulser, serial number 434 or the
Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

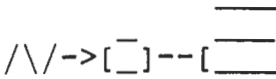
GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: SENECA OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 3 SERIAL NO: 61402

DETECTOR TYPE: G-M MODEL #: 44-9 SERIAL # PR051754
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

GEOMETRY



WINDOW: FIXED OPEN

METER RANGE	APPLIED UNITS MR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X100	50.0000	48.0000	N	48.0000	1.0416	0.9895
	150.0000	160.0000		160.0000	0.9375	
X10	5.0000	5.1000	N	5.1000	0.9803	0.9901
	15.0000	15.0000		15.0000	1.0000	
X1	0.5000	0.4900	N	0.4900	1.0204	1.0169
	1.5000	1.4800		1.4800	1.0135	
X0.1	0.0500	0.0490	N (*)	0.0490	1.0204	1.0204
	0.1500	0.1470	(*)	0.1470	1.0204	

*NOTE: Meter indications in MR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.90 kV Sensitivity: 48 mV
DEAD TIME: Cal constant: Date Calibrated:30 Oct 97
Calibration Report No. W0MG4G719D Calibration Due:27 Feb 98

ALPHA SURVEY INSTRUMENT CALIBRATION REPORT

Alpha particle emission rate from the active surface of the source are:

Serial Number	Counts/Minutes	Uncertainty
P-1670	1,352	3.98%
ATTENUATED	514	
P-1729	15,613	2.65%
ATTENUATED	5,933	
P-1253	166,152	1.77%
ATTENUATED	63,137	
P-1529	1,543,375	2.09%
ATTENUATED	586,483	

Owner:SENECA OUIC:W0MG4G PUIC:W459TD
Manufacturer: LUDLUM Meter Mdl: 3 Serial No: 61402
Detector Mdl: 44-9 Serial No: PR051754

CAL SW 4: DEAD TIME SW: STD CURRENT: HOUR SW:
CAL SW 3: MIN SW: Cal constant:

Dedicated source indicates N/A Battery check: OK Alarm:

Meter Range	Source		Emission Rate (2pi) CPM	Meter (CPM) Indication	Corr Factor	Average Efficiency%
*0.1	P-1670		1,352	210.000	.N/A	16.521
	P-1670	ATTENUATED	514	90.000	.N/A	
*1.0	P-1729		15,613	2,300.000	.N/A	15.371
	P-1729	ATTENUATED	5,933	950.000	.N/A	
*10	P-1253		166,152	26,000.000	.N/A	16.535
	P-1253	ATTENUATED	63,137	11,000.000	.N/A	
*100	P-1529		1,543,375	150,000.000	.N/A	11.850
	P-1529	ATTENUATED	586,483	82,000.000	.N/A	

% Efficiency = Detector count rate (instrument indication on CPM scale X 100) divided by the 2pi source value.

*note: Do not use for quantitative measurements.

HIGH VOLTAGE: 0.90 kV

Date Calibrated:30 Oct 97
CALIBRATION REPORT NO. W0MG4G719D Calibration Due:27 Feb 98

[illegible]

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109080
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.13 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

[illegible]
ATTN: AMSM[illegible]
[illegible]
[illegible] PA 18466-[illegible]

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

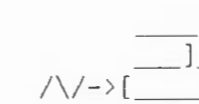
[illegible]

[illegible]

DETECTOR [illegible]: NaI(MODEL #: N/A SERIAL # N/A
Calibration Source(s):
MDL NO: 89-40[illegible] S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: LOW - REPLACED

GEOMETRY



WINDOW: NONE

METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	960.0000	Y	1,000.0000	1.0000	1.0128
	4,000.0000	3,560.0000		3,900.0000	1.0256	
X500	100.0000	110.0000	Y	104.0000	0.9615	1.0070
	400.0000	411.0000		380.0000	1.0526	
X250	50.0000	53.0000	Y (*)	50.0000	1.0000	1.0000
	200.0000	211.0000		200.0000	1.0000	
X50	10.0000	10.3000	Y (*)	10.0000	1.0000	1.0000
	40.0000	42.5000	(*)	40.0000	1.0000	
X25	5.0000	5.3000	Y (*)	5.0000	1.0000	1.0000
	20.0000	21.2000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.79 kV Sensitivity: 140 mV
DEAD TIME: Cal constant: Date Calibrated:29 Aug 96
Calibration Report No. WOMG4G706D Calibration Due:27 Dec 96

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.13 Ci Cesium 137 source (CS137) .662 mev,SER = 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-I
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.13 Ci Cesium 137 source (CS137) .662 mev,SER = 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

Thomas E. Davis

THOMAS E. DAVIS
Engineering Technician
LRPC, Nucleonics Laboratory
DSN 795-7255

Craig A. Gredlein

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.13 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

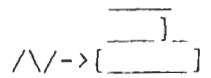
GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: SENECA RADIAC OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109980

DETECTOR TYPE: NaI(Tl) MODEL #: N/A SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: LOW - REPLACED

GEOMETRY



WINDOW: NONE

METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	960.0000	Y	1,000.0000	1.0000	1.0128
	4,000.0000	3,560.0000		3,900.0000	1.0256	
X500	100.0000	110.0000	Y	104.0000	0.9615	1.0070
	400.0000	411.0000		380.0000	1.0526	
X250	50.0000	53.0000	Y (*)	50.0000	1.0000	1.0000
	200.0000	211.0000		200.0000	1.0000	
X50	10.0000	10.3000	Y (*)	10.0000	1.0000	1.0000
	40.0000	42.5000	(*)	40.0000	1.0000	
X25	5.0000	5.3000	Y (*)	5.0000	1.0000	1.0000
	20.0000	21.2000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.79 kV Sensitivity: 140 mV
DEAD TIME: Cal constant: Date Calibrated:29 Aug 96
Calibration Report No. W0MG4G706D Calibration Due:27 Dec 96

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109950
DETECTOR MODEL: INTERNAL DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109950
DETECTOR MODEL: INTERNAL DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

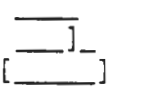
Owner: SENECA RADIAC OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109950

DETECTOR TYPE: NaI(Tl) MODEL #: INTERNAL SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

WINDOW: NONE

GEOMETRY



METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	750.0000	Y	960.0000	1.0416	0.9859
	4,000.0000	3,200.0000		4,300.0000	0.9302	
X500	100.0000	102.0000	N	102.0000	0.9803	1.0165
	400.0000	380.0000		380.0000	1.0526	
50	50.0000	0.0000	Y (*)	50.0000	1.0000	1.0050
	200.0000	210.0000		198.0000	1.0101	
X50	10.0000	10.5000	Y (*)	10.0000	1.0000	1.0000
	40.0000	43.5000	(*)	40.0000	1.0000	
X25	5.0000	5.3000	Y (*)	5.0000	1.0000	1.0000
	20.0000	21.8000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.83 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated:29 Apr 97
Calibration Report No. W0MG4G703D Calibration Due:27 Aug 97

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109962
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109962
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: SENECA RADIAC OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109962

DETECTOR TYPE: NaI(Tl) MODEL #: N/A SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

WINDOW: NONE

GEOMETRY

INTERNAL DET /\/->[_____]

METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	700.0000	Y	910.0000	1.0989	1.0256
	4,000.0000	3,200.0000		4,200.0000	0.9523	
X500	100.0000	100.0000	N	100.0000	1.0000	1.0263
	400.0000	380.0000		380.0000	1.0526	
X250	50.0000	0.0000	Y (*)	50.0000	1.0000	1.0050
	200.0000	218.0000		198.0000	1.0101	
X50	10.0000	11.0000	Y (*)	10.0000	1.0000	1.0000
	40.0000	44.0000	(*)	40.0000	1.0000	
X25	5.0000	5.4000	Y (*)	5.0000	1.0000	1.0000
	20.0000	22.2000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.78 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated:29 Apr 97
Calibration Report No. W0MG4G704D Calibration Due:27 Aug 97

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109978
DETECTOR MODEL: INTERNAL DETECTOR SERIAL NO:
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109978
DETECTOR MODEL: INTERNAL DETECTOR SERIAL NO:
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

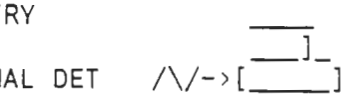
Owner: SENECA RADIAC OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109978

DETECTOR TYPE: NaI(Tl) MODEL #: INTERNAL SERIAL #
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: None supplied

WINDOW: NONE

GEOMETRY



METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	700.0000	Y	950.0000	1.0526	1.0025
	4,000.0000	3,000.0000		4,200.0000	0.9523	
X500	100.0000	106.0000	N	106.0000	0.9433	1.0272
	400.0000	360.0000		360.0000	1.1111	
250	50.0000	50.0000	N (*)	50.0000	1.0000	1.0000
	200.0000	200.0000		200.0000	1.0000	
X50	10.0000	10.0000	N (*)	10.0000	1.0000	1.0000
	40.0000	40.0000	(*)	40.0000	1.0000	
X25	5.0000	5.0000	N (*)	5.0000	1.0000	1.0000
	20.0000	20.0000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 1.00 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated:14 Mar 97
Calibration Report No. W0MG4G705D Calibration Due:12 Jul 97

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109980
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: WOMG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: SENECA RADIAC OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109980

DETECTOR TYPE: NaI(Tl) MODEL #: N/A SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

WINDOW: NONE

GEOMETRY

INTERNAL DET /\/->[_____]

METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	700.0000	Y	930.0000	1.0752	1.0138
	4,000.0000	3,150.0000		4,200.0000	0.9523	
X500	100.0000	110.0000	Y	105.0000	0.9523	1.0025
	400.0000	395.0000		380.0000	1.0526	
X250	50.0000	0.0000	Y (*)	50.0000	1.0000	1.0050
	200.0000	220.0000		198.0000	1.0101	
X50	10.0000	11.0000	Y (*)	10.0000	1.0000	1.0000
	40.0000	44.0000	(*)	40.0000	1.0000	
X25	5.0000	5.5000	Y (*)	5.0000	1.0000	1.0000
	20.0000	22.0000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.70 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated:29 Apr 97
Calibration Report No. W0MG4G706D Calibration Due:27 Aug 97

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109912
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

Owner: SENECA OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109912

DETECTOR TYPE: NaI(Tl) MODEL #: N/A SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

WINDOW: NONE

GEOMETRY

INTERNAL DET /\/->[_____]

METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	0.0000	Y	970.0000	1.0309	0.9916
	4,000.0000	2,650.0000		4,200.0000	0.9523	
X500	100.0000	105.0000	N	105.0000	0.9523	1.0025
	400.0000	380.0000		380.0000	1.0526	
X250	50.0000	50.0000	N (*)	50.0000	1.0000	1.0000
	200.0000	200.0000		200.0000	1.0000	
X50	10.0000	0.0000	Y (*)	10.0000	1.0000	1.0000
	40.0000	44.0000	(*)	40.0000	1.0000	
X25	5.0000	5.0000	N (*)	5.0000	1.0000	1.0000
	20.0000	20.0000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.88 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated: 5 Sep 97
Calibration Report No. W0MG4G702D Calibration Due: 3 Jan 98

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109912
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109962
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac Meters.

The reference standard for this calibration is a J.L. Shepherd & Associates model 89-400 self-contained gamma calibrator containing one (1) 130mci and one (1) 400.00 Ci Cesium 137 source (CS137) .662 mev,SER # 8221, .08 MR/HR TO 800.0 R/HR. Calibrated 17 Jun 96

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

Calibration uncertainty, including measurement errors and accuracy of the reference standard is +/- 10% .

IN CHARGE OF TEST:

THOMAS E. DAVIS
Engineering Technician
LRPO, Nucleonics Laboratory
DSN 795-7255

CRAIG A. GREDLEIN
Chief, Area Calibration Laboratory Section
USATSC-Tobyhanna
DSN 795-7820

U.S ARMY TMDE SUPPORT CENTER-TOBYHANNA
ATTN: AMSMI-TMDE-GA-T
11 HAP ARNOLD BOULEVARD
TOBYHANNA, PA 18466-5104

AREA SECONDARY NUCLEONICS LABORATORY
REPORT OF CALIBRATION
FOR
RADIAC SET/SURVEY METER

MODEL: LUDLUM 19 SERIAL NO: 109962
DETECTOR MODEL: N/A DETECTOR SERIAL NO: N/A
SUBMITTED BY: W0MG4G

The measurements were performed under ambient conditions of approximately 20 degrees Celsius and 35 percent relative humidity.

This instrument was calibrated in accordance with TB9-6665-285-15, Army Calibration Program for Radiac meters.

The reference standards for this calibration are the MP-2 Eberline Mini Pulser, serial number 434 or the Ludlum Model 500 Pulser serial number 87219.
The accuracy of the MP-2 Pulser frequency is +/- 0.1% with an amplitude accuracy of +/- 10% .
The accuracy of the Model 500 pulser frequency is < 2% with an amplitude accuracy of +/- 10% .

This calibration is traceable to and compatible with National Institute of Standards and Technology (NIST) measurements.

GAMMA SURVEY INSTRUMENT CALIBRATION REPORT

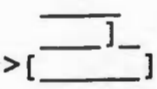
Owner: SENECA OUIC: W0MG4G PUIC: W459TD
Manufacturer: LUDLUM Meter Mdl: 19 SERIAL NO: 109962

DETECTOR TYPE: NaI(Tl) MODEL #: N/A SERIAL # N/A
Calibration Source(s)
MDL NO: 89-400 S/N: 8221 ISOTOPE/ENERGY/BEAM CODE: Cs137
PULSER MDL NO: Ludlum Model 500 Pulser S/N: 87219

CHECK SOURCE: NO DEDICATED SOURCE INDICATES: N/A
FLUSH AGAINST DETECTOR: N/A DISTANCE: 0 CM BATTERY CHECK: OK

WINDOW: NONE

GEOMETRY



METER RANGE	APPLIED UNITS uR/HR	INIT METER READING	ADJUST (Y/N)	FINAL METER READING	CORR FACTOR	AVG CORR FACTOR
X5000	1,000.0000	970.0000	N	970.0000	1.0309	0.9827
	4,000.0000	4,280.0000		4,280.0000	0.9345	
X500	100.0000	105.0000	N	105.0000	0.9523	0.9825
	400.0000	395.0000		395.0000	1.0126	
X250	50.0000	0.0000	N (*)	50.0000	1.0000	1.0000
	200.0000	200.0000		200.0000	1.0000	
X50	10.0000	10.0000	N (*)	10.0000	1.0000	1.0000
	40.0000	40.0000	(*)	40.0000	1.0000	
X25	5.0000	5.0000	N (*)	5.0000	1.0000	1.0000
	20.0000	20.0000	(*)	20.0000	1.0000	

*NOTE: Meter indications in uR/HR
The Ludlum Model 500 Pulser was used to Electronically calibrate the range and points identified with (*).

High Voltage: 0.78 kV Sensitivity: 80 mV
DEAD TIME: Cal constant: Date Calibrated: 5 Sep 97
Calibration Report No. W0MG4G704D Calibration Due: 3 Jan 98

DEPARTMENT OF THE ARMY
UNITED STATES ARMY MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA

REPLY TO
ATTENTION OF

AMSAM-TMD-SRN

U.S. Army Primary Standards Laboratories
Radiation Standards and Dosimetry Laboratory

REPORT OF CALIBRATION

Radiation Survey System

Consisting of

Bicron Model ANALYST Survey Meter, S/N A945P
Bicron Model G5 FIDLER Probe, S/N A378Q

For

Radiological Assistance Team - Seneca
5786 State Route 96
Romulus, NY 14541-5001

The instrument was electronically calibrated using a Ludlum Model 500 pulse generator, then checked with ^{241}Am and ^{226}Ra sources with calibration traceable to the National Institute of Standards and Technology (NIST). This instrument calibration, traceable to NIST, has an uncertainty of +/- 10 percent.

Steve Rogers
Team Leader, Nucleonics Section
In Charge of Calibration
DSN 746-1302

Calibration Rept No. W0MGAA204R
Date: 14 August 1997

Richard McGeorge
Rad Stds and Dos Lab
U.S. Army Pri Stds Lab Dir

CALIBRATION RESULTS

Electronic Calibration

Meter Range	Applied (CPM)	Init Meter Reading	Adjust? (Y/N)	Final Meter Reading	Corr Factor	Avg Corr Factor
1000	400K			410K	0.98	0.99
	100K	140K	Y	100K	1.0	
100	40K	40K			1.0	1.0
	10K	10K	N		1.0	
10	4K	3.2K	Y	4.0K	1.0	1.0
	1K			1.0K	1.0	
1	400	400			1.0	1.0
	100	100	N		1.0	

CALIBRATION RESULTS

Radioactive Source Checks

The activity of the ^{241}Am source is 7 μCi. The activity of the ^{226}Ra source is 10 μCi. The distance from the source to the bottom face of the probe was 12 inches. The cardboard protective cover (if present) was removed from the probe face.

1. ^{241}Am: Analyzer switch set to Channel 1

   Gross Count Rate: 60.4 KCPM

   Background Count Rate: 2.9 KCPM

   Net Count Rate: 57.5 KCPM

   Detector Sensitivity: 8.21 KCPM / μCi

2. ^{226}Ra: Analyzer switch set to Channel 2

   Gross Count Rate: 47.7 KCPM

   Background Count Rate: 1.4 KCPM

   Net Count Rate: 46.3 KCPM

   Detector Sensitivity: 4.63 KCPM / μCi

3. ^{241}Am and ^{226}Ra together: Analyzer switch set to Out

   Gross Count Rate: 202 KCPM

   Background Count Rate: 6.3 KCPM

   Net Count Rate: 195.7 KCPM

No ^{241}Am activity was identified with the analyzer set to channel 2.

DEPARTMENT OF THE ARMY
UNITED STATES ARMY MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA

REPLY TO
ATTENTION OF

AMSAM-TMD-SRN

U.S. Army Primary Standards Laboratories
Radiation Standards and Dosimetry Laboratory

REPORT OF CALIBRATION

Radiation Survey System

Consisting of

Bicron Model ANALYST Survey Meter, S/N A984P
Bicron Model G5 FIDLER Probe, S/N A398Q

For

Radiological Assistance Team - Seneca
5786 State Route 96
Romulus, NY 14541-5001

The instrument was electronically calibrated using a Ludlum Model 500 pulse generator, then checked with ^{241}Am and ^{226}Ra sources with calibration traceable to the National Institute of Standards and Technology (NIST). This instrument calibration, traceable to NIST, has an uncertainty of +/- 10 percent.

Steve Rogers
Team Leader, Nucleonics Section
In Charge of Calibration
DSN 746-1302

Calibration Rept No. W0MGAA201R
Date: 14 August 1997

Richard McGeorge
Rad Stds and Dos Lab
U.S. Army Pri Stds Lab Dir

CALIBRATION RESULTS

Electronic Calibration

Meter Range	Applied (CPM)	Init Meter Reading	Adjust? (Y/N)	Final Meter Reading	Corr Factor	Avg Corr Factor
1000	400K	400K		410K	0.98	0.99
	100K	90K	Y	100K	1.0	
100	40K	40K			1.0	1.0
	10K	10K	N		1.0	
10	4K	4.0K			1.0	1.0
	1K	1.0K	N		1.0	
1	400	400			1.0	1.0
	100	100	N		1.0	

CALIBRATION RESULTS

Radioactive Source Checks

The activity of the ^{241}Am source is 7 μCi. The activity of the ^{226}Ra source is 10 μCi. The distance from the source to the bottom face of the probe was 12 inches. The cardboard protective cover (if present) was removed from the probe face.

1. ^{241}Am: Analyzer switch set to Channel 1

Gross Count Rate:	61.4 KCPM
Background Count Rate:	4.0 KCPM
Net Count Rate:	57.4 KCPM
Detector Sensitivity:	8.20 KCPM / μCi

2. ^{226}Ra: Analyzer switch set to Channel 2

Gross Count Rate:	41.0 KCPM
Background Count Rate:	1.1 KCPM
Net Count Rate:	39.9 KCPM
Detector Sensitivity:	3.99 KCPM / μCi

3. ^{241}Am and ^{226}Ra together: Analyzer switch set to Out

Gross Count Rate:	201 KCPM
Background Count Rate:	6.1 KCPM
Net Count Rate:	194.9 KCPM

No ^{241}Am activity was identified with the analyzer set to channel 2.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5699

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Date 09/11/97

Instrument MICRO REM **S/N** C250A

Notes

X1 and X.1 ranges calibrated electronically using Bicron Acceptance Procedure 1056930 (Electronic Pulse Method) as specified in the Micro Rem manual.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Instrument Calibration Certificate

 # 5699

Customer SENECA ARMY ACTIVITY DEPO Order Number 30365

Instrument MICRO REM S/N C250A - NEW

Calibration Data

Range	Exposure Rate urem/h	Instrument Reading urem/h	% Error	Exposure Rate urem/h	Instrument Reading urem/h	% Error
X1000	160000	160000	0.0	40000	42000	5.0 %
X100	16000	16000	0.0	4000	4200	5.0 %
X10	1600	1600	0.0	400	410	2.5 %
X1	160	160	0.0	40.0	43.0	7.5 %
X0.1	16.0	16.0	0.0	4.00	4.20	5.0 %

Calibration Source Intensity at 1 meter 215.5 mR/h Date 07/25/97 Source to Detector Geometry perpendicular

Zero Check ok HV Check ok Threshold Set n/a

Battery Ok ok Scaler Rate n/a Geotropic Check ok
Checkband Response +/- 1% +/- 2%

Reproducibility ok (Checked 3 times, identical conditions +/- 10%)

Check Source n/a Check Source Reading

Quality Assurance Review By: T.B. Date 09/11/97

Calibrated By J.H. Date 09/11/97

Re-Cal Due 03/11/98

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5699

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Date 09/11/97

Instrument MICRO REM **S/N** C250A

TEST EQUIPMENT USED DURING CALIBRATION

Type	DIGITAL MULTIMETER	**S/N**	91011730	**Re-Cal Due**	11/05/97
Type	FREQ. COUNTER	**S/N**	250TW10903	**Re-Cal Due**	02/03/98
Type	EBERLINE MINI PULSER MP-2	**S/N**	788	**Re-Cal Due**	
Type	J.L. SHEPHERD CS-137	**S/N**	10081	**Re-Cal Due**	10/25/97

PROCEDURES USED DURING CALIBRATION

Procedure Used QC ACCEPTANCE PROCEDURE #1056930

Procedure Used

Procedure Used

LABORATORY CONDITIONS

Temperature 21 °C **Humidity** 52 % **Air Pressure** 1016 mBar **Elevation** 1036 FT.

Calibration Performed By

The above referenced products have been manufactured and tested in accordance with the Bicron Electronic Products Quality Assurance Program. See attached data sheets for response information. The calibration performed above complies with ANSI N323 (Radiation Protection Instrumentation Test and Calibration), and all standards referenced are traceable to NIST.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5699

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Date 09/11/97

Instrument MICRO REM **S/N** C250A

TEST EQUIPMENT USED DURING CALIBRATION

Type	DIGITAL MULTIMETER	**S/N**	91011730	**Re-Cal Due**	11/05/97
Type	FREQ. COUNTER	**S/N**	250TW10903	**Re-Cal Due**	02/03/98
Type	EBERLINE MINI PULSER MP-2	**S/N**	788	**Re-Cal Due**	
Type	J.L. SHEPHERD CS-137	**S/N**	10081	**Re-Cal Due**	10/25/97

PROCEDURES USED DURING CALIBRATION

Procedure Used QC ACCEPTANCE PROCEDURE #1056930

Procedure Used

Procedure Used

LABORATORY CONDITIONS

Temperature 21 °C **Humidity** 52 % **Air Pressure** 1016 mBar **Elevation** 1036 FT.

Calibration Performed By

The above referenced products have been manufactured and tested in accordance with the Bicron Electronic Products Quality Assurance Program. See attached data sheets for response information. The calibration performed above complies with ANSI N323 (Radiation Protection Instrumentation Test and Calibration), and all standards referenced are traceable to NIST.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5699

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Date 09/11/97

Instrument MICRO REM **S/N** C250A

Notes

X1 and X.1 ranges calibrated electronically using Bicron Acceptance Procedure 1056930 (Electronic Pulse Method) as specified in the Micro Rem manual.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Instrument Calibration Certificate

 # 5698

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Instrument MICRO REM **S/N** C251A - NEW

Calibration Data

Range	Exposure Rate urem/h	Instrument Reading urem/h	% Error	Exposure Rate urem/h	Instrument Reading urem/h	% Error
X1000	160000	160000	0.0	40000	41000	2.5 %
X100	16000	16000	0.0	4000	4100	2.5 %
X10	1600	1600	0.0	400	410	2.5 %
X1	160	160	0.0	40.0	42.0	5.0 %
X0.1	16.0	16.0	0.0	4.00	4.10	2.5 %

Calibration Source Intensity at 1 meter 215.5 mR/h **Date** 07/25/97 **Source to Detector Geometry** perpendicular

Zero Check ok **HV Check** ok **Threshold Set** n/a

Battery Ok Checkband ok **Scaler Rate Response +/- 1%** n/a **Geotropic Check +/- 2%** ok

Reproducibility ok **(Checked 3 times, identical conditions +/- 10%)**

Check Source n/a **Check Source Reading** _____

Quality Assurance Review By: T.B. **Date** 09/11/97

Calibrated By J.H. **Date** 09/11/97

Re-Cal Due 03/11/98 TR ~~03/11/97~~

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5698

Customer SENECA ARMY ACTIVITY DEPO Order Number 30365

Date 09/11/97

Instrument MICRO REM S/N C251A

TEST EQUIPMENT USED DURING CALIBRATION

Type	DIGITAL MULTIMETER	S/N	91011730	Re-Cal Due	11/05/97
Type	FREQ. COUNTER	S/N	250TW10903	Re-Cal Due	02/03/98
Type	EBERLINE MINI PULSER MP-2	S/N	788	Re-Cal Due	
Type	J.L. SHEPHERD CS-137	S/N	10081	Re-Cal Due	10/25/97

PROCEDURES USED DURING CALIBRATION

Procedure Used QC ACCEPTANCE PROCEDURE #1056930

Procedure Used

Procedure Used

LABORATORY CONDITIONS

Temperature 21 °C Humidity 52 % Air Pressure 1016 mBar Elevation 1036 FT.

Calibration Performed By

The above referenced products have been manufactured and tested in accordance with the Bicron Electronic Products Quality Assurance Program. See attached data sheets for response information. The calibration performed above complies with ANSI N323 (Radiation Protection Instrumentation Test and Calibration), and all standards referenced are traceable to NIST.

BICRON • NE

6801 Cochran Road
Solon, Ohio 44139 USA
Tel: (216) 248-7400 / (800) 472-5656
Fax: (216) 349-6581
http://www.bicron.com

Calibration Certificate

 # 5698

Customer SENECA ARMY ACTIVITY DEPO **Order Number** 30365

Date 09/11/97

Instrument MICRO REM **S/N** C251A

Notes

X1 and X.1 ranges calibrated electronically using Bicron Acceptance Procedure 1056930 (Electronic Pulse Method) as specified in the Micro Rem manual.

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

SHIPPER'S CERTIFICATION FOR RADIOACTIVE MATERIALS

"This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package - limited quantity of material, UN 2910 and 49 CFR 173.422 for radioactive material, excepted package - instruments or articles, UN 2910."

I hereby certify that this package also conforms to all packaging requirements of the U.S. Department of Transportation and the International Air Transport Association (IATA) Rules and Regulations regarding the shipment of radioactive materials.

The materials are packed in strong, tight packages that will not leak during normal transport conditions, the radiation level on the exterior surface of the package does not exceed 0.5 mrem/hr., nonfixed (removable) contamination does not exceed applicable limits, and the outside of the inner container bears the marking "Radioactive".

No other labels are required.

SOURCE INFORMATION

Model No.	Isotope	Total Activity	Total Quantity	Serial No.
DNS-9	$^{230}_{99}Th$ $^{137}_{55}Cs$	1.75µCi	6	1841-94,1039/92, 1845-94,1842-94, 1843-94,1844-94

Customer: Seneca Army Depot Activity
Romulus, NY 14541-5001

PO# W25GIV-4112-8406
SO# S-02845

Allen Satterly
Authorized Signature

6/17/94
Date

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CUSTOMER: Seneca Army Depot Activity

Quality Control & Inspection

ADDRESS: Receiving Bldg 323
Romulus, NY 14541-5001

P.O. NUMBER: w25giv-4112-8406

TMA/EBERLINE S.O. NUMBER: S-02845

DATE SHIPPED: 6/17/94

CERTIFICATE OF COMPLIANCE

The radioactive sources or services comprising this order have been subjected to and have passed all examinations, inspections, tests and calibrations of the TMA/Eberline quality assurance procedures, and, as applicable, are in compliance with specifications imposed by the above referenced contract/ purchase order number.

Calibration has been accomplished in accordance with TMA/Eberline calibration procedures. Sources for calibration and/or dose rates have calibration traceable to National Institute of Standards and Technology.

The undersigned as the authorized representative of TMA/Eberline warrants the information contained within this document to be a true statement of fact.

Kathy Burnham
Quality Assurance Manager

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Gamma Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1844-94 Isotope Cesium-137

The source of gamma radiation is mounted on a 2.54 cm diameter PLASTIC disc, 3 mm thick and ~~sealed with~~ _____.

Measurement Method:

The gamma ray emission rate was compared with a similar standard which was calibrated by NIST S/N 2753/91. This comparison of relative gamma ray emission rates was accomplished using a high resolution gamma-ray detector (nominal active volume 100 cm^3) and a multichannel pulse height analyzer.

Measurement Result:

The gamma ray activity of the standard on 6/16/94 was 0.829 µCi.

The uncertainty of the measurement is 3.9 % which is the sum of the uncertainty assigned to the NIST reference standard (2.2%), random counting error at the 99% confidence level, and the estimated upper limit of systematic errors.

Calibrated by: Charles Lamborn

Calibration technician: Charles Lamborn

Calibration date: 6/16/94

Reviewed by: Arlene Slattery

Q.A. Representative: Kathy Burnham

Reviewed date: 6-17-94

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Beta Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1843-94 Isotope Technetium-99

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi beta emission rate was measured using an internal gas flow proportional chamber. Absolute counting of beta particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated beta source S/N 2148/90.

Measurement Result:

The observed beta count rate from the surface of the disc per minute (cpm) on the calibration date was

7,500 ± 450

The total disintegration rate (dpm) assuming 25 % backscatter of beta particles from the surface of the disc, was

12,000 ± 720 (0.00541 μCi)

The uncertainty of the measurement is 6 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Charles Lambert

Calibration technician: Arlene Gutierrez Q.A. Representative: Kathy Burnham

Calibration date: 5/24/94 Reviewed date: 6-17-94

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1642-94 Isotope Thorium-230

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91.

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

5,040 ± 151

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

10,100 ± 302 (0.00454 μCi)

The uncertainty of the measurement is 3 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Charles Lambert

Calibration technician: Arlene Gutierrez Q.A. Representative: Kathy Burnham

Calibration date: 5/24/94 Reviewed date: 6-17-94

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Gamma Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1845-94 Isotope Cesium-137

The source of gamma radiation is mounted on a 2.54 cm diameter PLASTIC disc, 3 mm thick and sealed in a _____.

Measurement Method:

The gamma ray emission rate was compared with a similar standard which was calibrated by NIST S/N 2753/91. This comparison of relative gamma ray emission rates was accomplished using a high resolution gamma-ray detector (nominal active volume 100 cm^3) and a multichannel pulse height analyzer.

Measurement Result:

The gamma ray activity of the standard on 6/16/94 was 0.906 μCi.

The uncertainty of the measurement is 3.9 % which is the sum of the uncertainty assigned to the NIST reference standard (2.2 %), random counting error at the 99% confidence level, and the estimated upper limit of systematic errors.

Calibrated by: Charles Lamborn Reviewed by: Arlen Scantany

Calibration technician: Charles Lamborn Q.A. Representative: Kathy Burnham

Calibration date: 6/16/94 Reviewed date: 6-17-94

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Beta Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1039/92 Isotope Technetium-99

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi beta emission rate was measured using an internal gas flow proportional chamber. Absolute counting of beta particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated beta source S/N 2148/90.

Measurement Result:

The observed beta count rate from the surface of the disc per minute (cpm) on the calibration date was

6,780 ± 339

The total disintegration rate (dpm) assuming 25 % backscatter of beta particles from the surface of the disc, was

10,800 ± 542 (0.00489 μCi)

The uncertainty of the measurement is 5 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Charles Lambert

Calibration technician: Arlene Gutierrez Q.A. Representative: Kathy Burnham

Calibration date: 5/24/94 Reviewed date: 6-17-94

TMA
Thermo Analytical Inc.

TMA/Eberline Albuquerque Laboratory
7021 Pan American Hwy. NE
Albuquerque, NM 87109
(505) 345-3461 • FAX # (505) 761-5416

CERTIFICATE OF CALIBRATION

Electroplated Alpha Standard

S.O.# S-02845
P.O.# DAAC-72-94-V-0450

Description of Standard:

Model No. DNS-9 Serial No. 1841-94 Isotope Thorium-230

Electroplated on polished Stainless Steel disc, 0.79 mm thick.

Total diameter of 2.23 cm and an active diameter of 1.91 cm.

The radioactive material is permanently fixed to the disc by heat treatment without any covering over the active surface.

Measurement Method:

The 2 pi alpha emission rate was measured using an internal gas flow proportional chamber. Absolute counting of alpha particles emitted in the hemisphere above the active surface was verified by counting above, below and at the operative voltage. The calibration is traceable to NIST by reference to an NIST calibrated alpha source S/N 2393/91

Measurement Result:

The observed alpha particles emitted from the surface of the disc per minute (cpm) on the calibration date was

4,780 ± 239

The total disintegration rate (dpm) assuming 1.5% backscatter of alpha particles from the surface of the disc, was

9,570 ± 478 (0.00431 μCi)

The uncertainty of the measurement is 5 % which is the sum of random counting error at the 99% confidence level, and the estimated upper limit of systematic error in this measurement.

Calibrated by: Arlene Gutierrez Reviewed by: Charles Landon

Calibration technician: Arlene Gutierrez Q.A. Representative: Kathy Burnham

Calibration date: 5/24/94 Reviewed date: 6-17-94

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

fg. Ludlum Measurements, Inc. Model 2360 Serial No. 138262

Mfg. _____ Model _____ Serial No. _____

Cal. Date 05/15/97 Cal Due Date 05/15/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 1500 V Input Sens. Comment mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. 5/4 / 500 V Ref./Inst. 2001 / 2000 V

COMMENTS:

Firmware version: 390105
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 38mV.
Overload not set.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 05/15/1997
Calibration Date: 05/15/1998

Dave Stephen,

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		40048(0)
	40Kcpm		4003(0)
	4Kcpm		402(0)
	400cpm		40(0)
	40cpm		4(0)

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ 512 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 63888 ☐ Oscilloscope S/N _____ ☐ Multimeter S/N _____

Calibrated By: Stephen Henington Date 5-15-97

Reviewed By: Rhonda Harris Date 5-15-97

FORM C22A 04/22/97

Designer and Manufacturer of Scientific and Industrial Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CERTIFICATE OF CALIBRATION

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 133667

Mfg. _____ Model _____ Serial No. _____

Cal. Date 06/05/97 Cal Due Date 06/05/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 900 V Input Sens. Comment mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. 510 / 500 V Ref./Inst. 2004 / 2000 V

COMMENTS:

Firmware version: 390106
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 38mV.
Overload not set.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 06/05/1997
Calibration Date: 06/05/1998

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		400(3)(0)
	40Kcpm		4000(0)
	4Kcpm		400(0)
	400cpm		40(0)
	40cpm		4(0)

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 63888 ☐ Oscilloscope S/N _____ ☐ Multimeter S/N _____

Calibrated By: Stephen Kennington Date 6-5-97

Reviewed By: Rhonda Harris Date 6-5-97

FORM C22A 05/13/97

Designer and Manufacturer of Scientific and Industrial Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CERTIFICATE OF CALIBRATION

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 135247

Mfg. _____ Model _____ Serial No. _____

Cal. Date 06/05/97 Cal Due Date 06/05/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 900 V Input Sens. Comment mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. 514 / 500 V Ref./Inst. 1991 / 2000 V

COMMENTS:

Firmware version: 390106
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 38mV.
Overload not set.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 06/05/1997
Calibration Date: 06/05/1998

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		400540
	40Kcpm		40010
	4Kcpm		400 (-)
	400cpm		40 (0)
	40cpm		4 (0)

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 63888 ☐ Oscilloscope S/N _____ ☐ Multimeter S/N _____

Calibrated By: Stephen Wright Date 6-5-97

Reviewed By: Rhonda Harris Date 6-5-97

FORM C22A 05/13/97

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 138254

Mfg. _____ Model _____ Serial No. _____

Cal. Date 06/05/97 Cal Due Date 06/05/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 900 V Input Sens. Comment mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV

☑ HV Readout (2 points) Ref./Inst. 507 / 500 V Ref./Inst. 1997 / 2000 V

COMMENTS:

Firmware version: 390106
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 37mV.
Overload not set.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 06/05/1997
Calibration Date: 06/05/1998

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		400007(0)
	40Kcpm		40016(0)
	4Kcpm		401(0)
	400cpm		40(0)
	40cpm		4(0)

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ E552 ☐ E551 ☐ Neutron Am-241 Be S/N T-304

☐ Alpha S/N _____ ☐ Beta S/N _____ ☐ Other _____

☑ m 500 S/N 63888 ☐ Oscilloscope S/N _____ ☐ Multimeter S/N _____

Calibrated By: Stephen Kerrigan Date 6-5-97

Reviewed By: Rhonda Hann Date 6-5-97

FORM C22A 05/13/97

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 138238

Mfg. Ludlum Measurements, Inc. Model 43-68 Serial No. PR140510

Cal. Date 05/15/97 Cal Due Date 05/15/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC
☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 1525 V Input Sens. Comment mV Det. Oper. 1525 V at Comment mV Threshold Dial Ratio = mV

☑ HV Readout (2 points) Ref./Inst. 510 / 500 V Ref./Inst. 2000 / 2000 V

COMMENTS:

Firmware version: 390105
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 38mV.
Overload not set.
HV set with detector connected.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 05/15/1997
Calibration Date: 05/15/1998

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		400 (5) (0)	Log Scale			
	40Kcpm		400 (6) (0)				
	4Kcpm		400 (0)				
	400cpm		41 (0)				
	40cpm		4 (0)				

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ 512 Tc-99 143000cpm / Sr90Y10 0.0/022μCi ☐ Neutron Am-241 Be S/N T-304

☑ Alpha S/N 4337 Pu-239 15700cpm ☑ Beta S/N 635/83 443-69-3 ☐ Other

☑ m 500 S/N 63888 ☐ Oscilloscope S/N ☐ Multimeter S/N

Calibrated By: Stephen Henington Date 5-15-97

Reviewed By: Rhonda Harris Date 5-15-97

FORM C22A 04/22/97

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER SENECA ARMY DEP ACT ORDER NO. 970876/201047

Mfg. Ludlum Measurements, Inc. Model 2360 Serial No. 138256

Mfg. Ludlum Measurements, Inc. Model 43-68 Serial No. PR140515

Cal. Date 05/15/97 Cal Due Date 05/15/98 Cal. Interval 1 Year Meterface 202-855

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 702.8 mm Hg

☑ New Instrument Instrument Received ☐ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☑ Reset ck. ☑ Window Operation ☑ Geotropism
☑ Audio ck. ☑ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) 2.2 VDC

☑ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☐ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 1525 V Input Sens. Comment mV Det. Oper. 1525 V at Comment mV Threshold Dial Ratio ____ = ____ mV

☑ HV Readout (2 points) Ref./Inst. 509 / 500 V Ref./Inst. 2010 / 2000 V

COMMENTS:

Firmware version: 390105
Alpha Threshold: 120mV.
Beta Threshold: 3.5mV.
Beta Window: 38mV.
Overload not set.
HV set with detector connected.

EEPROM Settings:
User Time: 002.5 minutes
Alpha Alarms: 999999cpm
Beta Alarms: 999999cpm
A/B Alarms: 999999cpm
M2360 Date: 05/15/1997
Calibration Date: 05/15/1998

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	400Kcpm		400
X1000	100Kcpm		100
X100	40Kcpm		400
X100	10Kcpm		100
X10	4Kcpm		400
X10	1Kcpm		100
X1	400cpm		400
X1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400Kcpm		40023(0)
	40Kcpm		4003(0)
	4Kcpm		400(0)
	400cpm		40(0)
	40cpm		4(0)

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Log Scale			

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☐ 1162 ☐ G112 ☐ M565 ☐ 5105 ☐ T1008 ☐ T879 ☐ 512 / Sr90Y90 Tc-99 0.01022 μCi ☐ Neutron Am-241 Be S/N T-304

☑ Alpha S/N 4337 Pu-239 15700cpm ☑ Beta S/N 14360cpm 635/83 443-69-3 ☐ Other ____

☑ m 500 S/N 63888 ☐ Oscilloscope S/N ____ ☐ Multimeter S/N ____

Calibrated By: Stephen Kerrington Date 5-15-97

Reviewed By: Rhonda Harris Date 5-16-97

FORM C22A 04/22/97

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-68 Serial No. PR 140510 Order #. 970876/201047

Customer SENECA ARMY DEP ACT Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 138238 Beta Input Sensitivity 3.5 mV

Count Time 1Minute Beta Window 38 mV

Other HV set with detector not connected Distance Source to Detector Surface

High Voltage	Background		Isotope Pu-239 Size 15700cpm		Isotope Tc-99 Size 14300cpm		Isotope Sr90/Y90 Size 0.0102μCi	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
1500	0	137	5358	561	1	6571	2	12187
1525	3	195	5644	602	4	6440	0	14040
1550	1	253	5957	555	34	5895	22	14862
1575	3	279	6238	581	170	4848	176	14247

Gas proportional detector count rate decreased ≤10% after 15hour static test using 34" cab

Signature Stephen Kenington Date 5-15-97

FORM C4B 02/23/94

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-68 Serial No. PR140515 Order #. 970876/201047

Customer SENECA ARMY DEP ACT Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 138256 Beta Input Sensitivity 3.5 mV

Count Time 1 Minute Beta Window 38 mV

Other HV set with detector not connected Distance Source to Detector Surface

High Voltage	Background		Isotope Pu-239 Size 15700 dpm		Isotope Tc-99 Size 14300 dpm		Isotope Sr90Y90 Size 0.01022 μCi	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
1475	1	108	5134	519	5	6673	1	10885
1500	0	188	5651	591	5	6793	4	13695
1525	2	210	5783	600	12	6198	8	14725
1550	3	236	6130	549	106	5143	55	14842

Gas proportional detector count rate decreased ≤ 10% after 16 hour static test using 39" cable.

Signature Stephen Herrington Date 5-15-97

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-37 Serial No. PR 136498 Order #. 970876/201047

Customer SENECA ARMY DEP ACT Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 138262 Beta Input Sensitivity 4 mV

Count Time 1 Minute Beta Window 38 mV

Other HV set with detector not connected Distance Source to Detector Surface

High Voltage	Background		Isotope Pu-239 Size 15700 dpm		Isotope Tc-99 Size 14300 dpm		Isotope Sr^{90}/Y^{90} Size 0.2022 μCi	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
1550	4	333	5199	798	6	5934	2	8327
1575	0	426	5749	937	3	6797	3	10094
1600	3	593	6025	1055	10	7468	2	12304
1625	4	769	6414	1257	9	7688	4	14088
1650	5	924	6631	1434	7	7424	5	15196
1675	7	1040	6722	1576	57	6560	90	15378
1700	12	1099	6979	1556	206	5845	318	14153

Gas proportional detector count rate decreased ≤10% after 15 hour static test using 36" cable.

Signature Stephen Herrington Date 5-15-97

Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-37 Serial No. ~~43~~ PR136499 Order #. 970876/201047

Customer SENECA ARMY DEP ACT Alpha Input Sensitivity 120 mV

Counter 2360 Serial No. 138262 Beta Input Sensitivity 4 mV

Count Time 1Minute Beta Window 38 mV

Other HV set with detector not connected Distance Source to Detector Surface

High Voltage	Background		Isotope Pu-239 Size 15700 cpm		Isotope Tc-99 Size 14300 cpm		Isotope Sr90/Y90 Size a 01022 μCi	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
1575	3	496	5283	858	10	6637	4	10413
1600	2	598	5587	1026	11	7189	4	12277
1625	4	855	5867	1238	9	7314	4	13792
1650	7	1028	5944	1379	18	6987	17	14942
1675	9	1148	6210	1530	83	6155	107	14647

Gas proportional detector count rate decreased ≤10% after 15 hour static test using 39" cable.

Signature Stephen Herrington Date 5-15-97

DEPARTMENT OF THE ARMY
UNITED STATES ARMY MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA

REPLY TO
ATTENTION OF

AMSMI-TMDE-SRN

U.S. ARMY PRIMARY STANDARDS LABORATORIES
RADIATION STANDARDS AND DOSIMETRY LABORATORY

REPORT OF CALIBRATION

On

Radiation Standards Set S/N L8680

FOR

W0MG4G

The sources were calibrated using a National Institute of Standards and Technology (NIST) - designed gas flow proportional counting system (^{230}Th), a Ludlum Model 2000 scaler and Model 44-40 shielded G-M detector (^{99}Tc), and a Ludlum 2000 and Model BS-2 G-M detector (^{137}Cs). This calibration is traceable to and compatible with NIST measurements. The ^{230}Th and ^{99}Tc sources were calibrated for 2π geometry emission rate and the ^{137}Cs source was calibrated for activity. Calibration uncertainties are expected to be within +/- 5% at the 95% confidence level.

Steven C. Rogers
Sr Physicist, Nucleonics Sctn
DSN 788-8597
In Charge of Calibration

Calibration Report No. W0MG4G201R
Page 1 of 2
Date: 2 June 1997

Paul O. Pittman
Rad Stds and Dos Lab
U.S. Army Pri Std Lab Dir

CALIBRATION RESULTS

Isotope	Source S/N	2π Emission Rate	Activity (μCi)
^{230}Th	1841-94	4,896 $\alpha \cdot m^{-1}$	
^{137}Cs	1845-94		1.008
^{99}Tc	1039-92	5,559 $\beta \cdot m^{-1}$	

DEPARTMENT OF THE ARMY
UNITED STATES ARMY MISSILE COMMAND
REDSTONE ARSENAL, ALABAMA

REPLY TO
ATTENTION OF

AMSMI-TMDE-SRN

U.S. ARMY PRIMARY STANDARDS LABORATORIES
RADIATION STANDARDS AND DOSIMETRY LABORATORY

REPORT OF CALIBRATION

On

Radiation Standards Set S/N L8681

FOR

W0MG4G

The sources were calibrated using a National Institute of Standards and Technology (NIST) - designed gas flow proportional counting system (^{230}Th), a Ludlum Model 2000 scaler and Model 44-40 shielded G-M detector (^{99}Tc), and a Ludlum 2000 and Model BS-2 G-M detector (^{137}Cs). This calibration is traceable to and compatible with NIST measurements. The ^{230}Th and ^{99}Tc sources were calibrated for 2π geometry emission rate and the ^{137}Cs source was calibrated for activity. Calibration uncertainties are expected to be within +/- 5% at the 95% confidence level.

Steven C. Rogers
Sr Physicist, Nucleonics Sctn
DSN 788-8597
In Charge of Calibration

Calibration Report No. W0MG4G200R
Page 1 of 2
Date: 2 June 1997

Paul O. Pittman
Rad Stds and Dos Lab
U.S. Army Pri Std Lab Dir

CALIBRATION RESULTS

Isotope	Source S/N	2π Emission Rate	Activity (μCi)
^{230}Th	1842-94	5,048 $\alpha \cdot m^{-1}$	
^{137}Cs	1843-94		0.917
^{99}Tc	1844-94	6,453 $\beta \cdot m^{-1}$	

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
19 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(203) 228-0721 Fax (203) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 12**	Inst. Type **Count Rate Meter**	Inst. s/n **102850**
Det. Mfr. & Model **Ludlum 44-62-2**	Type **Gamma Scintillator**	Det. s/n **144955**
Cal. Date **29 September 1997**	Due Date **29 March 1998**	Cal. Interval **6 Months**

Environmental conditions: Temperature: 79°F Relative Humidity 48% Atmospheric Pressure 28.67 inches Hg
Pre-calibration Checks:

■ Contamination survey	■ Battery check	■ Slow response check	
■ Mechanical check	■ Audio check	□ Window operation	■ Det. volts 950 Vdc
■ Meter zero	■ Reset check	■ Plateau check	
■ Geotropism check	■ Fast response check	□ Alarm set	■ Input sens. 10 mV

■Pulse generator s/n 94926 □ Oscilloscope s/n 171-04928 ■ Voltmeter s/n 57410002
■HV Readout (2 points) Ref./Inst. 500V/ 500V Ref./Inst. 1500V/ 1500V

Comments: **Local background ≈ 900 cpm. Response to ^{137}Cs ≈ 66 cpm per mR/h. Response to ^{226}Ra ≈ 15 cpm per mR/h. Check source (^{137}Cs #4) = 24,000 cpm in contact with "yellow" side of source.**

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? □Yes ■No
Reading #1 17,000 cpm Reading #2 17,000 cpm Reading #3 17,000 cpm Mean 17,000 cpm
Precision: ■± <10% □±10-20% □Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	Instrument Efficiency (%)
x 10	I-125 (mock) #NES-186S-081963	129,870	1,200	0.23%
x 1000	Co-57 #DZ 994 (point source)	11,877,000	440,000	3.7%
x 100	Ba-133 #1652 (wide source)	1,422,646	39,000	2.7%
x 100	Cs-137 #A745 (wide source)	2,489,119	26,000	1.0%
x 10	Cs-137 #2887 (point source)	153,652	2,800	1.2%
N/A	Ra-226 (calculated for wide source)	N/A	N/A	0.22%
N/A	Ra-226 (calculated for point source)	N/A	N/A	0.26%

RSA Laboratories ID# 1527. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Paul R. Steinmeyer Paul R. Steinmeyer Date 29 Sept 97

Reviewed by: [signature] Date 30 Sep 97

- **DAILY FUNCTION CHECK PROCEDURE**

DAILY FUNCTION CHECK PROCEDURE
Seneca Army Depot
Parsons Engineering Science

This procedure is designed to serve as a generic guideline for the daily function check to be performed on a calibrated radiological instrument for daily use in the field at Seneca Army Depot during EPA remedial investigation activities in SEAD-12. This procedure will be performed daily.

1) Visually inspect the instrument for damage.

2) Check the calibration date on the rate meter and probe ensure that the instrument is not out of calibration.

3) Check the serial number on both the rate meter and the probe. Ensure that the serial number on the instrument corresponds to that on the front cover of the function check binder in use.

4) Connect the probe to the rate meter with the appropriate cable.

5) Turn the instrument on to the check battery position, check the battery and record the results on the appropriate function check form (Attachment A). In some cases the instrument will return a battery voltage, while in other cases the instrument will return a "OK".

6) Check and document the high voltage.

7) Place the probe on the appropriate source check jig with **NO CHECK SOURCE.** Each probe has a specific and clearly marked jig to be used for all function checks.

8) Set the instrument to the appropriate scale setting where the radiation reading is greater than 10% of full scale and less than 90% of full scale.

9) Allow the instrument appropriate time to settle on a relatively stable reading. Record the first background reading. The 1-minute scaler counting capability will be utilized for all function check readings when possible. With instruments that do not possess the 1-minute scaler counting capability readings will be collected with the instrument set on slow in 30 second increments. Repeat this step until 5 background readings have been collected and recorded.

10) Calculate the average of the 5 background readings and document on the appropriate form.

11) Check the serial number and calibration date on the appropriate function check source and on the accompanying calibration sheet to ensure that the source is not out of calibration. Note the serial number of the function check source. **Caution:** Radioactive sources must be handled with care and all appropriate PPE must be worn at all times when handling radioactive sources.

12) Remove the probe from the function check jig and mount the appropriate function check source in the jig adhering to the following table:

Instrument:	Source:
A/B Gas Proportional	Th-230, Tc-99
Fidler (Model G5)	Am-241
Micro-Rem	Cs-137
Pancake G-M	Cs-137, Tc-99
High Energy Gamma	Cs-137

13) Place the probe in the appropriate function check jig over the appropriate source. Ensure the probe is properly placed in the jig over the check source. Record 5 source checks using methods presented in step 9 above.

14) Ensure the source check average falls within the 2-sigma range found on the most recent initial check page in the function check binder (Attachment B).

15) Repeat steps 7 through 9 for each function check source. Note that some instruments require function checks on two sources.

16) Repeat steps 9 through 15 at noon, and again at night. During the noon and night function checks only one source check per source and only one background check will be collected.

- **DAILY FUNCTION CHECK LOGS**

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/5/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	IM263	IM263
Model	Model 3	Model 19	AN/PDR-77	AN/PDR-77
Serial Number	61457	109980	0033A	0034A
Calibration Date	16-May-97	29-Apr-97	4-Apr-97	3-Apr-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	not applicable	IM263	IM263
Model	Model 44-9	not applicable	DT-674/PDR-77	DT-674/PDR-77
Serial Number	PR026657	~~not applicable~~	0033A	0034A
Calibration Date	16-May-97	not applicable	4-Apr-97	3-Apr-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5,589 dpm	1.008 micro curie	307,511 cpm alpha	307,511 cpm alpha
Source Check Reading	910 cpm	222 uR/hr	3792 cpm	
Background Reading	2.6 cpm	10 uR/hr	2.5 Kcpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	~~Calibr~~ function check at 1300	function check at 1300	Function check at 1300	
EVENING READING	900 cpm	(140 uR/hr)	3800 cpm	
Check Performed By	D. Griffiths	D Griffiths	D Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

(1) Instrument checked at room, not used in AM.

* Micro-R SN 109980 - Reading very low on evening Reading

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/4/97

INSTRUMENTATION

Not used — Not used

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	IM263	IM263
Model	Model 3	Model 19	AN/PDR-77	AN/PDR-77
Serial Number	61457	109980	0033A	0034A
Calibration Date	16-May-97	29-Apr-97	4-Apr-97	3-Apr-97
PROBE	PANCAKE G-M	NaI(Tl) (external to detector)	LOW ENERGY GAMMA DETECTOR	[illegible]
Make	Ludlum	not applicable	IM263	IM263
Model	Model 44-9	not applicable	DT-674/PDR-77	DT-674/PDR-77
Serial Number	PR026657	not applicable	0033A	0034A
Calibration Date	16-May-97	not applicable	4-Apr-97	3-Apr-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5,589 dpm	1.008 micro curie	307,511 cpm alpha	307,511 cpm alpha
Source Check Reading	910 cpm		3300 cpm	
Background Reading	30 cpm		2256 cpm	
Instrument Efficiency				
FLAG			(1) 3700 ~~3300~~ cpm	
MIDDAY READING	850 cpm		3770 cpm	
EVENING READING				
Check Performed By	R. Griffiths		C. Majewski	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

(1) Instrument checked at room, not used in AM.

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/5/95

INSTRUMENTATION

Not used Not used

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	IM263	IM263
Model	Model 3	Model 19	AN/PDR-77	AN/PDR-77
Serial Number	61457	109980	0033A	0034A
Calibration Date	16-May-97	29-Apr-97	4-Apr-97	3-Apr-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	not applicable	IM263	IM263
Model	Model 44-9	not applicable	DT-674/PDR-77	DT-674/PDR-77
Serial Number	PR026657	not applicable	0033A	0034A
Calibration Date	16-May-97	not applicable	4-Apr-97	3-Apr-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5,589 dpm	1.008 micro curie	307,511 cpm alpha	307,511 cpm alpha
Source Check Reading	930 cpm			3806 cpm
Background Reading	30 cpm			2302 cpm
Instrument Efficiency	4%			
FLAG				
MIDDAY READING	N/A			4060 cpm
EVENING READING	900 cpm C. Majewski			4010 cpm
Check Performed By	D. Griffiths			C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG-

(2) Instrument checked at room, not used in AM.

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/6/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IM-63	
Model	Model 3		AN/PDR-77	
Serial Number	61-457		0034A	
Calibration Date	16 May-97		4/4/97	
DETECTOR	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum		IM 263	
Model	Model 44-9		DT-674/PDR-77	
Serial Number	PR026657		0034A	
Calibration Date	16 May 97		4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2 June 97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307,511 dpm Alpha	
Source Check Reading	940 cpm		3746 cpm	
Background Reading	32 cpm		2576 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	N/A		4100 cpm	
EVENING READING	920 cpm		4350 cpm	
Check Performed By	D. Griffiths		D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/7/97

[redacted]

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IRA 263	
Model	Model 3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum		IRA 263	
Model	Model 44-9		DT-674/PDR-77	
Serial Number	PR 026657		0034A	
Calibration Date	5/16/97		4/4/97	
Source Nuclide	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm Alpha	
Source Check Reading	930 cpm		3914 cpm	
Background Reading	34 cpm		2656 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	N/A		4160 cpm	
EVENING READING	900CPM		3810 cpm	
Check Performed By	C. Mayhew		D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/8/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IM 263	
Model	model # 3		AN / PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE GM	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	ludlum		IM 263	
Model	Model 44-9		DT-674 / PDR-77	
Serial Number	~~PR026~~ PR026657		0034A	
Calibration Date	5/16/97		4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm Alpha	
Source Check Reading	966 cpm		~~3884~~ ORIG 3414 cpm	
Background Reading	29.6 cpm		~~2512~~ ORIG ~~2666~~ cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	N/A		4160 cpm	
EVENING READING	900 cpm		4150 cpm	
Check Performed By	C. Majewski		D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/5/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IM-263	
Model	model #3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum		IM-263	
Model	Model 44-9		PT-674/PDR-77	
Serial Number	PR-026657		0034A	
Calibration Date	5/16/97		4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm Alpha	
Source Check Reading	960 cpm		3726 cpm	
Background Reading	28 cpm		2440 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	N/A		4240 cpm	
EVENING READING	900 cpm		4200 cpm	
Check Performed By	D. Griffiths		C. Majewski	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/10/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IM-263	
Model	Model 3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum			
Model	Model 44-9		DT-674/PDR-77	
Serial Number	PR-026657		0034A	
Calibration Date	5/16/97		4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm Alpha	
Source Check Reading	840 cpm		3620 cpm	
Background Reading	26 cpm		2510 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING				
EVENING READING	940 cpm		4080 cpm	
Check Performed By	C.S. Majewski		C.S. Majewski	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/15/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		IM - 263	
Model	Model 3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum			
Model	Model 44-9		DT-674/PDR-77	
Serial Number	PR-026657		0034A	
Calibration Date	5/16/97		4/4/97	
Source	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm Alpha	
Source Check Reading	~~8~~ 910 cpm		3620 cpm	
Background Reading	32 cpm		2586 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	did not	use until PM		
EVENING READING	950 cpm		4310 cpm	
Check Performed By	D. Griffiths		D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/16/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	LUDLUM		IM-263	
Model	MODEL 3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	LUDLUM			
Model	MODEL 44-9		DT-674/PDR-77	
Serial Number	PR-026657		0034A	
Calibration Date	5/16/97		4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		307511 cpm	
Source Check Reading	976 cpm		3822 cpm	
Background Reading	26 cpm		2610 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	———		3910 cpm	
EVENING READING	950 cpm		~~3805 cpm~~ 2225 cpm	
Check Performed By	CSM		CSM	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/17/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	LudLum		IM-263	
Model	Model 3		AN/PDR-77	
Serial Number	61457		0034A	
Calibration Date	5/16/97		4/4/97	
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	LudLum			
Model	Model 44-9		DT-674/PDR77	
Serial Number	PR-026657		0034A	
Calibration Date	5/16/97		4/4/97	
SOURCE	Tc-99	Cs-137	Am241	Am241
Source Calibration Date	6/2/97		6/2/97	
Source Serial Number	1039/92		8921	
Source Emission Rate	5589 dpm		30751 cpm Alpha	
Source Check Reading	943 cpm		3794 cpm	
Background Reading	26 cpm		2508 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	900 cpm		4430 cpm *	
EVENING READING	850 cpm		4204 cpm	
Check Performed By	C. Majewski		D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

* Did not use in pm, consulting Tom Reynolds about Instrument drift

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/18/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	IM-263	
Model	model-3	model-19	AN/PDR-77	
Serial Number	61457	109962	0034A	
Calibration Date	5/16/97	9/5/97	4/4/97	
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A		
Model	model 44-9	N/A	DT-674/PDR-77	
Serial Number	PR-026657	N/A	0034A	
Calibration Date	(QRL) 5/16/97	N/A	4/4/97	
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97	6/2/97	6/2/97	
Source Serial Number	1039-92	1845-94	8921	
Source Emission Rate	55-89 dpm	1.008 µCi	307511 cpm Alpha	
Source Check Reading	953 cpm	214 µR/h	3780 cpm	
Background Reading	22 cpm	9.55 µR/h	2660 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used	212 µR/h	4300 cpm	
EVENING READING	900 cpm	215 µR/h	4490 cpm	
Check Performed By	D. Griffiths	C. Majewski	D. Griffiths	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/19/97

[redacted]

INSTRUMENTATION

CM Not used NATUSED

INSTRUMENT TYPE	RATEMETER	MICRO-R RATEMETER	SCALER/RATEMETER	SCALER/RATEMETER
Make	LudLum	LudLum	IM-263	IM-263
Model	MODEL-3	MODEL-19	AN/PDR-77	AN/PDR-77
Serial Number	CSN 61457	109962	0034A	0033A
Calibration Date	5/16/97	9/5/97	4/4/97	4/3/97
PROBE	PANCAKE GM	Nal(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	LudLum	N/A	DT-674/PDR77	
Model	MODEL 44-9		0034A	DT-674/PDR77
Serial Number	PR-026657			0033A
Calibration Date	5/16/97		4/4/97	4/3/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97	6/2/97	6/2/97	6/2/97
Source Serial Number	1039/92	1845-94	8921	8921
Source Emission Rate	5589dpm[1]	1.008 μCi	307511cpm ALPHA	307511cpm Alpha
Source Check Reading	970CPM	208 MR/hr	3824 CPM	4460 cpm done at NOON
Background Reading	16CPM	10 MR/hr	2624CPM	3306 cpm done at NOON
Instrument Efficiency				
FLAG				
MIDDAY READING	———		4350 cpm	———
EVENING READING	950 cpm		4420CPM	4410CPM
Check Performed By	D. Griffith		C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

direction and review of work products.

Jim Koehler, Ph.D. (Technical Review)
Jim is a contract employee who provides technical guidance and project review. Jim earned a Ph.D. in Statistics from Stanford University. He is a professor of Mathematics at the University of Colorado at Denver and has a research focus on environmental statistics.

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/20/97

INSTRUMENTATION

Did not use

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Im-263	Im-263
Model	Model 3	Model 19	AN/PDR-77	AN/PDR-77
Serial Number	61457	109962	0033A	0034A
Calibration Date	5/16/97	9/5/97	4/4/97	4/3/97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Im 263	Im 263
Model	Model 44-9	N/A	DT-674/PDR-77	DT-674/PDR-77
Serial Number	PR026657	N/A	0033A	0034A
Calibration Date	5/16/97	N/A	4/4/97	4/3/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97	6/2/97	6/2/97	6/2/97
Source Serial Number	1039/92	1845-/94	8921	8921
Source Emission Rate	5589 dpm	1.008 microCi	307511 cpm Alpha	307511 cpm Alpha
Source Check Reading	900 cpm	215.6 cpm	3910 cpm	4116 cpm
Background Reading	25 cpm	9.7 cpm	2838 cpm	2978 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used	Not	4460 cpm	4230 cpm
EVENING READING	900 cpm	used	4530 cpm	4420 cpm
Check Performed By	C. Majewski		C. MAJEWSKI	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/2/97

INSTRUMENTATION

INSTRUMENT TYPE	RATEMETER	MICRO R RATE METER	SCALER RATE/METER	
Make	LUDLUM	LUDLUM	IM-263	IM-263
Model	MODEL 3	MODEL 19	AN/PDR-77	AN/PDR 77
Serial Number	61457	109962	0033A	0034A
Calibration Date	5/16/97	9/5/97	4/4/97	4/3/97
Make	LUDLUM	N/A	IM263	IM-263
Model	Model 44-9	N/A	DT-674/PDR77	DT-674/PDR77
Serial Number	PR026657	N/A	0033A	0034A
Calibration Date	5/16/97	N/A	4/4/97	4/3/97
Source Calibration Date	6/2/97	6/2/97	6/2/97	6/2/97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5589dpm	1.008 Micro Ci	30751 cpm Alpha	30751 cpm Alpha
Source Check Reading	901 cpm	219 MR/hr	4012 cpm	3794 cpm
Background Reading	32 cpm	9.7 uR/hr	2848 cpm	2584 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	———	220 MR/hr	3985 cpm	3890 cpm
EVENING READING	925 cpm	215 MR/hr	4136 cpm	
Check Performed By	D. Griffith	C. MAJEWSKI	D. Griffith	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/22/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	LUDLUM	LUDLUM	IM-263	IM-263
Model	MODEL 3	MODEL 19	AN/PDR-77	AN/PDR 77
Serial Number	61457	109962	0033A	0034A
Calibration Date	5/16/97	9/5/97	4/4/97	4/3/97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	LUDLUM	N/A	IM263	IM-263
Model	Model 44-9	N/A	DT-674/PDR77	DT-674/PDR77
Serial Number	PR026657	N/A	0033A	0034A
Calibration Date	5/16/97	N/A	4/4/97	4/3/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	6/2/97	6/2/97	6/2/97	6/2/97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5589dpm	1.008 MICRO Ci	30751 cpm Alpha	30751 cpm Alpha
Source Check Reading	910 cpm	219.6 uR/hr	4130 cpm	3968 cpm
Background Reading	32 CPM	10 uR/hr	2872 cpm	2626 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used in AM	not used in AM	4380 cpm	3990 CPM
EVENING READING	950CPM	222 MR/hr	4266 cpm	4405 CPM
Check Performed By	C MAJEWSKI	C MAJEWSKI	C-Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 1/23/97

INSTRUMENTATION				
INSTRUMENT TYPE	RATE METER	MICRO-R RATEMETER	SCALER RATE METER	
Make	LUDLUM	LUDLUM	IM-263	IM-263
Model	MODEL 3	MODEL 19	AN/PDR-77	AN/PDR 77
Serial Number	61457	109962	0033A	0034A
Calibration Date	5/16/97	9/5/97	4/4/97	4/3/97
Make	LUDLUM	N/A	IM263	IM-263
Model	Model 44-9	N/A	DT-674/PDR77	DT-674/PDR77
Serial Number	PR026657	N/A	0033A	0034A
Calibration Date	5/16/97	N/A	4/4/97	4/3/97
Source Calibration Date	6/2/97	6/2/97	6/2/97	6/2/97
Source Serial Number	1039/92	1845/94	8921	8921
Source Emission Rate	5589dpm	1.00B Micro Ci	3075N cpm Alpha	3075N cpm Alpha
Source Check Reading	900 cpm	221 uR/hr	4040 cpm	4004 cpm
Background Reading	27 cpm	9.65 uR/hr	3116 cpm	2718 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	900 cpm	215 uR/hr	4500 cpm	4020 cpm
EVENING READING	900cpm	235 uR/h	3998 CPM	3807 cpm
Check Performed By	C. Majewski	C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/24/97

Returned to Tom Reynolds for Calibration

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Im263	
Model	Model-3	Model-19	AN/PDR-77	
Serial Number	61457	109962	0034A	
Calibration Date	5/6/97	9/5/97	4/4/97	
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	—	
Model	Model 44-9	N/A	DT-674/PDR77	
Serial Number	PR-026657	N/A	0034A	
Calibration Date	5/16/97	N/A	4/4/97	
Source	Tc-99	Cs-137	Am241	Am
Source Calibration Date	6/2/97	6/2/97	6/2/97	
Source Serial Number	1635-92	1845-94	8921	
Source Emission Rate	558dpm	1.008μCi	307511cpmAlphA	
Source Check Reading	920cpm	219μR/hr	3742cpm	
Background Reading	30cpm	9.35μR/hr	2670cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	—	220 μR/hr	3860 cpm	
EVENING READING	—	217.5μR/hr	4035 cpm	
Check Performed By	C.S. Majewski	C.S. Majewski	C.S. Majewski	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/29/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO R RATE METER	SCALER/RATE METER	SCALER/RATE METER
Make		Ludlum	Bicron Analyst	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109962	A984P	A945P ~~A3780~~ csm
Calibration Date		9/5/97	14/09/97	14/09/97
PROBE	PANCAKE GM	NaI(Tl) Internal to ratemeter	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	Bicron	Bicron
Model		N/A	G5	G5
Serial Number		N/A	A3980	A328 Q
Calibration Date		N/A	14/08/97	14/08/97
SOURCE	Tc99	Cs137	Am241	Am241
Source Calibration Date		6/2/97	~~6/2/97~~ 14/08/97 csm	~~6/2/97~~ 14/08/97 csm
Source Serial Number		1945-94	8921	8921
Source Emission Rate		1.008 μCi	307511 Cpm Alpha	307511 Cpm Alpha
Source Check Reading		231 μR/h	Ch-2 8972 cpm / OUT 11,462 cpm	Ch-2 7634 cpm / OUT 11579 cpm
Background Reading		10.80 μR/h	6697 cpm / 9182 cpm	5625.6 cpm / 9086.7 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		222 μR/h	Did not use until PM	
EVENING READING		215 μR/h	10,693	10685
Check Performed By		C. Majewski	C. Majewski	D. Griffith

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 9/29/97

INSTRUMENTATION

Not used Not used

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER		SCALER/RATEMETER
Make		Ludlum	Bicron		
Model		Model-19	Analyst		
Serial Number		S/N 109912	A983P		
Calibration Date		05/09/97	14/09/97		
PROBE	**PANCAKE G-M**	**NaI(Tl) (internal to ratemeter)**	**LOW ENERGY GAMMA DETECTOR**		**LOW ENERGY GAMMA DETECTOR**
Make		N/A	Bicron		
Model		N/A	G5		
Serial Number		N/A	A394Q		
Calibration Date		N/A	14/08/97		
SOURCE	**Tc-99**	**Cs-137**	**Am-241**		**Am-241**
Source Calibration Date		6/2/97	6/2/97 ~~6/2/97~~ [illegible]		
Source Serial Number		1845-94	8821 CSM		
Source Emission Rate		1.008 μCi	307511 CPM-Alpha		
Source Check Reading		294 ~~290~~ μR/h	ch 1 15404 Cpm	-out- 16370 cpm	
Background Reading		13.1 μR/h	103361 CPM	11343 CPM	
Instrument Efficiency					
FLAG					
MIDDAY READING					
EVENING READING					
Check Performed By					

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 30 Sept 97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		Ludlum	Bicron	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/~~Sept~~ Aug/97	14/~~Sept~~ Aug/97
PROBE	PANCAKE GM	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA (HE DETECTOR)	LOW [illegible]
Make		N/A	Bicron	Bicron
Model		/	G-5	G-5
Serial Number		/	A398Q	A378Q
Calibration Date		N/A	14/~~Sept~~ Aug/97	14/~~Sept~~ Aug/97
SOURCE	Tc99	Cs137	Am241	[illegible]
Source Calibration Date		6/02/97	6/02/97	6/02/97
Source Serial Number		1845-94	8921	8921
Source Emission Rate		1.008 MCi	307511 CPM Alpha	307511 CPM Alpha
Source Check Reading		216 MR/h	11035.8 cpm	11018.8 cpm
Background Reading		9.7 uR/hr	10243 cpm	9381.2 cpm
Instrument Efficiency			~~11202 cpm~~ (DRG)	~~11297 cpm~~ (DRG)
FLAG				
MIDDAY READING		220 uR/hr	11202 cpm	11297 cpm
EVENING READING		212 MR/h	11008 cpm	11091 cpm
Check Performed By		C. Majewski	C. Majewski	D. Griffiths

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 1 Oct 97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LudLum	Bicron	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109962	A9841P	A945P
Calibration Date		9/5/97	14/Sept/97	14/Sept/97
PROBE	PANCAKE G-M	NaI(Tl) Internal to Meter	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	Bicron	Bicron
Model		|	G-5	G-5
Serial Number		|	A398Q	A328Q
Calibration Date		N/A	8/14/97	8/14/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/02/97	6/02/97	6/02/97
Source Serial Number		1845-94	8921	8921
Source Emission Rate		1.008 μCi	307511 CPM Alpha	307511 CPM Alpha
Source Check Reading		210 μCi	10571 cpm	10866 cpm
Background Reading		9.1 μCi	9128 cpm	9109 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED	10622 cpm	10864 cpm
EVENING READING		213 μCi	10798 cpm	10923 cpm
Check Performed By		C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/1/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO RAIL METER	SCALER/RATEMETER	SCALER/COUNTER
Make		Ludlum		
Model		Model - 19		
Serial Number		109912		
Calibration Date		9/5/97		
PROBE	PANCAKE GM	NaI(Tl) Gamma Detector	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		NA		
Model				
Serial Number				
Calibration Date		NA		
Sr-90	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97		
Source Serial Number		1845-94		
Source Emission Rate		1008 µCi		
Source Check Reading		286 µR/hr		
Background Reading		10.7 µR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED		
EVENING READING		NOT USED		
Check Performed By				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/2/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		Ludlum	Bicron	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
PROBE	PANCAKE G-M	NaI(Tl) (internal to micro-R)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	Bicron	Bicron
Model			~~A398Q~~ G5	G5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
SOURCE #	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97	6/2/97	6/2/97
Source Serial Number		1845-84	8921	8921
Source Emission Rate		1.008 MCi	307511 CPM Alpha	307511 CPM Alpha
Source Check Reading		228 ~~MR~~/hr	11803 cpm	11758 cpm
Background Reading		9.15 ~~MR~~/hr	9184 cpm	9263 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		did not use in AM	10766 cpm	10782 cpm
EVENING READING		215 µR/hr	10923 cpm	10875 cpm
Check Performed By		D. Griffiths	D. Griffiths	D. Griffiths

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/2/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM		
Model		MODEL-19		
Serial Number		108912		
Calibration Date				
PROBE	PANCAKE G-M	NaI(TI) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		NA		
Model		|		
Serial Number				
Calibration Date		NA		
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97		
Source Serial Number		1845-94		
Source Emission Rate		1.008 μCi		
Source Check Reading		294 μR/hr		
Background Reading		10.5 μR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING		did not use AM		
EVENING READING		did not use PM		
Check Performed By		D. Griffith		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO RATE METER	SCALER RATEMETER	SCALER RATEMETER
Make		Ludlum	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/09/97	14/09/97
PROBE	PANCAKE GM	NaI(Tl) Integral Micro R	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	BICRON	BICRON
Model			G5	G6
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/06/97	14/06/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97	6/2/97	6/2/97
Source Serial Number		1845-94	8921	8921
Source Emission Rate		1.008 μCi	307511 cpm Alpha	307511 cpm Alpha
Source Check Reading		221 μR/h	11597 cpm	11619 cpm
Background Reading		9.15 μR/h	9722 cpm	9597 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used	11393 cpm	11183 cpm
EVENING READING		219 μR/h	11475 cpm	11453 cpm
Check Performed By		C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICROR RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		Lud Lum		
Model		MODEL-19		
Serial Number		109912		
Calibration Date		9/5/97		
PROBE	PANCAKE GM	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A		
Model				
Serial Number				
Calibration Date		N/A		
SOURCE	Co-60	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97		
Source Serial Number		1845-94		
Source Emission Rate		1.008 μCi		
Source Check Reading		294.4 μR/hr		
Background Reading		11.4 μR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used		
EVENING READING		293 μR/hr		
Check Performed By		C. Majewski		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/6/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		Ludlum	Bicron	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	Bicron	Bicron
Model			G5	G5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/09/97	14/09/97
	Tc-99	Cs-137	Am-241	
Source Calibration Date		6/2/97	6/2/97	6/2/97
Source Serial Number		1845-94	8921	8921
Source Emission Rate		1.008 MCi	30751 CPM Alpha	30751 CPM Alpha
Source Check Reading		219 µR/h	11092 cpm	11093 cpm
Background Reading		9.3 µR/h	9391.4 cpm	9429 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used	11229 cpm	11148 cpm
EVENING READING		225 MR/h	11055 cpm	10973 cpm
Check Performed By		C. Majewski	C.S. Majewski	C.S. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date:

[redacted]

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM		
Model		MODEL-19		
Serial Number		109912		
Calibration Date		9/5/97		
PROBE	PANCAKE G-M	NaI(Tl) (internal to meter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A		
Model		/		
Serial Number				
Calibration Date		N/A		
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97		
Source Serial Number		1845-54		
Source Emission Rate		1.008 μCi		
Source Check Reading		295 MR/hr		
Background Reading		11-9MR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED		
EVENING READING		290MR/hr		
Check Performed By		C. MASEWSKI		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/7/97

INSTRUMENTATION

INSTRUMENT TYPE	RAD METER	MICRO R RAD METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
PROBE	PANCAKE G-M	NaI(Tl) (internal to microR)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	BICRON	BICRUN
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97	6/2/97	6/2/97
Source Serial Number		1845-94	8921	8921
Source Emission Rate		1.008 μCi	307511CPM Alpha	307511CPM Alpha
Source Check Reading		220 μR/hr	11252.6	11093 cpm
Background Reading		9.4 μR/hr	9535 cpm	9361 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used	11133 CPM 11222 CPM	11432 CPM 11218 CPM
EVENING READING		205 MR/hr		
Check Performed By		C.S. MAJEWSKI	C Majewski	C.MAJEWSKI

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/7/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	
Model		MODEL-19	ANALYST	
Serial Number		109912	A883P	
Calibration Date		14/08/97	14/08/97	
PROBE	PANCAKE GM	Nal(Tl) micro R meter	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	BICRON	
Model			G-5	
Serial Number			A354Q	
Calibration Date		N/A	14/08/97	
SOURCE	Tc99	Cs137	Am241	Am241
Source Calibration Date		6/2/97	6/2/97	
Source Serial Number		1945-94	8921	
Source Emission Rate		1.008 μCi	307511 CPM-ALPHA	
Source Check Reading		290.4 μR/hr	15880 cpm	
Background Reading		11.9 μR/hr (Bkg)	11571 cpm	
Instrument Efficiency			—	
FLAG			—	
MIDDAY READING		Not Used	16090 cpm	
EVENING READING		290 μR/hr	16799 cpm	
Check Performed By		C. Majewski	FAD	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/8/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	10/08/97	10/08/97
PROBE	**PANCAKE G-M**	**NaI(Tl) (internal to ratemeter)**	**LOW ENERGY GAMMA DETECTOR**	**LOW ENERGY GAMMA DETECTOR**
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	10/08/97	10/08/97
SOURCE	**Tc-99**	**Cs-137**	**Am-241**	**Am-241**
Source Calibration Date		6/2/97	6/2/97	6/2/97
Source Serial Number		1245-94	8921	8921
Source Emission Rate		1.008 MCi	307511 CPM Alpha	307511 CPM Alpha
Source Check Reading		223 MR/hr	11330 cpm	11264 CPM ~~9467 cpm~~
Background Reading		9.5 MR/hr	9591 cpM	9462 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	cpm	~~NOT USED 225 MR/hr~~	11684 dPM *	11866 dPM *
EVENING READING		225 MR/hr	11786 dPM *	11689 dPM *
Check Performed By				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG= * NEW SOURCE AM-241 S# 8920
DATE -10-25-83
EMISSION RATE 751,000 dpm
REC 10/8/97
AFTER AM SOURCE CHECKS

Site: Seneca Army Depot Activity

Project: SEAD-12

Date:

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make			Bicron	
Model			Analyst	
Serial Number			A983P	
Calibration Date			8/14/97	
PROBE	**PANCAKE G-M**	**NaI(Tl) (internal to meter)**	**LOW ENERGY GAMMA DETECTOR**	**LOW ENERGY GAMMA DETECTOR**
Make			Bicron	
Model			G5	
Serial Number			A394Q	
Calibration Date			8/14/97	
SOURCE	**Tc-99**	**Cs-137**	**Am-241**	**Am-241**
Source Calibration Date			6/2/97	
Source Serial Number			8921 ~~30751 cpm - Alpha~~	
Source Emission Rate			30751 cpm - Alpha	
Source Check Reading			16029 cpm	
Background Reading			11714 cpm	
Instrument Efficiency			—	
FLAG			—	
MIDDAY READING			16995	
EVENING READING			17192	
Check Performed By			FO	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/9/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date			14/08/97	14/08/97
PROBE	PANCAKE GM	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date		6/2/97	~~6/2/97~~ 9/25/83 (CST)	~~6/2/97~~ 9/25/83 (CST)
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 μCi	751,000 dpm	751,000 dpm
Source Check Reading		229 μR/hr	12350 cpm	11832 cpm
Background Reading		9.3 μR/hr	9905 CPM	9737 CPM
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used IN AM	11952 cpm	11911 cpm
EVENING READING		225 ~~μR/hr~~ ~~μCi~~	11512 cpm	11539 cpm
Check Performed By		D. Griffiths	D. Griffiths	D. Griffiths

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/9/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make			Bicron	
Model			Analyst	
Serial Number			A983P	
Calibration Date			8/14/97	
PROBE	**PANCAKE G-M**	**NaI(Tl) (internal to ratemeter)**	**LOW ENERGY GAMMA DETECTOR**	**LOW ENERGY [illegible] DETECTOR**
Make			Bicron	
Model			GS	
Serial Number			A394Q	
Calibration Date			8/14/97	
SOURCE	**Tc-99**	**Cs-137**	**Am-241**	**Am-[illegible]**
Source Calibration Date			~~6/2/97~~ 10/25/83	
Source Serial Number		CSR	~~8921~~ P520	
Source Emission Rate			25/000 dPM ~~30751 cpm~~ - Alpha	
Source Check Reading			18758	
Background Reading			11956	
Instrument Efficiency			—	
FLAG			—	
MIDDAY READING			17016	
EVENING READING			16929	
Check Performed By			F.O	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/10/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
PROBE	PANCAKE GM	NaI(Tl) microR RATE METER	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
SOURCE	Tc99	Cs137	Am241	Am241
Source Calibration Date		6/2/97	10/25/83	10/25/93
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 μCi	751,000 dpm	251,000dpm
Source Check Reading		220 μR/hr	11737 cpm	11698 cpm
Background Reading		9.5 μR/hr	9544 cpm	9567 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED	11491 cpm	11423 cpm
EVENING READING		228MR/hr	11441 cpm	11443 cpm
Check Performed By		C. Majewski	C. MAJEWSKI	C. MAJEWSKI

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/10/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make			BICRON	
Model			ANALYST	
Serial Number			A983P	
Calibration Date			8/14/97	
PROBE	**PANCAKE GM**	**NaI(Tl) (internal to ratemeter)**	**LOW ENERGY GAMMA DETECTOR**	**LOW ENERGY GAMMA DETECTOR**
Make			BICRON	
Model			G5	
Serial Number			A394Q	
Calibration Date			8/14/97	
SOURCE	**Tc-99**	**Cs-137**	**Am-241**	**Am-241**
Source Calibration Date			10/25/83	
Source Serial Number			8920	
Source Emission Rate			751000 dpm	
Source Check Reading			16997	
Background Reading			11597	
Instrument Efficiency			—	
FLAG			—	
MIDDAY READING			16882	
EVENING READING			—	
Check Performed By			F.O.	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/11/97

INSTRUMENTATION

Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A398Q
Calibration Date		N/A	14/09/97	14/08/97
Source Calibration Date		6/2/97	10/25/83	10/25/83
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 MCi	751,000 dpm	751,000 dpm
Source Check Reading		219 µR/hr	12490 cpm	12516 cpm
Background Reading		9.5 µR/hr	9380 cpm	~~9528~~ (9260) 9529 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used in AM	11340 cpm	11508 cpm
EVENING READING		~~1433 cpm~~ 220 µR/hr	11335 cpm	11508 cpm
Check Performed By		C. MAJEWSKI	C. MAJEWSKI	C. MAJEWSKI

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/12/97

INSTRUMENTATION

Make		Ludlum	Bicron	Bicron
Model		Model - 19	Analyst	Analyst
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	8/14/97
Make		N/A	Bicron	Bicron
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	8/14/97
Source Calibration Date		6/2/97	10/25/83	10/25/83
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 uCi	751000 dpm	751000 dpm
Source Check Reading		227 MR/hr	11790 cpm ~~9710 cpm~~	11853 cpm
Background Reading		10 ~~kR/hr (cpm)~~ MR/hr	9710 cpm	9635 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used in AM	12287 cpm	11322 cpm
EVENING READING		220 kR/hr	11450 cpm	11682 cpm
Check Performed By		C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 13/OCT/97

INSTRUMENTATION

Make		Ludlum	Bicron	Bicron
Model		MODEL-19	Analyst	/
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
Make		N/A	Bicron	Bicron
Model		/	G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
Source Calibration Date		6/2/97	10/25/03	10/25/03
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 MCi	751000 dpm	751000 dpm
Source Check Reading		217 MR/hr	11652 cpm	11770 cpm
Background Reading		9.5 µR/hr	9669 cpm	9880 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		did not use till pm	12087 cpm	11736 cpm
EVENING READING		220 µR/hr	11953 cpm	12481 cpm
Check Performed By		C. Majewski	D. Griffiths	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 14/OCT/97

INSTRUMENTATION

Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109562	A994P	A945P
Calibration Date		9/5/97	14/08/97	14/09/97
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A399Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
Source Calibration Date		6/2/97	10/25/83	10/25/83
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 MCi	751000 dpm	751000 dpm
Source Check Reading		220 µR/hr	11612 cpm	11622 cpm
Background Reading		10-25 µR/hr	~~11612~~ 9616 cpm	9671 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED	11832 cpm	~~11784~~ cpm
EVENING READING		218 µR/hr	11375 cpm	~~11540~~ 11540 cpm
Check Performed By				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 15/OCT/97

INSTRUMENTATION

[illegible]	RATE METER	MICRO RATE METER	[illegible]	[illegible]
Make		LUDLUM	BICRON	BICRON
Model		MODEL 19	ANALYST	ANALYST
Serial Number		109562	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
[illegible]	PANCAKE PROBE	[illegible]	[illegible]	[illegible]
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Source Calibration Date		6/2/97	10/25/~~97~~ 23 CSN	10/25/~~97~~ 23 CSN
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 μCi	751000 dpm	751000 dpm
Source Check Reading		202 MR/hr	11473 cpm	11810 CPM
Background Reading		9.7 MR/hr	9740 cpm	9766 CPM
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used	11532 CPM	11498 CPM
EVENING READING		210 MR/hr	11274 CPM	12169 CPM
Check Performed By		C. MAJEWSKI	C. MAJEWSKI	C MAJEWSKI

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/20/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCINTILLATION METER [Micro-Rem]	SCINTILLATION METER [Micro-Rem]
Make		Ludlum	Bicron	Bicron
Model		Model - 19	Micro-Rem	Micro-Rem
Serial Number		109962	C250A	C251A
Calibration Date		9/5/97	7/25/97	7/25/97
PROBE	**PANCAKE G-M**	**NaI(Tl) (internal to meter)**	**LOW ENERGY GAMMA DETECTOR**	**LOW ENERGY GAMMA DETECTOR**
Make				
Model				
Serial Number				
Calibration Date				
SOURCE	**Tc-99**	**Cs-137**	**Am-241**	**Am-241**
Source Calibration Date		6/2/97	6/2/97 ~~10/25/83~~ DRC	6/2/97 ~~10/25/83~~ DRC
Source Serial Number		1845-94	1845-94	1845-94
Source Emission Rate		1.008 µCi	1.008 µCi	1.008 µCi
Source Check Reading		28 µR/hr	679 µRem/hr	658 µRem/hr
Background Reading		8.2 µR/hr	5.9 µRem/hr	7.0 µRem/hr
Instrument Efficiency				
FLAG				
MIDDAY READING		did not use in AM	did not use in AM	did not use in AM
EVENING READING		220 µR/hr	did not use in PM	did not use in PM
Check Performed By		D. Griffiths	D. Griffiths	D. Griffiths

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/21/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATE METER	SCALER/RATE METER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	~~MICRO R~~ CSR ANALYST	ANALYST
Serial Number		109962	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
	PANCAKE GM	NaI(Tl) (internal to counter)	LOW ENERGY GAMMA	
Make		N/A	BICRON	BICRON
Model			G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
Source Calibration Date		6/2/97	10/25/~~97~~ 93	10/25/~~97~~ 93
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.008 μCi	7500 dpm	7500 dpm
Source Check Reading		223 mR/hr	~~9460 cpm~~ 11493 cpm	~~11594 cpm~~ 11493 cpm
Background Reading		9.5 μR/hr	9460 cpm	9443 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED	11843 cpm	11461 cpm
EVENING READING		220 mR/hr	12908 cpm	12939 cpm
Check Performed By		C. Majewski	C Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date:

INSTRUMENTATION

[illegible] TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER [illegible]
Make			Bicron	
Model			Analyst	
Serial Number			A983 P	
Calibration Date			14/08/97	
[illegible]	PANCAKE G-M	NaI(Tl) (internal to [illegible])	LOW ENERGY GAMMA [illegible]	LOW ENERGY [illegible]
Make			Bicron	
Model			G-5	
Serial Number			A394Q	
Calibration Date			8/14/97	
[illegible]	Tc-99	Cs-137	Am-241	[illegible]
Source Calibration Date			6/2/97	
Source Serial Number			1845-94	
Source Emission Rate			1.008 μCi	
Source Check Reading			OUT: 16662 cpm / Ch #2: 1552 cpm	
Background Reading			11453 cpm / 805 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING			12292 cpm / 1388 cpm	
EVENING READING			18416 cpm / 1305 cpm	
Check Performed By			C Majewski	

↑ Am-241 ↑ Cs-137

10/25/97

8920

751,000 dPM

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/21/97

INSTRUMENTATION

	RATE METER	MICRO R RATE METER		
Make			BICRON	BICRON
Model			MicroRem	MicroRem
Serial Number			C250A	C251A
Calibration Date			~~11/08~~ / 7/25/97	7/25/97
Make				
Model				
Serial Number				
Calibration Date				
Source Calibration Date			6/2/97	6/2/97
Source Serial Number			1845-94	1845-94
Source Emission Rate			1.008 μCi	1.008 μCi
Source Check Reading			682 μR/hr	
Background Reading				NOT
Instrument Efficiency				
FLAG				US
MIDDAY READING			NOT USED	BD
EVENING READING			NOT USED	
Check Performed By			C. Mayo	CS Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/22/97

INSTRUMENTATION

Make		Ludlum	Bicron	Bicron
Model		Model-19	Analyst	Analyst
Serial Number		109562	A984P	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
Make		N/A	Bicron	Bicron
Model		/	G-5	G-5
Serial Number			A398Q	A378Q
Calibration Date		N/A	14/08/97	14/08/97
Source Calibration Date		6/2/97	10/25/97 (CM)	10/25/97 (CM)
Source Serial Number		1845-94	8920	8920
Source Emission Rate		1.00 uCi	751,000 dpm	751,000 dpm
Source Check Reading		CM 223 uR/hr	11711 cpm	12120 cpm
Background Reading		9.6 uR/hr	9519 cpm	9258 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		228 uR/hr	11657 cpm	11517 cpm
EVENING READING		220 uR/hr	11449 (CM) cpm	11425 cpm
Check Performed By		C. Mapsawski	C. Majewski	C.S. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/22/97

INSTRUMENTATION

			channel - OUT	channel - 2
[illegible]	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	[illegible]
Make			Bicron	Bicron
Model			ANALYST	ANALYST
Serial Number			A983P	
Calibration Date				
[illegible]	PANCAKE GM	NaI(Tl) internal [illegible]	LOW ENERGY GAMMA [illegible]	[illegible]
Make			BICRON	
Model			G-5	
Serial Number			A394Q	
Calibration Date			8/14/97	
[illegible]	Tc-99	Cs-137	Am-241	[illegible]
Source Calibration Date			10/25/~~97~~ 83 (CSM)	6/2/97
Source Serial Number			8920	1845-84
Source Emission Rate			751000dpM	1.008μCi
Source Check Reading			~~11250~~ 16800 (CSM) cpm	836 cpm
Background Reading			~~836~~ 11250 (CSM) cpm	156 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING			16826 cpm	1351 cpm
EVENING READING			16501 cpm	1315 cpm
Check Performed By			C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/24/97

INSTRUMENTATION

			Not used	
Make		Ludlum	Bicron	
Model		Model 12	Micro Rem	
Serial Number		102850	C250A	
Calibration Date		9/28/97	7/25/97	
Make		Ludlum ~~44-9 Corp~~	N/A	
Model		44-62-2		
Serial Number		14495		
Calibration Date		9/28/97	N/A	
Source Calibration Date		6/2/97	6/2/97	
Source Serial Number		1845-54	1845-54	
Source Emission Rate		1.008 μCi	1.008 μCi	
Source Check Reading		46500 cpm		
Background Reading		———		
Instrument Efficiency			Not Used	
FLAG				
MIDDAY READING		Not used in AM		
EVENING READING		45000 cpm		
Check Performed By		D. Griffith		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/23/97

INSTRUMENTATION

[illegible] TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make		LUDLUM	BICRON	BICRON
Model		MODEL-19	ANALYST	ANALYST
Serial Number		109962	A9846	A945P
Calibration Date		9/5/97	14/08/97	14/08/97
[illegible]	PANCAKE PROBE	NAI(Tl) Internal to [illegible]	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make		NA	BICRON	BICRON
Model			G-5	G-5
Serial Number			A3580	A3780
Calibration Date		NA	14/08/97	14/08/97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Source Calibration Date		6/2/97	10/25/97 (SD)	10/25/97 (SM)
Source Serial Number		1245-54	8920	8920
Source Emission Rate		1.008 µCi	751,000 dpm	751000dpm
Source Check Reading		226 µR/hr	11494 cpm	11498cpm
Background Reading		8.9 µR/hr	9476 cpm	9086cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED	11449cpm	11454cpm
EVENING READING		222 µR/hr	11000 cpm	11198cpm
Check Performed By		C. MAJEWSKI	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/23/97

INSTRUMENTATION

TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER (Channel-out)	[illegible] (Channel #2)
Make			Bicron	Bicron
Model			ANALYST	
Serial Number			A983P	
Calibration Date				
[illegible]	[illegible]	NaI(Tl) [illegible]	LOW ENERGY GAMMA DETECTOR	[illegible]
Make			Bicron	Bicron
Model			G-5	
Serial Number			A-394Q	
Calibration Date			8/14/97	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Source Calibration Date			10/25/~~97~~ 83 (CSM)	6/2/97
Source Serial Number			8920	1845-97
Source Emission Rate			751000 dpm	1.008 µCi
Source Check Reading			16755 Cpm	1337 cpm
Background Reading			11565 Cpm	805 Cpm
Instrument Efficiency				
FLAG				
MIDDAY READING			16500 CPM	~~1337~~ 1330 CPM (CSM)
EVENING READING			16587 CPM	1325 CPM
Check Performed By			C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/23 97

INSTRUMENTATION

[illegible]	RATEMETER	MICRO-R RATE METER	SCALER/RATEMETER	SCINTISCALER
Make		Ludlum		
Model		MODEL-12		
Serial Number		102850		
Calibration Date		9/22/97		
[illegible]	PANCAKE G-M	[illegible]	LOW ENERGY GAMMA	[illegible]
Make		Ludlum		
Model		44-62-2		
Serial Number		14495		
Calibration Date		9/22/97		
[illegible]	Tc-99	[illegible]	Am-241	[illegible]
Source Calibration Date		6/2/97		
Source Serial Number		1845-94		
Source Emission Rate		1.00 μCi		
Source Check Reading		42400 cpm		
Background Reading				
Instrument Efficiency				
FLAG				
MIDDAY READING		Not Used		
EVENING READING				
Check Performed By				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/24/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel		N/A	ot	ot
Source Check Reading		222 uR/hr	11866 cpm	11981 cpm
Background Reading		9.6 uR/hr	9840 cpm	9660 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used in AM	11714 cpm	11952 cpm
EVENING READING		215 uR/hr	11839 cpm	11785 cpm
Check Performed By		C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/24/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		Bicron	Bicron
Model	Model 12		Analyst	Analyst
Serial Number	102850		A983P	A983P
Calibration Date	28-Sep-97		14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum		Bicron	Bicron
Model	Model 44-62-2		G-5	G-5
Serial Number	14495		A394Q	A394Q
Calibration Date	28-Sep-97		14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97		25-Oct-83	2-Jun-97
Source Serial Number	1845-94		8920	1845-94
Source Emission Rate	1.008 uCi		751,000 dpm	1.008 uCi
Instrument Channel	N/A		Ch. Out	Ch. 2
Source Check Reading	41600 cpm		16500 cpm	1563 cpm
Background Reading	N/A		10900 cpm	790 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used in AM		Not used in AM	Not used AM
EVENING READING	42000 cpm		17500 cpm	16000 cpm
Check Performed By	C. Majewski		D. Griffiths	C. Majewski

HV 1,42 KV

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/25/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	N/A	N/A	out	OUT
Source Check Reading	1490 cpm	208 µR/hr	11905 cpm	12051 cpm
Background Reading	59 cpm	9.45 µR/hr	10036 cpm	10207 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	1500 cpm	Not used AM	11696 cpm	11627 cpm
EVENING READING	1350 cpm	220 µR/hr	11587 cpm	11619 cpm
Check Performed By	C. Majewski	D. Griffiths	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/25/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum		Bicron	Bicron
Model	Model 12		Analyst	Analyst
Serial Number	102850		A983P	A983P
Calibration Date	28-Sep-97		14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	NaI(Tl) (internal to ratemeter)	LOW-ENERGY GAMMA DETECTOR	LOW-ENERGY GAMMA DETECTOR
Make	Ludlum		Bicron	Bicron
Model	Model 44-62-2		G-5	G-5
Serial Number	14495		A394Q	A394Q
Calibration Date	28-Sep-97		14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97		25-Oct-83	2-Jun-97
Source Serial Number	1845-94		8920	1845-94
Source Emission Rate	1.008 uCi		751,000 dpm	1.008 uCi
Instrument Channel	N/A		Ch. Out	Ch. 2
Source Check Reading	42000 cpm		17400 cpm	1470 cpm
Background Reading	N/A		15500 cpm	885 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used AM		16000 cpm	1550 cpm
EVENING READING	42000 cpm		15500 cpm	1550 cpm
Check Performed By	C. Majewski		D. Griffiths	D. Griffiths

HV 1.30 KV

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/27/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—	—	out	out
High Voltage	—	—	1.3KV	1.2KV
Source Check Reading	CSM ~~227~~ 1445cpm	227 uR/hr	11360 cpm	11402 cpm
Background Reading	51 cpm	9.55uR/h	9729 cpm	9775 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used	Not used	Not used in AM	Not used in AM
EVENING READING	1500 cpm	222 uR/hr	10992 cpm	10809 cpm
Check Performed By	C. Majewski	C. MOJOWSKI	C. MOJOWSKI	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/27/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	Na(Tl)	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	G-5	G-5
Serial Number	14495	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	Ch. Out	Ch. 2
High Voltage	-	OK	1.4KV	1.4KV
Source Check Reading	46700cpm	1010 MRem/h	16700cpm	1555cpm
Background Reading	N/A	6.7 MRem/h	1350 cpm	810 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	40500cpm	NOT USED	17000 cpm	1750cpm
EVENING READING	38500 cpm	1000 MRem/hr	16000cpm	1700cpm
Check Performed By	C. MAJEWSKI	C Majewski	C. MAJEWSKI	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Micro-R 10992 No HV

Source Cs-137		Background
232	1	9.25
228	2	10.0
220	3	10.25
225	4	9.5
230	5	8.75
227 Ave		9.55

μR/h

Mod-12 S/N [illegible]

Source Cs 137

1	46000	cpm
2	48000	cpm
3	47000	cpm
4	46500	cpm
5	46000	cpm
Ave	46700	

N/A

Date mcN 10/27/97

Mod 3 pancake 94360/092307

Source (Tc-99)		Background
1400 cpm	1	55
1450 cpm	2	55
1350 cpm	3	60
1500 cpm	4	45
1525 cpm	5	40
1445	Ave	51

Bicron 945P/378Q HV = 1.2 kV

Source Am-241		Background
11412	1	9770
11201	2	9714
11456	3	9923
11547	4	9834
11392	5	9636
11402 Ave		9775

CPM

Bicron S/N 983P/394Q HV = 1.4kV

Source out (Am241)		chan 2 (Cs137)
16500 cpm	1	1450 cpm
16000	2	1600
16800	3	1750
17000	4	1400
17200 cpm	5	1550 cpm
16,700	Ave	1550

Background out		chan 2
11500	1	825
11000	2	875
11500	3	800
11750	4	825
11000	5	725
11350	Ave	810

Bicron 984D/398Q

Source Am241

BKG HV = 1.3KV

11537	1	9946
11189	2	9591
11329	3	9928
11429	4	9724
11306	5	9456
11360 Ave		9729

CPM

Bicron Micro-Rem HV = OK

BKG		Source
6	1	1020
7	2	1000
8	3	1000
6.5	4	1020
6	5	1010
6.7 Ave		1010

μRem/h

10/27/97

Micro R-Model 19 S/N 109962

Bkg

(1) 9.25

(2) 10.0

(3) 10.25

(4) 9.5

(5) 8.75

Bkg A983P HV=1.4KV (ANDY's)

OUT	Ch #2	
11500	825	(1)
11000	875	(2)
11500	800	(3)
~~11750~~	825	(4)
11000	725	(5)

CPM

Ludlum Pancake - Model 3 NO HV.

Bkg

55 (1)

55 (2)

60 (3)

45 (4)

40 (5)

CPM

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/28/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	-	-	OUT	OUT
High Voltage	N/A	NA	1.3KV	1.2KV
Source Check Reading	1522 cpm	034 MR/hr	10700 cpm	10624 cpm
Background Reading	53 cpm	0.03 MR/hr	9404 cpm	9385 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	1400 cpm	255 uR/hr		
EVENING READING	1500 cpm	210 MR/hr	10959 cpm	10876 cpm
Check Performed By	C. Majewski	C Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/28/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	G-5	G-5
Serial Number	14495	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	Ch. Out	Ch. 2
High Voltage	—	OK	1.3 KV ~~1585~~ OC pm	—
Source Check Reading	46200 ~~[illegible]~~ cpm	660 μRem/hr	15850 ~~[illegible]~~ cpm	785 cpm
Background Reading	N/A	5.9 μRem/hr	11150 cpm	NOT DONE
Instrument Efficiency				
FLAG				
MIDDAY READING	None Taken	650 μRem/hr	16000 cpm	Ch #2 Not used
EVENING READING	39000 cpm ~~[illegible]~~	650 μRem/hr ~~[illegible]~~ μRem/hr	15,500 cpm	Ch #2 not used
Check Performed By	C. Majewski	C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Model 3 pancake
S/N 94360/092307

Source (Tc-99)		Background
CPM		CPM
1500	1	50
1475	2	55
1500	3	60
1560	4	50
1575	5	50
CPM 1522	Ave	53 CPM

Model - [illegible] S/N 102850

Source (Cs-137)

1	46000	cpm
2	46500	cpm
3	45500	cpm
4	47000	cpm
5	46000	cpm
Ave	46250	

TUE
10/29/9[illegible]

Micro-R S/N 109962

Source (Cs-137)			Background
235	µR/hr	1	9.25
238		2	8.5
230		3	8.25
240		4	8.9
228	µR/hr	5	8.75
234		Ave	8.73

MR/h

Micro-Rem S/N C250A

Source (Cs-137)		Background
700 µrem/hr	1	5.5
650 µrem/hr	2	5.75
680 µrem/hr	3	6.5
620 µrem/hr	4	5.0
650 µrem/hr	5	6.75
660	Ave	5.9

MRem/h

H/U = OK

Bicron S/N 983P
HV = 1.3KV

Source Am-241		BKG OUT	BKG Ch #2
OUT 15500 cpm	1	11250	cpm 825
16750	2	10750	750
15500	3	11500	875
16000	4	11500	750
16500	5	10750	725
15850 cpm (Ave)		11150 cpm	785

Bicron S/N 945P
HV = 1.2KV

Source Am-241		Bkgs
CPM 10780	1	9406 CPM
10717	2	9279
10428	3	9641
10789	4	9410
10656	5	9186
CPM 10674	Ave	9385

Bicron S/N 984P
HV = 1.3 KV
Am-241 Source

		BKG
CPM 10803	1	9544 CPM
10731	2	9401
10668	3	9555
10601	4	9545
10696	5	8916
10700	Ave	9404

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/29/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—	—	out	out
High Voltage	—	—	1.3 KV	1.2 KV
Source Check Reading	1440 cpm	218 MR/h	11250 cpm	(CM) ~~NOT~~ 11371 cpm
Background Reading	51 cpm	9.6 MR/h	9755 cpm	9725 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used PM	Not Done	Not used AM	Not used AM
EVENING READING	1480 cpm	220 MR/h	11222 cpm	11238 cpm
Check Performed By	C. Majewski	C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/29/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	G-5	G-5
Serial Number	14495	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	Ch. Out	Ch. 2
High Voltage	—	OK	1.4KV	1.2KV
Source Check Reading	47400cpm	1005 μRem/hr	162000cpm	Ch.2 NOT USED
Background Reading	N/A	5-26 μRem/hr	11400CPM	" "
Instrument Efficiency				
FLAG				
MIDDAY READING	Not Done	NOT USED PM	Not Done	
EVENING READING	50900	1053 μRem/hr	160000CPM	" "
Check Performed By	C. Mayhew	C. Mayhew	C. Mayhew	C. Mayhew

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT _____ JOB. NO. _____ SHEET ___ OF ___

SUBJECT Source/BKG Checks BY CSM/DRG DATE 10/29/97

CKD. _____ REVISION _____

Bicron A883P OUT HV=1.4KV

Source Am241		BKG
16500	(1)	11500
16250	(2)	11500
16000	(3)	11750
16250	(4)	11000
16050	(5)	11250
16200	Ave	11400 cpm ✓

cpm

model -12 S/N 144955/ 102850

Source Cs-137

(1)	48000	cpm	NO
(2)	46500	cpm	BKG
(3)	47500	cpm	
(4)	47000	cpm	
(5)	48000	cpm	
Ave	47400 cpm ✓		

HV=1.3KV Bicron 984P OUT

Source		BKG cpm
11381	(1)	9814
11275	(2)	9725
11278	(3)	9738
11242	(4)	9867
11075	(5)	9633
11250	Ave	9755 ✓

model 3 S/N 94360/092307

Source (Tc-99)

Background		cpm
1550 cpm	(1)	40
1400 cpm	(2)	50
1380 cpm	(3)	60
1420 cpm	(4)	55
1450 cpm	(5)	50
1440	Ave	51 cpm ✓

HV=1.2 Bicron 945P OUT

Source		BKG cpm
11380	1	9629
11340	2	9652
11347	3	9917
11406	4	9788
11372	5	9640
11371	Ave	9725

Micro-R S/N 109962

Source (Cs-137)

			Background
220 μR/hr	(1)	10	μR/h
215 μR/hr	(2)	9.0	
218 μR/hr	(3)	9.75	
212 μR/hr	(4)	9.25	
225 μR/hr	(5)	10.0	
218 μR/hr	Ave	9.6	

HV=0K Micro Rem -250A

Source Cs-137		BKG μRem/hr
1025 μR/h	(1)	6.5
975	(2)	5.5
1000	(3)	5.75
1025	(4)	5.0
1000	(5)	6.5
1005	Ave	5.86

NOTE:

1 Cs-137 - Yellow LABEL To Probe

2 ✓ = TRANSFERED AVE TO DAILY SHEET

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—	—	OUT	OUT
High Voltage	—	—	1.3KV	1.2KV
Source Check Reading	1464 cpm	214 MR/h	11108 cpm	11554 cpm
Background Reading	53.5 cpm	9.12 MR/h	9444 cpm	9404 cpm
Instrument Efficiency				
FLAG				
MIDDAY READING	1425 cpm	230 MR/h	NOT Used	NOT Used
EVENING READING	15508 cpm	NOT USED	" "	" "
Check Performed By	C Majewski	C. Majewski	C. Majewski	C. Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(TI)	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	G-5	G-5
Serial Number	14495	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	Ch. Out	Ch. 2
High Voltage	—	OK	1-3KV	
Source Check Reading	47200 (926) cpm	1020 µRem/h	16100 cpm	
Background Reading	—	5.95 µRem/h	11300 cpm	
Instrument Efficiency				
FLAG				
MIDDAY READING	47500 cpm	1025 µRem/h	16000 cpm	
EVENING READING	48000 cpm	1000 µRem/h	Not used PM	
Check Performed By	P. Griffiths	C. Mayhew	C. Mayhew	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Analyst	Analyst
Serial Number	102850	C2S1A ~~C250A~~	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	G-5	G-5
Serial Number	14495	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	Ch. Out	Ch. 2
High Voltage		—		
Source Check Reading		971 mR/hr		
Background Reading		5.8 mR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING		Not used		
EVENING READING		" "		
Check Performed By		(Majeed)		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 14/3/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109912 ~~109962~~ ABS	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel		-		
High Voltage		290 MR/h		
Source Check Reading		10.8 MR/h		
Background Reading				
Instrument Efficiency				
FLAG				
MIDDAY READING		NOT USED		
EVENING READING		NOT USED		
Check Performed By		C Majewski		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. — PARSONS

CLIENT ______ JOB. NO. ______ SHEET 1 OF 2

SUBJECT Source Checks BY ______ DATE 11/3/97

CKD. ______ REVISION ______

(1) 983P HV= 1.3 [redacted] KV (CYP)

Source OUT		Bkg	
16500	(1)	11250	cpm
16000	(2)	11500	
15750	(3)	11250	
16000	(4)	11500	
16250	(5)	11000	
16100	AVE	11300	CPM

(5) Micro Rem C250A HV = OK ✓

Src (CS-137)		Bkg	
1020 µRem/hr	(1)	7.0	µRem/hr
980 µRem/hr	(2)	5.25	
1050 µRem/hr	(3)	6.0	
1060 µRem/hr	(4)	5.5	
990 µRem/hr	(5)	6.0	
1020 µR/hr	Ave	5.95	µR/hr

✓ **(2) 984D HV = 1.3KV cpm**

Source		Bkg	
11131 ~~9484~~	(1)	9582	
11076 ~~9416~~	(2)	9300	
11002	(3)	9740	
11170	(4)	9415	
11159	(5)	9181	
11108	Ave	9444	cpm

(6) 109962 model-19 [redacted] — CS-137 Src / Bkg, µR/hr — (1)–(5), Ave — See page 2

Model 3 Pancake 10 (2) (Z) TCS

Src		Bkg	
1550		55.	cpm
1400		45.	
14200		575	
1500		50.	
1450		60.	
1444		53.5	cpm

✓ **(3) 945D HV=1.2KV**

Source		Bkg	
11266	(1)	9441	cpm
11588	(2)	9264	
11552	(3)	9611	
11729	(4)	9460	
11636	(5)	9243	
11554	Ave	9404	cpm

(8) Model-12 Downhole

Source (CS-137)

(1)	460 cpm
(2)	470 cpm
(3)	475 cpm
(4)	482 cpm
(5)	475 cpm
Ave	472 cpm

N/A ✓

✓ **(4) Micro R Mod-19 CS137 Source 109962**

Source		Bkg	
218	(1)	9.25	µR/h
215	(2)	9.0	
215	(3)	8.9	
212	4	9.9	
219	5	9.0	
216	Ave	9.21	

(9) Micro-Rem C251A HV: OK

Source (Cs-137)		Background
950 µRem/hr	(1)	See Pg 2
1050 µRem/hr	(2)	
980 µRem/hr	(3)	
940 µRem/hr	(4)	
1000 µRem/hr	(5)	
See Pg 2	Ave	

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT Micro Rem / Micro R JOB. NO. ____ SHEET 2 OF 2
SUBJECT Initial Source Check BY ____ DATE 11/3/97
S/N C251A CS-137 CKD. ____ REVISION ____

Micro Rem C251A

Source		Bkg	
950	①	7.25	Previous page
1050	②	6.0	μRem/hr
960	③	6.0	
940	④	6.25	
1000	⑤	5.25	
950	⑥	5.75	
940	⑦	5.9	
950	⑧	5.75	
980	⑨	4.0	
970	⑩	6.0	
—	⑪	—	
—	⑫	—	
~~Micro R~~			
—	⑬	—	
—	⑭	—	
—	⑮	—	

971 AVE 5.8 μRem/hr

Model 19 Micro R S/N 104912
CS-137

Source		Bkg μR/hr
290	①	11.5
290	②	11.25
285	③	11.0
295	④	10.5
290	⑤	10.25
290	⑥	10.0
295	⑦	10.75
290	⑧	10.25
290	⑨	10.75
285	⑩	11.25
—	⑪	—
—	⑫	—
—	⑬	—
—	⑭	—
—	⑮	—

290 Ave 10.8 μR/hr

11/3
Original in CAL Sheet File

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/4/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICROR RATE METER	MICROR RATE METER	SCINTREX RATEMETER	SCINTREX RATEMETER
Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Analyst	Analyst
Serial Number	94360	109912	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (microR meter)	NaI(Tl) (microR meter)	LOW ENERGY GAMMA (Scintrex)	LOW ENERGY GAMMA (Scintrex)
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	44-9	N/A	N/A	G-5	G-5
Serial Number	92307	N/A	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—				
High Voltage	—				
Source Check Reading	1550 CPM	295 MR/hr	231 MR/hr		
Background Reading	55 CPM	11.65 MR/hr	9.1 MR/hr		
Instrument Efficiency					
FLAG					
MIDDAY READING	Not Done	285 MR/hr	NOT Done		
EVENING READING	1450 CPM	290 MR/hr	219 MR/hr		
Check Performed By	C. Majewski	C Sng	C Majewski		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/4/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO REM METER ✓	MICRO REM METER ✓	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	Notch	Not Applicable	Not Applicable	"LOW ENERGY GAMMA" DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE:	Cs-137	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage	.94KV	OK	OK		
Source Check Reading	40660 cpm	1025 μRem/hr	950 μRem/hr		
Background Reading	N/A	6.55 μRem/hr	6.0 μRem/hr		
Instrument Efficiency					
FLAG					
MIDDAY READING	Not Used	1000 μRem/hr	Not Done		
EVENING READING		1025 μRem/hr	940 μRem/hr		
Check Performed By	CS Mejia	CS Mejia	CS Mejia		

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC.

PARSONS

CLIENT _____ JOB. NO. _____ SHEET ____ OF ____

SUBJECT Source Checks BY _____ DATE 11/4/97

_____ CKD. _____ REVISION _____

Bicron - Micro Rem

S/N 250 A — CS-137 — S/N 251 A — HV = OK

Source		Bkg
1025	①	6.5
1050	②	5.75
1050	③	6.5
1000	④	6.0
1000	⑤	8.0
1025	Ave	6.55

HV = OK

Mrem/hr

Source		Bkg
950	①	6.0
1000	②	6.0
925	③	6.5
950	④	6.5
950	⑤	5.0
950	Ave	6.0

Mrem/hr

Mrem/hr

Ludlum Micro - R

S/N 109912 — CS-137 — S/N 109962

MR/hr

S		B
298	①	12.5
298	②	12.25
290	③	11.0
290	④	11.5
298	⑤	11.0
295	Ave	11.65

MR/hr

S		B
230	①	9
230	②	9.2
231	③	9
230	④	9
234	⑤	9.25
231	Ave	9.1

Ponca City - Ludlum Model - 3

TC-99

CPM

S		Bkg
1600	①	65
1450	②	60
1550	③	45
1550	④	60
1600	⑤	45
1550	Ave	55

CPM

PARSONS ENGINEERING SCIENCE, INC.

PARSONS

CLIENT _____ JOB. NO. _____ SHEET 2 OF 2

SUBJECT Source Check. BY _____ DATE 11/4/97

_____ CKD. _____ REVISION _____

Downhole

Model 12

HV = .94kV

Cs-137

41000 cpm	(1)
40800	(2)
41000	(3)
40000	(4)
40500	(5)
40660	

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 4/5/97

INSTRUMENTATION

INSTRUMENT TYPE	RATEMETER	MICROR RATEMETER	MICROR RATEMETER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Analyst	Analyst
Serial Number	94360	109912	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	44-9	N/A	N/A	G-5	G-5
Serial Number	92307	N/A	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—	—	—	OUT	OUT
High Voltage	—	—	—	1.3 KV	1.2 KV
Source Check Reading	1430 cpm	305 µR/h	229 µR/h	10563 cpm	11212 cpm
Background Reading	55 cpm	11.8 µR/h	9.11 µR/h	9533 cpm	9288 cpm
Instrument Efficiency					
FLAG					
MIDDAY READING	Not Done	Not Done	Not Done	11413 cpm	11321 cpm
EVENING READING	1500 CPM	290 µR/h	228 µR/h	11220 cpm	11146 cpm
Check Performed By	C Masewski	C. Majewski	C Masewski	C MASEWSKI	C MASEWSKI

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/5/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage	9.5KV	OK	OK	1.4KV	
Source Check Reading	46950 CPM	1001 μRem/hr	966 μRem/hr	15700 cpm	
Background Reading	~~46950 CPM~~ (CPM) N/A	6.17 μRem/hr	5.8 μRem/hr	10900 cpm	
Instrument Efficiency					
FLAG					
MIDDAY READING	Not Done	Not Done	Not Done	Not Done	
EVENING READING	42000 cpm	1000 μRem/hr	970 μRem/hr	16000 cpm	
Check Performed By	C MAJEWSKI	C majewski	C. majewski	C MAJEWSKI	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/17/97

INSTRUMENTATION

INSTRUMENT	RADIE METER	MICROR RATE METER	MICROR RATEMETER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Analyst	Analyst
Serial Number	94360	109912	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE GM	NaI(Tl) (internal to ratemeter)	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	44-9	N/A	N/A	G-5	G-5
Serial Number	92307	N/A	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—				OUT
High Voltage	—				1.2KV
Source Check Reading	1490 cpm	201 mR/hr	201 mR/hr		10032 cpm
Background Reading	51 cpm	8.4 mR/hr	8.4 mR/hr		8525 cpm
Instrument Efficiency					
FLAG					
MIDDAY READING	NOT USED				
EVENING READING	1500 cpm	Not Used	222 mR/hr		Not used
Check Performed By	C. Majewski	C. Majewski	C. Majewski		C Majewski

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/17/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137 etc	Cs-137 etc	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage		OK			
Source Check Reading		1802 µRem/hr			
Background Reading		5.7 µRem/hr			
Instrument Efficiency					
FLAG					
MIDDAY READING		Not used			
EVENING READING		980 µRem/h			
Check Performed By		C. Mayberry			

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/17/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	61402 ~~94360~~	109962	A984P	A945P
Calibration Date	30 ~~17~~-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	PR051754 ~~92307~~ cm	N/A	A398Q	A378Q
Calibration Date	30 ~~17~~-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—			
High Voltage	—			
Source Check Reading	869 cpm			
Background Reading	21.3 cpm			
Instrument Efficiency				
FLAG				
MIDDAY READING				
EVENING READING				
Check Performed By				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT Seneca Army Depot JOB. NO. _____ SHEET ___ OF ___

SUBJECT Daily Source Checks BY _____ DATE 11/17/97

CKD. _____ REVISION _____

Units - CPM
S/N 994 P/3994
HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Bicron Analyst
S/N 945 P/
✓ HV = 1.2KV

Source	BKG
10034	① 8584
10135	② 8526
10204	③ 8817
9997	④ 8615
9789	⑤ 8501
10032	Ave 8589

S = Am - 241
S/N 983 P/3
HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Units - MR/hr
S/N 109962

Source	BKG
290	19.0
✓ 280	28.4
275	3 8.2
280	4 8.5
282	5 8.0
281	Ave 8.4

Micro - R - Ludlum S = CS - 137
S/N 109962
✓

Source	BKG
205	① 8.5
200	② 8.0
200	③ 7.9
200	④ 8.75
202	⑤ 8.9
201	Ave 8.4

Units - MRem/hr
S/N 250 A · HV = OK
✓

Source	BKG
1000	① 5.75
1000	② 5.5
1010	③ 5.5
975	④ 6.0
1025	⑤ 5.75
1002	Ave 5.7

Micro-Rem - Bicron S = CS - 137
S/N 251 A HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Pancake S/N 94360 S = TC - 99
Units - CPM
model - 3
✓

Source	BKG
1400	① 55
1500	② 45
1400	③ 50
1550	④ 60
	⑤ 45
1490	Ave 51 cpm

Downhole S/N 102850 S = CS - 137
Units - cpm
model - 12
HV =

Source	BKG
	①
	②
	③
	④
	⑤

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/18/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-R RATE METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Analyst	Analyst
Serial Number	94360	109962	A984P	A945P
Calibration Date	17-Oct-97	5-Sep-97	14-Aug-97	14-Aug-97
PROBE	PANCAKE G-M	NaI(Tl) (internal to ratemeter)	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	Bicron	Bicron
Model	44-9	N/A	G-5	G-5
Serial Number	92307	N/A	A398Q	A378Q
Calibration Date	17-Oct-97	N/A	14-Aug-97	14-Aug-97
SOURCE	Tc-99	Cs-137	Am-241	Am-241
Source Calibration Date	2-Jun-97	2-Jun-97	25-Oct-83	25-Oct-83
Source Serial Number	1039/92	1845-94	8920	8920
Source Emission Rate	5589 cpm	1.008 uCi	751,000 dpm	751,000 dpm
Instrument Channel	—	N/A		
High Voltage	—	N/A		
Source Check Reading	1476CPM	218 µR/hr		
Background Reading	47.4CPM	8.1 µR/hr		
Instrument Efficiency				
FLAG				
MIDDAY READING	Not used	214µR/hr		
EVENING READING	1550 cpm	224µR/hr		
Check Performed By	C Majewski	C S Majewski		

MODEL 3 LUDLUM UNITS = CPM 94360 BKG

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

SOURCE
1470 @ 50
1400 @ 46
1500 @ 52
1510 @ 45
1500 @ 45

1476 AVG 47.4 CPM
CPM

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11/18/97

[redacted]

INSTRUMENTATION

INSTRUMENT-TYPE	RATE METER	MICRO-REM METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage		OK			
Source Check Reading		984 μRem/hr			
Background Reading		5.1 μRem/hr			
Instrument Efficiency					
FLAG					
MIDDAY READING		990 μRem/hr			
EVENING READING		10 00 μRem/hr			
Check Performed By		C.S. McJones			

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT Seneca Army Depot JOB. NO. _____ SHEET ____ OF ____

SUBJECT Daily Source Checks BY 11/18/97 DATE _____

CKD. _____ REVISION _____

Units - CPM
S/N 994 P/3594
HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Bicron Analyst
S/N 945 P/
HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

S = Am - 241
S/N 983 P/3-
HV =

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Units - MR/hr
S/N 109962

Source		BKG
215	1	8.5
225	2	8.2
218	3	8.0
214	4	8.2
220	5	7.6
218	Ave	8.1

Micro - R - Ludlum S = Cs - 137
S/N

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Units - MRem/hr Micro-Rem - Bicron S = Cs - 137
S/N 250 A · HV = OK S/N 251 A HV =

Source		BKG
1050	①	5.5
950	②	4.5
1010	③	5.25
970	④	6.0
940	⑤	4.0
984	Ave	5.1

Source	BKG
①	
②	
③	
④	
⑤	
Ave	

Pancake S/N 94360 S = TC - 99
Units - CPM
model - 3

Source		BKG
1470	①	50
1400	②	45
1500	③	52
1570	④	45
1500	⑤	45
1476	ave	47.4

Downhole S/N 102850 S = Cs - 137
Units - CPM
model - 12
HV =

Source	BKG
①	
②	
③	
④	
⑤	

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: ~~11/20/97~~ DRG
11/19/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751,000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage	N/A				
Source Check Reading	41400 cpm				
Background Reading	———				
Instrument Efficiency					
FLAG					
MIDDAY READING	———				
EVENING READING	42000 cpm				
Check Performed By	DRG				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Model-12
Source Readings
1 40000 cpm
2 42000 cpm
3 41500 cpm
4 41000 cpm
5 42500 cpm
Ave 41400 cpm

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 10/20/97

INSTRUMENTATION

INSTRUMENT TYPE	RATE METER	MICRO-REM METER	MICRO-REM METER	SCALER/RATEMETER	SCALER/RATEMETER
Make	Ludlum	Bicron	Bicron	Bicron	Bicron
Model	Model 12	Micro Rem	Micro Rem	Analyst	Analyst
Serial Number	102850	C250A	C251A	A983P	A983P
Calibration Date	28-Sep-97	25-Jul-97	25-Jul-97	14-Aug-97	14-Aug-97
PROBE	NaI(Tl)	Not Applicable	Not Applicable	LOW ENERGY GAMMA DETECTOR	LOW ENERGY GAMMA DETECTOR
Make	Ludlum	N/A	N/A	Bicron	Bicron
Model	Model 44-62-2	N/A	N/A	G-5	G-5
Serial Number	14495	N/A	N/A	A394Q	A394Q
Calibration Date	28-Sep-97	N/A	N/A	14-Aug-97	14-Aug-97
SOURCE	Cs-137	Cs-137	Cs-137	Am-241	Cs-137
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	25-Oct-83	2-Jun-97
Source Serial Number	1845-94	1845-94	1845-94	8920	1845-94
Source Emission Rate	1.008 uCi	1.008 uCi	1.008 uCi	751.000 dpm	1.008 uCi
Instrument Channel	N/A	N/A	N/A	Ch. Out	Ch. 2
High Voltage	1.0				
Source Check Reading	41800 cpm				
Background Reading	———				
Instrument Efficiency					
FLAG					
MIDDAY READING	did not use AM				
EVENING READING	42200 cpm				
Check Performed By	D Griffiths				

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

① 42500
② 41000
③ 42000
④ 41500
⑤ 41000

Ave 41800 cpm

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12-1-97

INSTRUMENTATION

INSTRUMENT TYPE	RM METER
Make	Ludlum
Model	Model 3
Serial Number	61402
Calibration Date	30-Oct-97
PROBE	PANCAKE G-M
Make	Ludlum
Model	44-9
Serial Number	PR051754
Calibration Date	30-Oct-97
SOURCE	Tc-99
Source Calibration Date	2-Jun-97
Source Serial Number	1039/92
Source Emission Rate	5589 cpm
Instrument Channel	
High Voltage	
Source Check Reading	920
Background Reading	40
Instrument Efficiency	
FLAG	
MIDDAY READING	
EVENING READING	
Check Performed By	MGA

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 11-25-97

INSTRUMENTATION

[redacted]	[redacted]
Make	Ludlum
Model	Model 3
Serial Number	61402
Calibration Date	30-Oct-97
[redacted]	[redacted]
Make	Ludlum
Model	44-9
Serial Number	PR051754
Calibration Date	30-Oct-97
[redacted]	[redacted]
Source Calibration Date	2-Jun-97
Source Serial Number	1039/92
Source Emission Rate	5589 cpm
Instrument Channel	
High Voltage	
Source Check Reading	700
Background Reading	40
Instrument Efficiency	
FLAG	
MIDDAY READING	
EVENING READING	
Check Performed By	MGA

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/4/97

INSTRUMENTATION

	[illegible] METER	[illegible] METER	[illegible] METER	[illegible]	[illegible]
Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61442 ~~94360~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR05 1754 ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	~~17~~-Oct-97	N/A	N/A	N/A	N/A
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		N/A	OK	
Source Check Reading	860		245	998	
Background Reading	27		8.9	5.6	
Instrument Efficiency					
FLAG	54		17.8	11.2	
MIDDAY READING	850		240	1000	
EVENING READING	900		240	1000	
Check Performed By	NAS		NAS	NAS	

EFFICIENCY=(CPM-BACKGROUND)/CPM

FLAG=

Src 870 ± 20%
696 - 1044 cpm

290 ± 20%
232 - 348 MR/hr

220 ± 20%
176 - 264 MR/hr

1015 ± 20%
812 - 1218 mrem/hr

971 ± 20%
776.8 - 1165.2 MR/hr

PARSONS ENGINEERING SCIENCE, INC.

PARSONS

CLIENT SENECA ARMY DEPOT | JOB NO. 730047.01001 | SHEET ____ OF ____

SUBJECT SEAD 12 & 63 SW/SED | BY NAS | DATE 12/4/97

RAD INSTRUMENT SOURCE CHECK DATA | CKD. ____ | REVISION ____

MODEL 3

SER# 61402

- TC-99 SOURCE:

1. 800
2. 850
3. 900
4. 900
5. 850

AVG 860 cpm

- BACKGROUND:

1. 30
2. 35
3. 25
4. 20
5. 25

AVG 27 cpm

FLAG 54 cpm

PROBE # PR051754

MODEL 19

SER# 109962

- CS-137 SOURCE

1. 220
2. 225
3. 260
4. 250
5. 270

AVG 245 mR/hr

- BACKGROUND

1. 8.5
2. 9.0
3. 9.0
4. 9.0
5. 9.0

AVG: 8.9 mR/hr

FLAG: 17.8 mR/hr

MICRO REM

SER# C250A

- CS-137 SOURCE

1. 1000
2. 1000
3. 990
4. 1000
5. 1000

AVG: 998 µR/hr

- BACKGROUND

1. 6.0
2. 5.0
3. 5.5
4. 5.5
5. 6.0

AVG. 5.6 µR/hr

FLAG: 11.2 µR/hr

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/5/97

INSTRUMENTATION

[illegible]	RATE METER	MICROR RATE METER	MICROR RATE METER	MICRO REM METER	[illegible]
Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61402 ~~94360~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
[illegible]	PANCAKE GM	NaI(Tl) (internal to ratemeter)	NaI(Tl) (internal to ratemeter)	Not Applicable	Not Applicable
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR 61754 ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	17-Oct-97	N/A	N/A	N/A	N/A
[illegible]	Cs-137	Cs-137	Cs-137	Cs-137	[illegible]
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		N/A	OK	
Source Check Reading	860		254	975	
Background Reading	26		9.3	6.5	
Instrument Efficiency					
FLAG	52		18.6	13	
MIDDAY READING	N/A - DONE @ NOON		N/A - DONE @ NOON	N/A - DONE @ NOON	
EVENING READING	900		245	975	
Check Performed By	NAS		NAS	NAS	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC.

PARSONS

CLIENT SENECA ARMY DEPOT | JOB NO. [illegible] | SHEET ___ OF ___

SUBJECT SEAD 12 & 63 SW/SED | BY NAS | DATE 12/5/97

RAD INSTRUMENT SURFACE CHECK DATA | CKD. ___ | REVISION ___

MODEL 3

SER# 61462
PROBE # PRO91754
TC-99 SOURCE:
1. 900
2. 850
3. 825
4. 900
5. 825
AVG 860 cpm

BACKGROUND:
1. 20
2. 30
3. 20
4. 30
5. 30
AVG 26 cpm

FLAG 52 cpm

MODEL 19

SER# 109962

CS-137 SOURCE:
1. 260
2. 250
3. 250
4. 250
5. 260
AVG 254 μR/hr

BACKGROUND
1. 9.5
2. 9.0
3. 9.5
4. 9.5
5. 9.0
AVG. 9.3 μR/hr

FLAG 18.6 μR/hr

MICRO REM

SER# C250 A1

CS-137 SOURCE:
1. 950
2. 975
3. 975
4. 975
5. 1000
AVG. 975 μrem/hr

BACKGROUND:
1. 7.0
2. 6.0
3. 6.5
4. 6.0
5. 7.0
AVG 6.5 μrem/hr

FLAG 13 μrem/hr

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/9/97

INSTRUMENTATION

Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61402 ~~94360~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR05175H ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	17-Oct-97	N/A	N/A	N/A	N/A
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		NA		OK
Source Check Reading	920		251		925
Background Reading	30		8.9		5.3
Instrument Efficiency					
FLAG	60		17.8		10.6
MIDDAY READING	—		—		—
EVENING READING	950		250		950
Check Performed By	NAS		NAS		NAS

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC.

PARSONS

CLIENT SENECA ARMY DEPOT | JOB. NO. 730C47.01001 | SHEET ___ OF ___

SUBJECT SEAD 12 & 63 SW/SED | BY NAS | DATE 12/9/97

RAD INSTRUMENT SOURCE CHECK DATA | CKD. ___ | REVISION ___

MODEL 3

SER# 61462

PROBE # PROSI754

TC-99 SOURCE:

1. 900
2. 925
3. 925
4. 900
5. 950

AVG: 920 cpm

BACKGROUND:

1. 25
2. 30
3. 40
4. 30
5. 25

AVG: 30 cpm

FLAG: 60 cpm

ENVELOPE: 696 - 1044 cpm
(870 ± 20%)

MODEL 19

SER# 109962

CS-137 SOURCE:

1. 250
2. 255
3. 250
4. 245
5. 255

AVG 251 μR/hr

BACKGROUND:

1. 9.0
2. 9.0
3. 9.0
4. 8.5
5. 9.0

AVG 8.9 μR/hr

FLAG: 17.8 μR/hr

ENVELOPE: 176 - 264 μR/hr
(220 ± 20%)

MICROREM

SER# C25[illegible]A

CS-137 SOURCE:

1. 900
2. 950
3. 900
4. 925
5. 950

AVG 925 μrem/hr

BACKGROUND:

1. 6.0
2. 5.0
3. 5.5
4. 5.0
5. 5.0

AVG: 5.3 μrem/hr

FLAG: 10.6 μrem/hr

ENVELOPE: ~~812 - 1218~~ and μrem/hr (971 ± 2
776.8 - 1165.2

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/16/97

INSTRUMENTATION

Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61402 ~~94300~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR051754 ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	17-Oct-97	N/A	N/A	N/A	N/A
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		N/A		OK
Source Check Reading	860		257		955
Background Reading	26		8.6		NW ~~9.6~~ 4.8
Instrument Efficiency	~~9nn~~				
FLAG	52		17.2		9.6
MIDDAY READING	— OFFSITE		— OFF SITE		— OFFSITE
EVENING READING	960		240		950
Check Performed By	NAS		NAS		NAS

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT: SENECA ARMY DEPOT | JOB NO. 7300??? | SHEET ___ OF ___
SUBJECT: SEAD 12 &63 R.I | BY: NAS | DATE: 12/16/97
RAD INSTRUMENT SOURCE CHECK DATA | CKD. ___ | REVISION ___

MODEL 3	MODEL 19	MICROREM
SER# 61402	SER# 109962	SER# C251A
PROBE# PR051754		
ENVELOPE: 870 ± 20% = 696-1044 cpm	ENVELOPE: 220 ± 20% = 176-264 µR/hr	ENVELOPE: 971 ± 20% = 776.8-1165.2 µrem/hr
TC-99 SOURCE	**CS-137 SOURCE**	**CS-137 SOURCE**
1. 850	1. 255	1. 975
2. 900	2. 255	2. 950
3. 850	3. 260	3. 950
4. 850	4. 260	4. 950
5. 850	5. 255	5. 950
AVG: 860 cpm	AVG: 257 µR/hr	AVG: 955 µrem/hr
BACKGROUND	**BACKGROUND**	**BACKGROUND**
1. 30	1. 8.5	1. 4.5
2. 25	2. 8.5	2. 5.0
3. 20	3. 9.0	3. 5.0
4. 30	4. 8.5	4. 4.5
5. 25	5. 8.5	5. 5.0
AVG: 26 cpm	AVG 8.6 µR/hr	AVG 4.8 µrem/hr
FLAG: 52 cpm	FLAG: 17.2 µR/hr	FLAG: 9.6 µrem/hr

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/11/97

INSTRUMENTATION

Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61402 ~~94360~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR0 51794 ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	17-Oct-97	N/A	N/A	N/A	N/A
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		N/A		OK
Source Check Reading	890		241		955
Background Reading	27		8.2		4.9
Instrument Efficiency					~~9.9~~
FLAG	54		16.4		9.8
MIDDAY READING	350		250		450
EVENING READING	900		235		950
Check Performed By	NAS		NAS		NAS

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

PARSONS ENGINEERING SCIENCE, INC. PARSONS

CLIENT SENECA ARMY DEPOT JOB. NO. 732417-0100 SHEET ___ OF ___
SUBJECT SEAD 12 & 63 BY NAS DATE 12/11/97
RAD INSTRUMENT SCALE CHECK DATA CKD. ___ REVISION ___

MODEL 3	MODEL 19	MICROREM
SER# 61402	SER# 109962	SER# C251A
PROBE# PR051754		
ENVELOPE: 870 ± 20% = 696-1044 cpm	ENVELOPE: 220 ± 20% = 176-264 µR/hr	ENVELOPE: 971 ± 20% = 776.8-1165.2 µrem/hr
TC-99 SOURCE	CS-137 SOURCE	CS-137 SOURCE
1. 900	1. 230	1. 950
2. 850	2. 250	2. 950
3. 900	3. 245	3. 950
4. 900	4. 235	4. 975
5. 900	5. 245	5. 950
AVG: 890 cpm	AVG: 241 µR/hr	AVG: 955 µrem/hr
BACKGROUND	BACKGROUND	BACKGROUND
1. 25	1. 3.0	1. 5.0
2. 30	2. 3.5	2. 5.5
3. 25	3. 3.0	3. 4.5
4. 30	4. 3.0	4. 4.5
5. 25	5. 3.5	5. 5.0
AVG: 27 cpm	AVG: 3.2 µR/hr	AVG: 4.9 µrem/hr
FLAG: 54 cpm	FLAG: 16.4 µR/hr	FLAG: 9.8 µrem/hr

Site: Seneca Army Depot Activity

Project: SEAD-12

Date: 12/12/97

INSTRUMENTATION

Make	Ludlum	Ludlum	Ludlum	Bicron	Bicron
Model	Model 3	Model 19	Model 19	Micro Rem	Micro Rem
Serial Number	61402 ~~94360~~	109912	109962	C250A	C251A
Calibration Date	17-Oct-97	5-Sep-97	5-Sep-97	25-Jul-97	25-Jul-97
Make	Ludlum	N/A	N/A	N/A	N/A
Model	44-9	N/A	N/A	N/A	N/A
Serial Number	PR081754 ~~92307~~	N/A	N/A	N/A	N/A
Calibration Date	17-Oct-97	N/A	N/A	N/A	N/A
Source Calibration Date	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97	2-Jun-97
Source Serial Number	1039/92	1845-94	1845-94	1845-94	1845-94
Source Emission Rate	5589 cpm	1.008 uCi	1.008 uCi	1.008 uCi	1.008 uCi
Instrument Channel	N/A	N/A	N/A	N/A	N/A
High Voltage	N/A		N/A	OK	
Source Check Reading	870		243	995	
Background Reading	21		8.1	5.2	
Instrument Efficiency					
FLAG	42		16.2	10.4	
MIDDAY READING	—		—	—	
EVENING READING	900		240	1000	
Check Performed By	NAS		NAS	NAS	

EFFICIENCY=(CPM-BACKGROUND)/DPM

FLAG=

APPENDIX B

FIELD LOGS

- TEST PIT LOGS
- SOIL BORING LOGS
- MONITORING WELL INSTALLATION LOGS

TEST PIT LOGS

PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/16/98 0942
Date / Time Finish: 10/16/98 1115
Weather: Sunny, 60's, light west wind
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-1

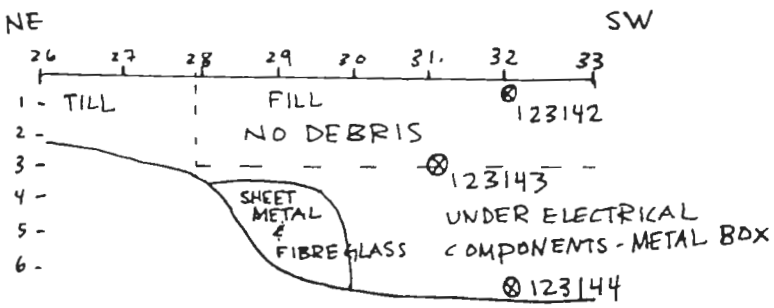
Location:
Disposal Pit A - Trench starts at 0.0 and runs southwest into the anomaly area 33'

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS	
			0' to 28' SW	28' to 32'	0' to 28' SW	28' to 32'
0	FL	SM	Olive gray, fine SAND and SILT, little Gravel, trace Organics, moist, loose	Fill - dark gray to olive gray, fine to medium SAND, some Silt, trace Gravel, loose, dry	Topsoil - Grass surface	Topsoil - Grass
1	TL	SM			Undisturbed Till	Loose Fill - no articles
2	TL	SM	Light brown, fine SAND, little Silt, trace fine Gravel, dense, dry			
3	TL	SM		Fill and Debris - olive gray SILT and fine SAND, little coarse Sand, some Gravel, moist	Undisturbed Till	- Heavy sheet metal - Broken fiberglass - Electrical components - 1' X 8' X .3' open-ended box with liquid inside. No VOCs - pictures taken
4			Olive gray SILT and fine SAND, little coarse Sand, trace Cobble, dry, hard			
5			Backhoe Refusal			
6	WS	WS				
7						
8						
9						

EXCAVATION DIMENSIONS: (Length X Width X Depth): 33' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1030	123143	31.0' X 3.0' D
1045	123142	32.0' X 0.5' D
1100	123144	32.0' X 6.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/16/98 1318
Date / Time Finish: 10/16/98 1530
Weather: Sunny, 60's, light west wind
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-2

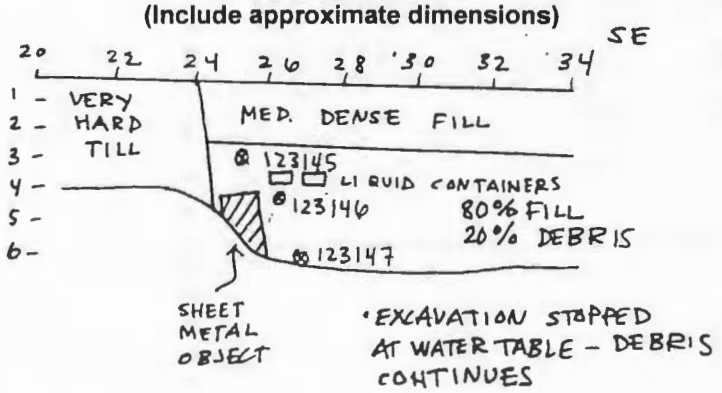
Location:
Disposal Pit A-Trench starts at 0,0 and runs southeast into the anomaly area. Ends at 34'.

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			0' (NW) to 24' (SE)	24' to 34'	
0	FL	SM	Dark brown SILT and fine SAND, some coarse Sand, little Gravel, Organics, damp.	Olive gray SILT and fine SAND, some coarse Sand and fine Gravel, Organics, damp.	Debris started at 24'. Large sheet metal object at 25' X 3' deep- possible cabinet or shelving unit. One-gallon metal cans at 26' X 3.5' deep (2), high VOC's, possibly paint cans, one had no cap. Contents variable in soil. Cans and recovered stained soil placed in a 5-gallon bucket for disposal. Headspace = 611 ppm. Picture taken, samples taken above and below. Other debris visible in wall of trench including electrical components and metal/fiberglass debris. Light sheen on water at 6'.
1	FL	SM			
2			Olive gray SILT, some fine to medium Sand, little Gravel, dry, very dense	Olive gray, silty SAND and SHALE, Gravel, moist under sheet metal (3' deep to bottom of pit). Water at 6'.	
3					
4	FL	SM	Olive gray, silty SAND and Shale		
5					
6					
7					
8					
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 34' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1400	123145	25.0' X 3.0' D
1430	123146	26.0' X 3.5' D
1500	123147	26.0' X 6.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

TEST PIT NO. TP12-3 (North)

Location:
Disposal Pit C

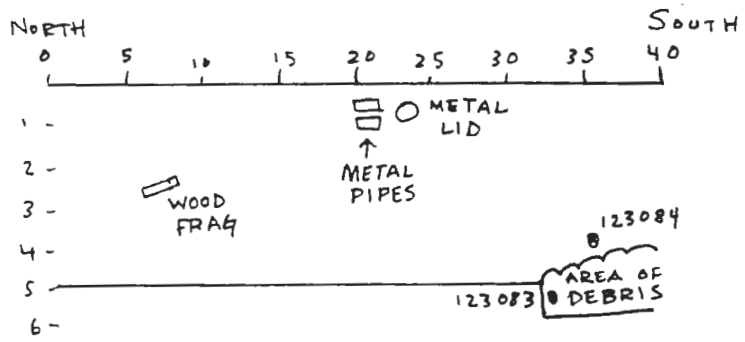
Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/6/98 1412
Date / Time Finish: 10/7/98 1600
Weather: Cloudy, showers, 60 deg.
Contractor: Maxim
Inspector(s): KKS, BC, JT

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			0 (North) to 32' (South)	32' to 40'	
0	FL	SM	Topsoil .8' deep to non-existant. Area of stressed vegetation. Light brown to olive gray, fine SAND, some Silt, little fine to coarse Gravel, trace Cobble, dry- very dense. Bottom of pit at 5'. - Wood fragment with metal hasp at 10' X 2.5' deep - .1' X .2' corroded sheet metal at 10' X 4' deep - 10" lid with clamping ring at 25' X 1' deep - 2 - 8" X 2" diameter steel, theaded pipes with end caps at 23' X 1' deep	No topsoil- same Fill material as before Looser Fill with cone shaped objects and electrial components, sheet metal and styrofoam, fiberglass fragments. Soil is moist. - Pocket of grease-looking material at 34' X 5' deep - Water table at 5.5'	Purpose of excavation is to determine extent of disposal pit C. Excavation from 0 (North) to 32' was scanned with a metal-detector to verift no metal objects below 5'. A total of 6 cone-shaped objects were removed from the pit - 18" L X 12" W at the base. Gamma radiation screening = 8X background. More of these objects were visible in the pit, above and potentially below the water table (5.5'). Paint on a dial at the cone top was likely source of radiation reading. There was a brief VOC hit near the top of the pit (17 ppm) which cleared quickly. A pocket of grease, which also covered some of the soil and debris, was sampled - no VOC's detected.
1					
2					
3					
4					
5					
6					
7					
8					
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 40' X 3.5' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
0945	123084	33.5' X 4.0' D
1145	123083	33.0' X 5.5' deep
1330	123082	surface

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/17/98 1135
Date / Time Finish: 10/17/98 1330
Weather:
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-3 (South)

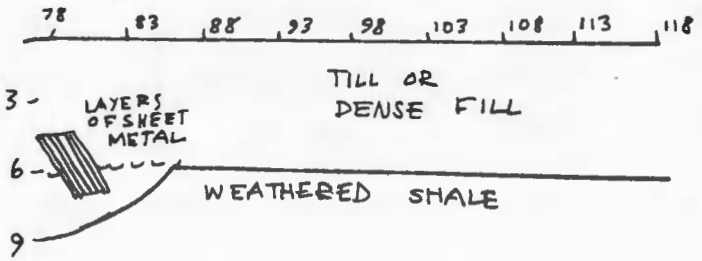
Location:
Disposal Pit C

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			77' to 85'	85'to 114'	
0	FL	GC	- Stressed vegitation, little or no topsoil. Fill. Olive gray to light brown, silty SAND and GRAVEL, dry. moderately compact. - Electric cable with a connector at 3.5' deep. - Stacked sheet metal at 5.5' deep- stop digging.	Stressed vegitation, little or no topsoil. Fill. Olive gray to light brown, silty SAND, some Gravel, trace Cobble, and small Boulders, dry, compact	Purpose of excavation is to determine the extent of disposal pit C- digging from the south end of the proposed trench towards where the pit was terminated at 40' (10/7/98). Digging will stop when debris are found. Started at 118' south. No debris found until 77' from north end. Digging continued down to bedrock- it is apparent that the burial pit was dug into the weathered shale, below present water table.
1					
2					
3					
4				Same as above, more compact	
5					
6					
7	WS		Water table	Weathered SHALE	
8					
9	WS		Weathered SHALE		

EXCAVATION DIMENSIONS: (Length X Width X Depth): 118' X 3' X 5.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
	No samples taken	

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

TEST PIT NO. TP12-4

Location:
Disposal Pit C

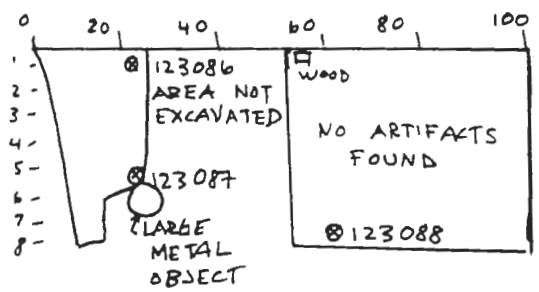
Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/12/98 1230
Date / Time Finish: 10/12/98 1630
Weather: Sunny, 60's, light wind from NW
Contractor: Maxim
Inspector(s): KKS, JT

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GC	Dark brown to olive gray, fine SAND and SILT, some fine and coarse Gravel, few Cobbles and Boulders.	Little or no topsoil, vegetation stressed.
1				
2				
3				
4				
5				
6				
7	FL	GC	Large cylindrical object approximately 4' in diameter. Length is unknown. Appears to be made of stainless steel, attempts to move object were completely unsuccessful. Resulted in broken backhoe tooth and no visible damage to cylindar.	No further attempts made to disturb metal object. Length of the cylinder is probably substantially longer than 3'.
8				
9				
10	FL	SC	Reddish-brown CLAY, very dense, moist.	

EXCAVATION DIMENSIONS: (Length X Width X Depth): 100' X 3' X 9.5'
AIR MONITORING DATA: Background OVM Reading: 0.0-0.7 ppm
Maximum Breathing Zone OVM Reading: 0.0-0.7 ppm

TIME	SAMPLE I.D.	LOCATION
1406	123086	22.0" X 0.5' D
1330	123087	22.0' X 6.0' D
1530	123088	60.0' X 8.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/13/98 0900
Date / Time Finish: 10/13/98 1140
Weather: Sunny, 60's, light wind
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-5

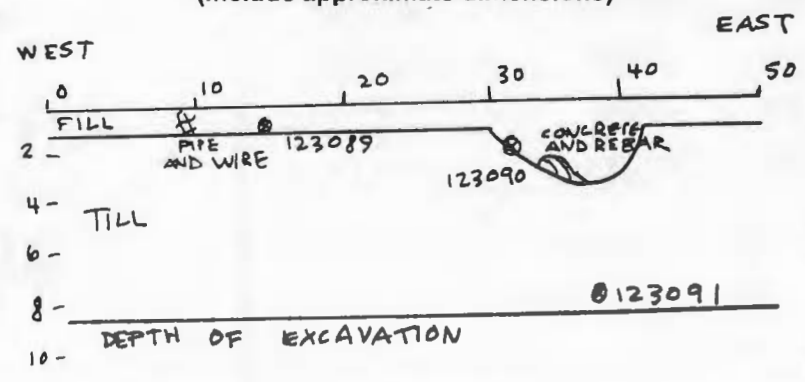
Location:
EM- 23

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil, dark gray, fine to medium SAND, some SILT, little fine to coarse Gravel, trace Organics, moist, loose	4' by 2' by 1' concrete with rebar
1	FL	SM	Dark gray to light brown, fine to medium SAND, some Silt, little fine to coarse Gravel, trace Cobbles and Boulders, moist, loose	Smaller pieces of concrete with rebar, strands of insulated wire, 1" diameter pipe
2				
3				
4				
5	TL	SC	Olive gray to dark gray, SILT and fine SAND, little coarse Sand, trace Cobble, moist	No debris
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 50' X 3' X 9'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
0945	123089, 123092	16.0' X 0.8' D
1045	123090	30.0' X 2.0' D
1130	123091	35.0' X 8.0 ' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/17/98 1002
Date / Time Finish: 10/17/98 1050
Weather: Sunny, 60's moderate wind from west
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-6

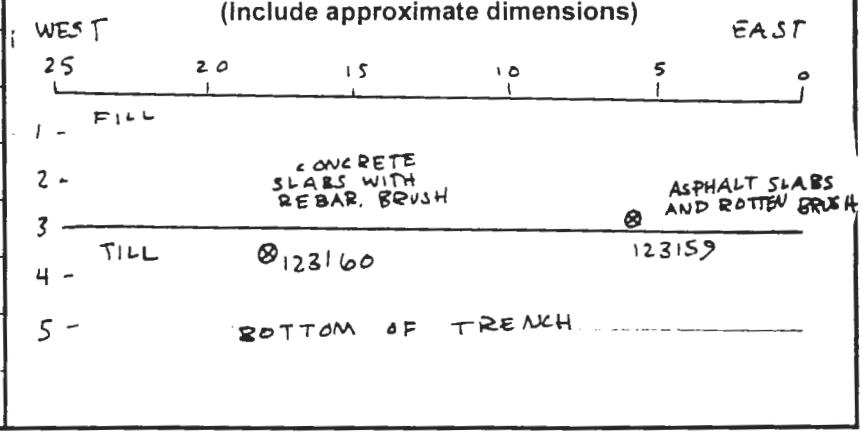
Location:
EM- 23

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil- olive gray, silty SAND, moist, thick Grass and Roots	
1	FL	SM	Fill- olive gray to light brown, silty SAND, some Gravel, trace	8' by 4' by 1' concrete slab with rebar, small concrete pieces, brush underneath
2				
3	TL	SM	Olive gray SILT and SAND, some Gravel, trace Cobble, moist, very compact	Undisturbed, scanned with metal-detector
4				
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 25' X 3' X 5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1030	123158	16.0' W X 2.5' D
1040	123159	6.0' W X 3.0' D
1050	123160	18.0' W X 3.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/15/98 1330
Date / Time Finish: 10/15/98 1430
Weather: Sunny, 60's, moderate wind from west
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-7A & 7B

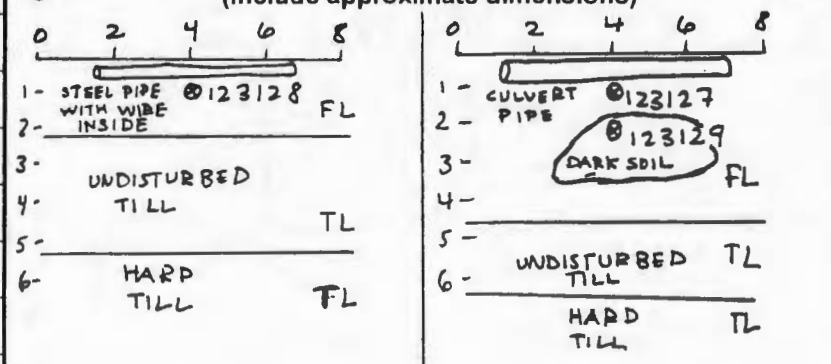
Location:
TP 12-7.9 EM-22 TP 12-7B
EM-21

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS	
			TP12-7A	TP12-7B	TP12-7A	TP12-7B
0	see cross section	see cross section	Dark brown fine to medium SAND, some Silt, little Organics, moist	Dark brown fine to medium SAND, some Silt, little Organics, moist	Topsoil	Topsoil
1					5.5' L X 1' Diameter drain pipe, steel - 1/2" wall, wire inside	- Culvert pipe, 4' L X 2 Diameter - Fired 7.62 NATO Black Casing - 1' Heavy gauge wire - 3' X 3' aluminum foil - Very dark soil in central area, possibly stained
2			Dark gray SILT and fine SAND, little coarse Sand, trace Cobble, dry, loose	Dark gray SILT and fine SAND, little coarse Sand, trace Cobble, dry dense		
3					Undisturbed Till	Undisturbed Till
4			Olive gray to dark gray SILT and fine SAND, trace Clay and Gravel, dry, dense			
5				Olive gray to dark gray SILT and fine SAND, trace Clay and Gravel, dense, dry		
6			Very hard TILL	Very hard TILL		
7						
8						
9						

EXCAVATION DIMENSIONS: (Length X Width X Depth): 7A= 8' X 3' X 5.5' 7B= 8' X 3' X 6.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1340	123127	4.0' X 1.0" D (7B)
1400	123128	4.0' X 1.0 D (7A)
1420	123129	4.0' X 2.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/14/98 1108
Date / Time Finish: 10/15/98 1220
Weather: Sunny, 50's, moderate west wind
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-8

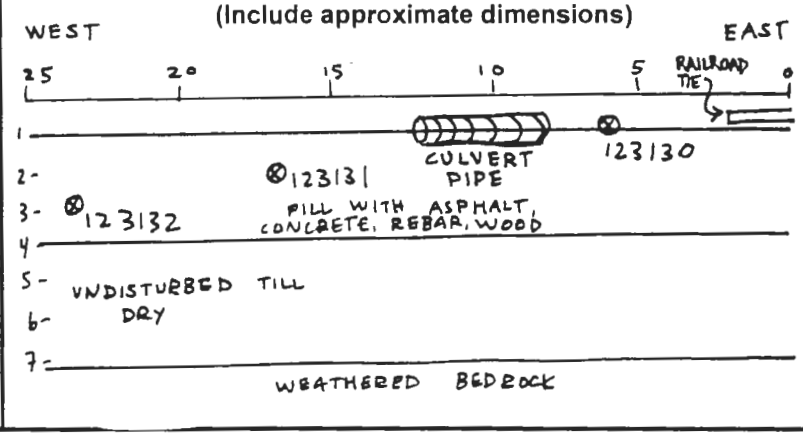
Location:
EM-21

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil- dark brown fine to medium SAND, some Silt, little Organics	Topsoil free of debris
1	FL	GC	Light brown to very dark brown fine to medium SAND, some fine to coarse Gravel, little Silt and Cobbles	Railroad ties, nails, 2' diameter culvert pipe sections, concrete with rebar, asphalt, brush. electrical tape
2				
3				
4	TL	GC	Olive gray, fine SAND and SILT, some fine to coarse Gravel, little Cobble, dense, dry	Undisturbed
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 25' X 3' X 7.2'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1115	123130	7.0' X 1.0' D
1200	123131	17.0' X 2.0' D
1210	123132	23.0' X 3.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/15/98 0905
Date / Time Finish: 10/15/98 1015
Weather: Sunny, 50's, moderate west wind
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-9

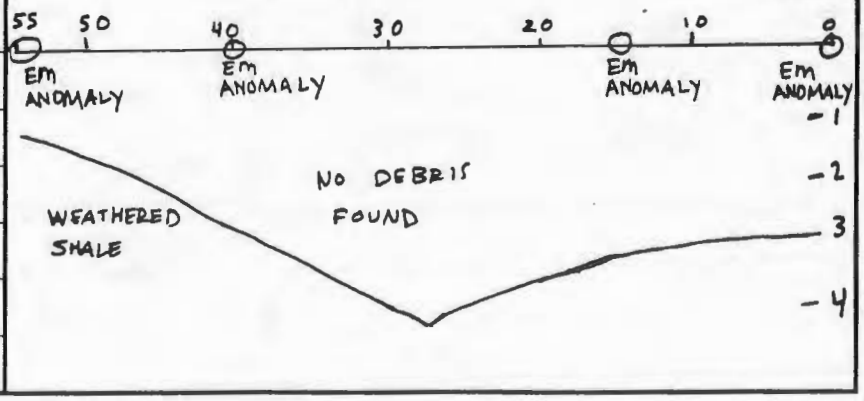
Location:
EM-7

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GM	Dark gray fine to medium SAND, some Silt, little Organics, loose, moist	Rich topsoil - no debris
	TL	GM		Undisturbed - no debris
1	TL	GM	Light brown fine SAND, some Silt, little Organics, dense, dry	Undisturbed, no debris
2			Olive gray fine SAND, some Silt, little fine Gravel, dense, dry	
3				
4	TL	CH	Light gray, stiff, dry	Undisturbed - no debris
	WS	WS	Weathered SHALE, dry	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 55' X 3' X 4.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
0945	123124	25.0' X 0.5' D
0950	123125	25.0' X 1.0' D
0955	123126	25.0' X 2.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/4/98 1020
Date / Time Finish: 10/4/98 1345
Weather: Clear, 70's, dry
Contractor: Maxim
Inspector(s): KKS, RLC

TEST PIT NO. TP12-10

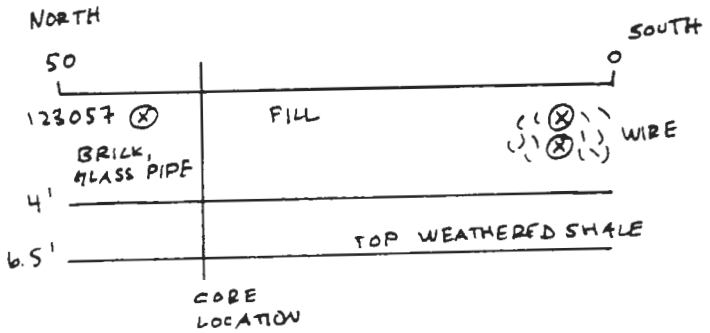
Location:
EM-8

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GM	Greenish-gray to brown SILT, some fine Sand, little medium SAND, little coarse Gravel, little Cobble, trace Debris, dry to moist	Debris includes wire, glass, steel pipe, and brush debris
1				
2				
3				
4	TL	GM	Greenish gray to olive gray SILT and fine SAND, little clay, little fine to coarse Gravel, trace Cobble, moist to wet at 6'	
5				
6				
7	WS	WS	Weathered Shale	
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 48' X 3' X 6.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1225	123056	2.0' X 2.0' D
1215,	123055, 123067	40.0' X 1.0' D
1220 1230	123057	40.0' X 5.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/14/98 0945
Date / Time Finish: 10/14/98 1330
Weather: Cloudy, showers, 60's
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-11

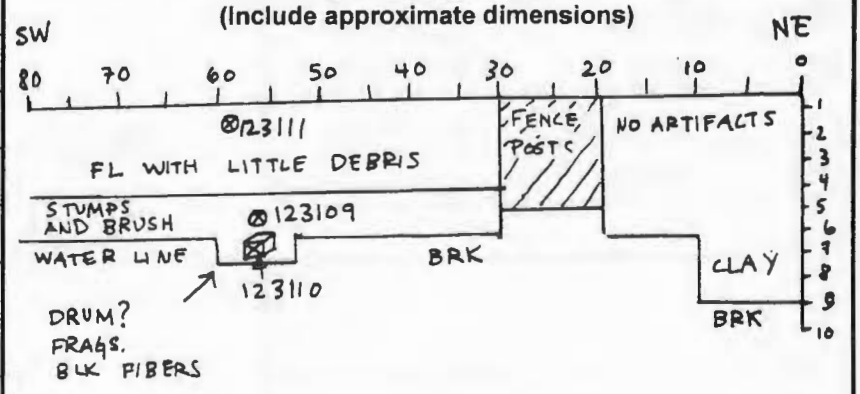
Location:
EM-6

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GM	Light brown, fine SAND, some fine Gravel, little to no Organics, moist	No topsoil, stressed vegetation
1	FL	GM	Light reddish-brown, fine SAND, some fine to medium Gravel, little Silt, moist, dense	
2	FL	SM	Dark gray, fine SAND and SILT, some fine to coarse Gravel, little Cobble, moist dense	
3				
4	FL	GM	Dark gray, fine SAND and SILT, some fine to coarse Gravel, little Cobble, moist to saturated, loose	Stumps and brush
5				
6	FL	GM	Water table	Wood debris continues under water possible drum fragments, cannot dig further due to wood debris
7				
8	FL	GM		
9	WS		Weathered Shale	

EXCAVATION DIMENSIONS: (Length X Width X Depth): 80' X 3' X 9'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1130	123109	58.0' X 6.0' D
1200	123110	59.0' X 6.5' D
1300	123111	60.0' X 0.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

TEST PIT NO. TP12-12

Location: EM-6

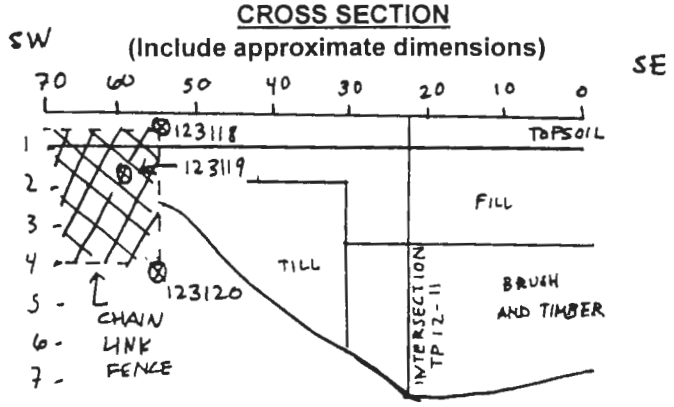
Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/14/98 1500
Date / Time Finish: 10/14/98 1700
Weather: Cloudy, showers, 50's
Contractor: Maxim
Inspector(s): KKS, BC, JT

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			6' (SW)	12' (SW)	
0	FL	SB	Topsoil- grass covered.	Same	Test pit intersects TP12-11 at 22' (SW) running up hill. Heavy brush and timber was found from 0 to 32'. Couldn't break through except in a few spots to bedrock at 7.5' deep. Past 32' the soil - possibly Till - was denser with shale fragments. Water table was deeper - -near bedrock. No debris below 1' deep. A thick layer of chain link fince from 55' to the end of the trench prevented digging to bedrock
1	FL	CL	Dark to olive gray, silty SAND	- Olive gray fine SAND, little fine to coarse Gravel, moist	
2			Fill - backfilled Till		
3			Fence post and piece of chain	- Wood - brush, timber and stumps, mostly cedar at 3.5' deep	
4	FL		Olive gray, silty SAND, some orange to red Clay, little Shale Gravel		
5					
6			Galvanized chain link fence from 1.5' - 2' to unknown depth - cannot dig through it.	- Water table at 6'	
7					
8	WS	WS	Scooped under South-east edge to collect soil sample	Weathered SHALE	
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 70' X 3 to 4' X 7.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1620	123118	57.0' X 0.5' D
1640	123119	60.0' X 1.5' D
1650	123120	58.0' X 4.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/3/98 1415
Date / Time Finish: 10/3/98 1830
Weather: Cloudy, 60's, light northeast wind
Contractor: Maxim
Inspector(s): KKS, DRG

TEST PIT NO. TP12-13

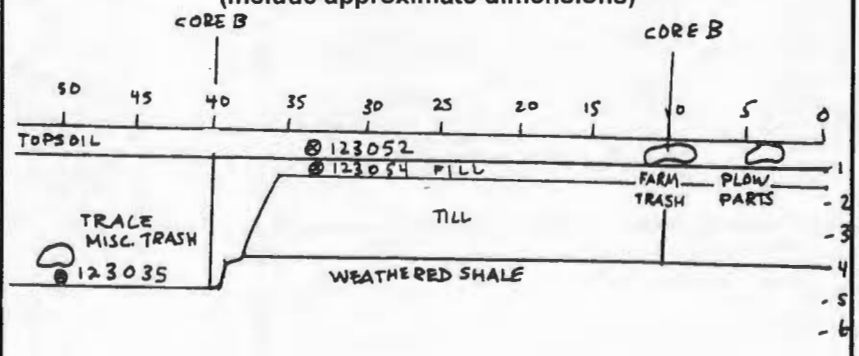
Location:
EM-40

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			0' to 35' (NW)	35' to 50'	
0	FL	SM	Brown SILT and fine SAND, little medium Sand, trace Gravel, Organics and debris	Fill - dark gray to brown, fine to coarse SAND, some Silt, and fine to coarse Gravel, little Organics and debris	Debris included hinges, coal, broken glass, sheet metal, and wood
1	TL	SP			
2	TL	SM	Light brown, fine to medium SAND, little Silt, trace Gravel		
3					
4	WS	WS	Olive gray to dark gray SILT and fine SAND, little fine to coarse Gravel, trace Cobble		
5			Weathered SHALE	Weathered SHALE	
6					
7					
8					
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 50' X 3' X 5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1625	123052	34.0' X 0.8' D
1640	123053	50.0' X 5.5' D
1655	123054	34.0' X 1.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 9/30/98 1000
Date / Time Finish: 9/30/98 1120
Weather: Light rain, 60's, light wind SW
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-14

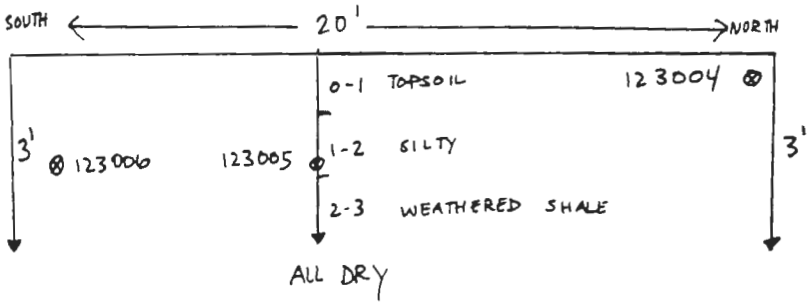
Location:
EM-11

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	ML	Light brown topsoil - SILT, some fine Sand, little organic matter and small Gravel, dry	No hits with VOC or Rad monitors
1	FL	CL-ML	Olive gray, SILT and CLAY, some organic matter (Roots), spots of red oxidation, dry	No signs of disturbed ground
2	WS	WS	Weathered SHALE	
3				
4				
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 20' X 3' X 3'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
	123004	North end, 0.5' D
	123005	Midway, 1.5' D
	123006	South end. 1.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/2/98 1010
Date / Time Finish: 10/2/98 1620
Weather: Overcast, 50's
Contractor: Maxim
Inspector(s): DRG, KKS

TEST PIT NO. TP12-15

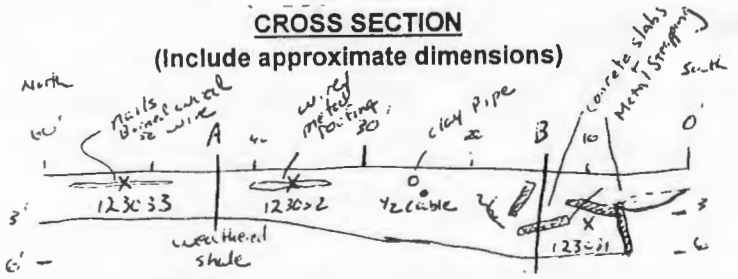
Location:
EM-5

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			CORE A	CORE B	
0	FL	SM	Olive gray to light brown fine SAND, some Silt, little coarse Sand to fine Gravel, trace Organic matter, dry to moist	Olive gray to light brown fine SAND, some Silt, little coarse Sand to fine Gravel, trace Organic material, dry to moist	
1					
2	TL	SM			
3	WS	WS	Olive gray to dark gray SILT and fine Sand, little coarse Sand, trace Cobble, moist	Olive gray to dark gray SILT and fine SAND, little coarse Sand, trace Cobble, moist to 4.5', wet to 5', saturated below 5'	
4					
5			Weathered SHALE		
6				Weathered SHALE	
7					
8					
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 62' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
	123031	12 N X 3.5' D
	123032	38 N X 2.0' D
	123033	51 N X 0.8' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

TEST PIT NO. TP12-16A

Location:
EM-5

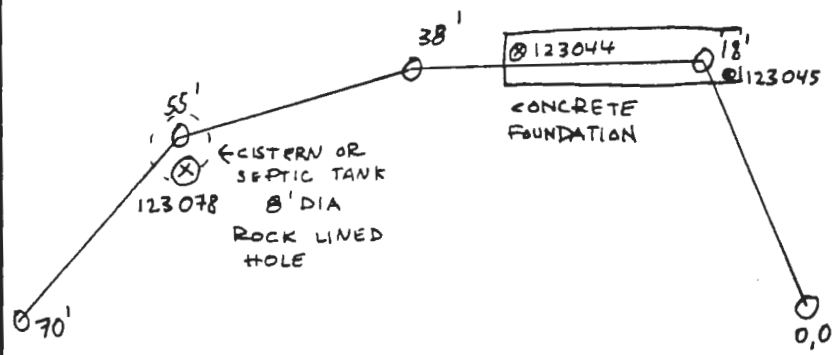
Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/3/98 0845
Date / Time Finish: 10/3/98 1240
Weather: Cloudy, 60's, light wind
Contractor: Maxim
Inspector(s): KKS, DRG

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GM	Dark gray fine SILT to medium SAND, some fine to coarse Gravel, little Organics (Roots) and debris, dry	Probable site of a farm related building - no positive Army debris found - Nails, horseshoe, concrete fragments, rusty sheet metal (.4' X .4'), rusty metal strapping, and glass shard found at 0-15' X 0-4' deep - Metal strapping, sheet metal fragments, 18" rebar, nail, begining of a large concrete slab, 8" steel or iron door hinge, and 2" diameter metal ring found at 15-20' X 0-2' deep - Nails, 1' light chain, and more door hardware found at 20-25' X 0.5' deep -Pottery shards, glass bottle fragment, 3/4" metal pipe, sheet metal fragments, and metal strapping found at 35-50'
1				
2	FL	GM	Light brown fine SAND and SILT, some medium to coarse Gravel, dry	
3	TL	SM	Olive gray to dark gray SILT and SAND, little coarse Sand to fine Gravel, trace Cobble	
4	WS	WS	Weathered SHALE	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 70 X 3 to 6 ' X 3.5 to 4'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1210	123045	18.0' X 2.0' D
1215	123044	31.0' X 0.6' D
1220	123078	18.0' X 2.0' D

OVERHEAD VIEW
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/6/98 0950
Date / Time Finish: 10/6/98 1200
Weather: Clear, 60's, wind out of the SW
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-17

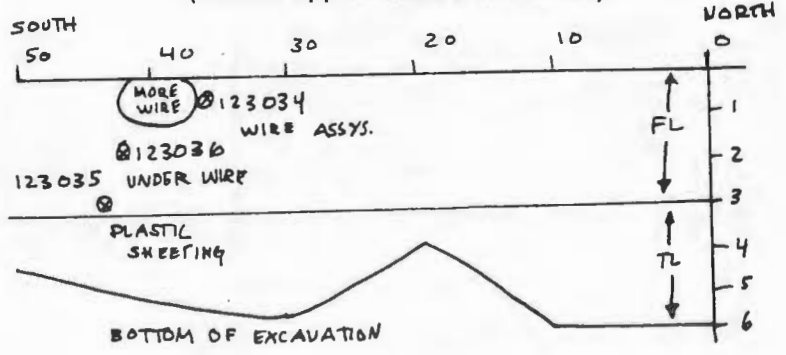
Location:
EM-27

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil - dark gray, fine to medium SAND, some Silt, fine to medium Gravel, trace Organics	6" by 6" metal square wire frames (10)
1	FL	SM	Disturbed till - olive gray	More wire frames, small pieces of plastic sheeting
2				
3	TL	SM	Undisturbed Till - olive gray, very dense	
4				
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 50' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
	123034	36' X 0.5' D
	123035	44' X 3.0' D
	123036	42' X 2.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/1/98 0910
Date / Time Finish: 10/1/98 1200
Weather: Showers, 60 deg., gusty winds
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-18

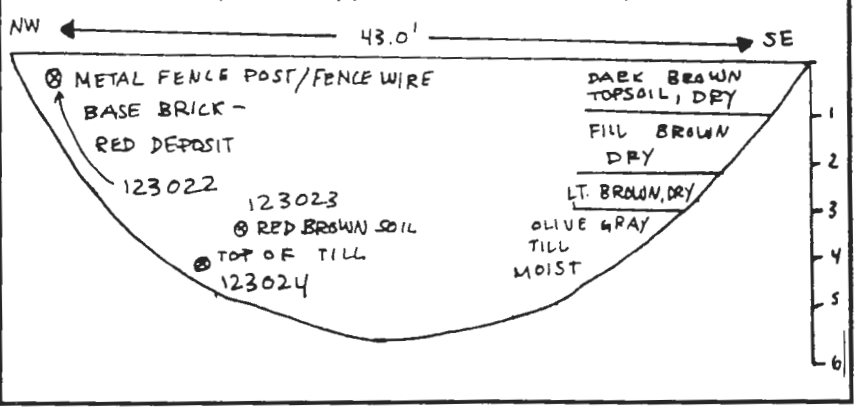
Location:
EM-28

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil - Dark gray, fine to medium SAND, some Silt, trace Organics (Roots)	No VOC or Rad hits
1	FL	GM	Brown, fine to medium SAND, some Silt, little Shale fragments, dry	Rust, metal fragment, glass shard, fence wire pieces, and part of metal fence post
2				
	FL	SM	Light brown, fine to medium SAND, some Silt, dry	
3	TL	GM	Olive gray SILT, fine to medium Sand, Shale fragments, moist	Undisturbed
4				
5				
6	WS	WS	Weathered SHALE	
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 43' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1015	123022	39.0' X 0.5' D
1040	123023	34.0' X 4.0' D
1050	123024	38.0' X 4.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/1/98 1337
Date / Time Finish: 10/1/98 1440
Weather: Partly sunny, 65 deg., windy
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-19

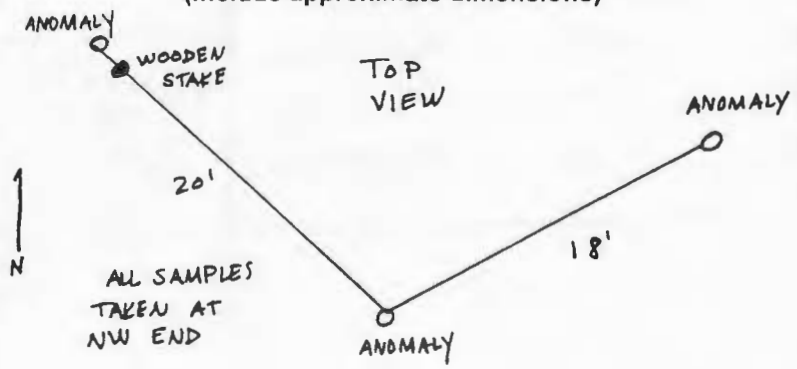
Location:
EM-28

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil - dark gray, fine to medium SAND, Silt, Roots, dry	No VOC or Rad hits. Only man-made object was an old stake at NW end - 5' D
1	TL	SM	Light brown to olive gray fine to medium SAND, Silt, dry	
2				
3				
4	TL	SM	Same as above, moist	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 38' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1445	123025	NW end of pit
1450	123026	NW end of pit
1455	123027	NW end of pit

OVERHEAD VIEW
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 9/30/98 1340
Date / Time Finish: 9/30/98 1355
Weather: Partly sunny, 70's, light wind
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-20

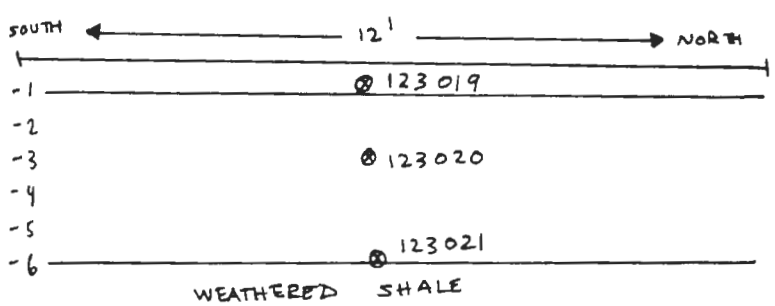
Location:
EM-38-1

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil - light brown SILT, fine to medium Sand, some small Shale fragments, little Organic (Roots)	No VOC or Rad hits
1	FL	SM	Light brown SILT, fine to medium SAND, some Shale fragments, little Organics (Roots), very dense, dry Small pocket of brick red soil - possibly oxidation staining from a piece of heavy wire found in the dirt pile from an unknown depth	No VOC or Rad hits Red stained soil sampled - #123020 1.0' to 6.0' very uniform stratigraphy, cannot say if this is fill or undisturbed. Wire could have come from 2.0' to 2.5'
2				
3				
4				
5				
6	WS	WS	Weathered SHALE	
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 12' X 3' X 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1400	123019	mid-trench, 0.5' D
	123020	mid-trench, 2.5' D
	123021	mid-trench, 6.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 9/29/98 1100
Date / Time Finish: 9/29/98 1520
Weather: Sunny, 70 deg ., moderate wind
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-21

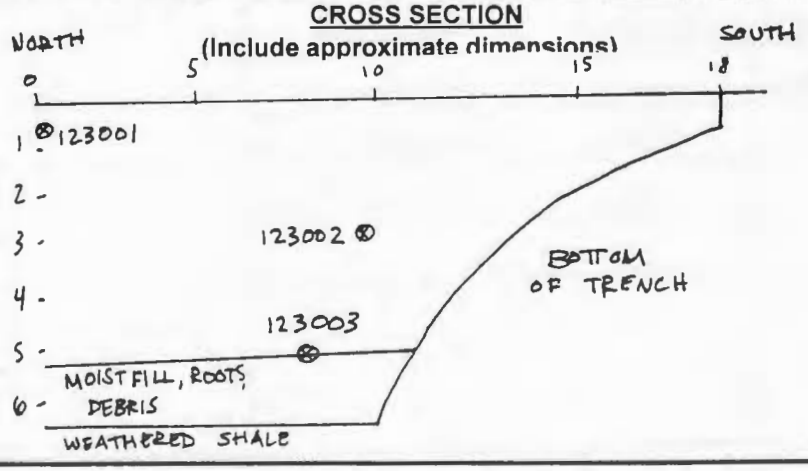
Location:
EM-10

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GP	Dark brown, fine to coarse SAND, Shale fragments, dry	No VOC or Rad hits with monitoring instrument Debris - brick fragments, lumber, black plastic sheeting, 3' rolls of barbed wire (4), 1' diameter boulders, Dr. Pepper can with tapered top and pull tab opening
6	FL	GP	Moist Fill - Roots, some debris	Wood fragments, brick fragments
7	WS	WS	Weathered SHALE	No sign of undisturbed material above weathered shale

EXCAVATION DIMENSIONS: (Length X Width X Depth): 18' X 3' X 6.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1515	123001	0.0' X 0.7' D
1520	123002	10.0' X 3.0' D
1525	123003	8.0' X 5.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/4/98 1535
Date / Time Finish: 10/5/98 1220
Weather: Clear, 70's, dry
Contractor: Maxim
Inspector(s): KKS, RLC, DRG

TEST PIT NO. TP12-22A+B

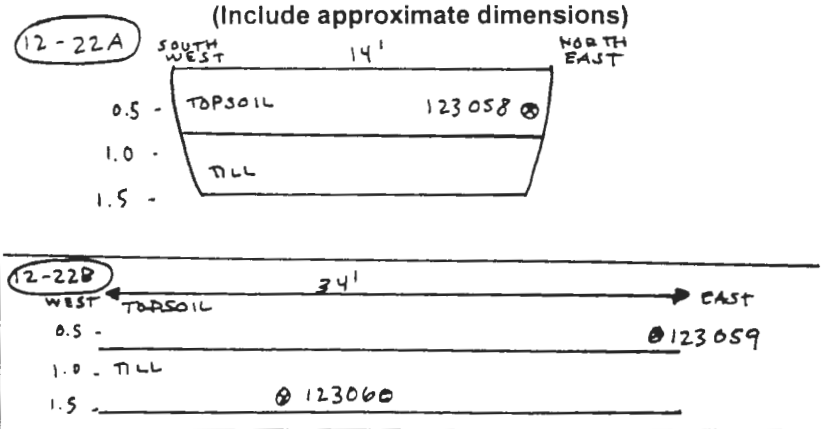
Location:
EM-13

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Topsoil - brown SILT and fine SAND, little medium Sand, trace fine Gravel, trace Clay, trace Roots	
1	TL	SM		
	TL	GM	Olive gray to brown, SILT and fine SAND, little Clay, trace Gravel, dry	
2	WS	WS	Olive gray to dark brown SILT and fine SAND, little fine to coarse Gravel, trace Cobble, dry	
3			Weathered SHALE	
4				
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): A: 14' X 3' X 1.5' B: 34' X 3' X 1.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1550	123058	14.0' X 0.5' D (A)
1555	123059	34.0' X 0.5' D (B)
1600	123060	14.0' X 1.5' D (C)

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/17/98 0846
Date / Time Finish: 10/17/98 0935
Weather:
Contractor: Maxim
Inspector(s): KKS, JT

TEST PIT NO. TP12-23

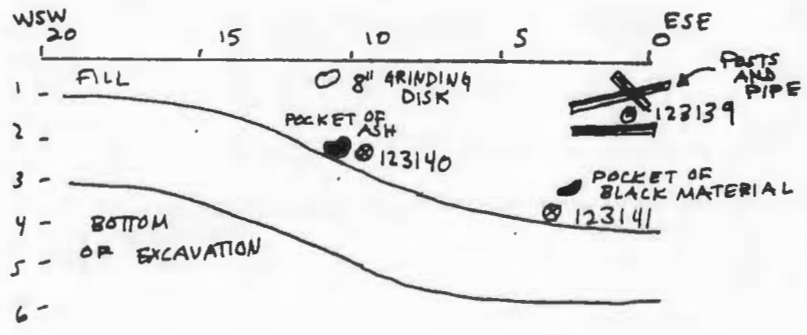
Location:
EM- 23

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL		COMMENTS
			18' (West)	1' (West)	
0	FL	SM	Fill - olive gray to light brown fine SAND,	Fill - same as left	
1	TL	SM	some Silt, little coarse Sand and fine Gravel and Cobble, Grass and Roots on surface, moist 0-5', otherwise dry		
2					
3	TL	SM			
4			Olive gray, fine SAND, some Silt, little coarse Sand and fine to coarse Gravel, trace Cobble and Boulder, very dense	Till - same as left	
5					
6			Olive gray fine SAND, some silt.		
7					
8					
9					

EXCAVATION DIMENSIONS: (Length X Width X Depth): 20' X 3.5' X 3 to 6'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
0850	123139	0.0' X 1.0' D
0910	123140	10.0' X 2.0' D
0930	123141	3.0' X 3.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

TEST PIT NO. TP12-24

Location:
EM-14

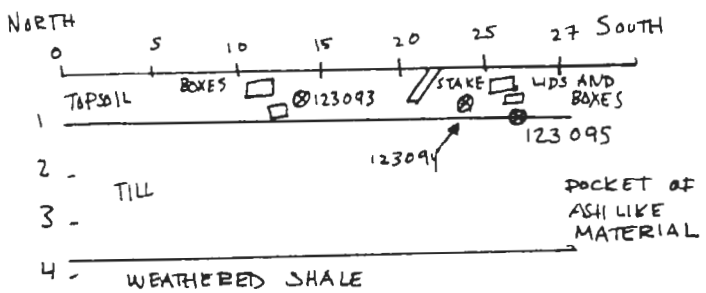
Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/13/98 1400
Date / Time Finish: 10/13/98 1525
Weather: Sunny, 60 deg., light wind
Contractor: Maxim
Inspector(s): KKS, JT

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	SM	Dark gray fine to medium SAND, some Silt, little coarse Gravel, trace Organics, dry	Ammo boxes lined with plywood - crushed and rusted lids, angle iron stakes
1	TL	SC	Olive gray to light brown fine to medium SAND, Silt, trace fine Gravel, dry	No debris
2				
3				
4	WS	WS	Weathered SHALE	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 27' X 3' X 3.8'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1400	123093	13.0' X 0.5' D
1427	123094	24.0' X 0.5' D
1500	123095	26.0' X 1.0' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/5/98 1004
Date / Time Finish: 10/5/98 1215
Weather: Sunny, 60 deg., variable wind direction
Contractor: Maxim
Inspector(s): KKS, JT, BC

TEST PIT NO. TP12-25

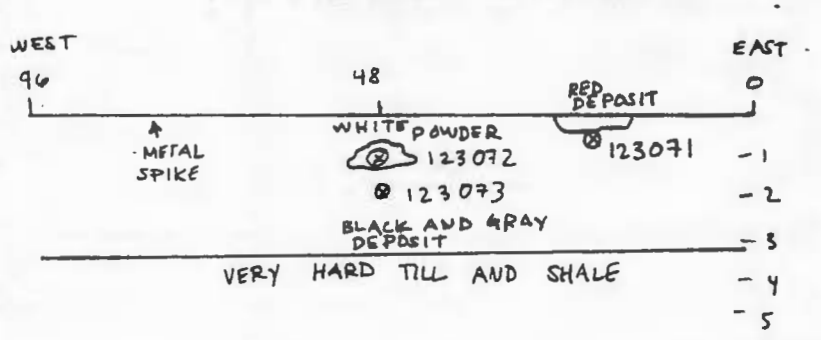
Location:
North of BLDG 805

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GM	Dark gray, fine to coarse SAND, some Silt and fine to coarse Gravel, little Organic material, moist, variable thickness	Topsoil and till interface was difficult to determine in most locations. There were several different colored pockets of soil, probally natural clays and oxidized rocks. A very small deposit of white powder was sampled (123072). Could have been rock powder from a backhoe tooth, not sure. A nail was found in the spoils pile at 75'.
1	TL	SM	Olive gray to light brown SILT and fine SAND, some medium Sand, little fine to coarse Gravel, moist	
2				
3				
4	TL	SM	Hard Till and SHALE, too hard for backhoe to do continuous digging , moist, no water	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 96' X 3' X 3.5'
AIR MONITORING DATA: Background OVM Reading: 0 ppm
Maximum Breathing Zone OVM Reading: 0 ppm

TIME	SAMPLE I.D.	LOCATION
1035	123071	17.0' X 0.5' D
1215	123072	48.0' X 1.0' D
1220	123073	47.5' X 1.5' D

CROSS SECTION
(Include approximate dimensions)



PARSONS ENGINEERING SCIENCE, INC.
TEST PIT RECORD

Project Name: SEAD-12
Project Number: 730047-01001
Date / Time Start: 10/5/98 1425
Date / Time Finish: 10/5/98 1650
Weather: Sunny, 70 deg., variable wind direction
Contractor: Maxim
Inspector(s): KKS, JT., BC

TEST PIT NO. TP12-26

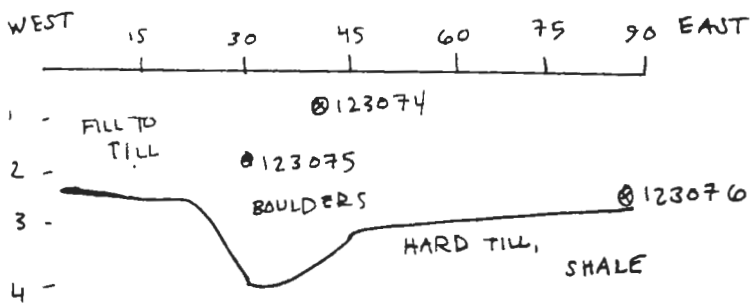
Location:
North of BLDG 805

DEPTH (ft bgs)	Stratigraphy	Macro	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	FL	GW	Olive gray to dark brown fine to medium SAND, some fine to coarse Gravel and Silt, trace Clay (red to orange-brown in pockets), little to no Organics, several small to large Cobbles, moist	Surface of ground is mostly non-vegetated - light gray with gravel and cobbles. Very little topsoil. Little sign of any disturbance except in short intervals - no more than 1.0' D. No man made items found
1	TL			
2				
3				
4	TL	SM	Hard Till and SHALE, too hard for backhoe to do continuous digging, moist, no water	
5				
6				
7				
8				
9				

EXCAVATION DIMENSIONS: (Length X Width X Depth): 93' X 3' X 2.8-4.5'
AIR MONITORING DATA: Background OVM Reading: BKG
Maximum Breathing Zone OVM Reading: BKG

TIME	SAMPLE I.D.	LOCATION
1530	123074	43.0' X 0.4' D
1605	123075	30.0' X 1.3' D
1600	123076	92.0' X 3.0' D

CROSS SECTION
(Include approximate dimensions)



SOIL BORING LOGS

LOG OF BORING NO. MW12-1

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 12/4/1997
DATE COMPLETED 12/4/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 9
DEPTH TO WATER: 4.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
	1	1.4	0	7.5	0		Brown SILT, little Clay, trace fine Sand, Organic rich, moist	ML	FL
	4				0.8				
	11				1		Light brown CLAY, some Silt, slightly mottled, moist	CL	TL
	15				1.4		No Recovery		
	8	1.5	0	7.5	2		Brown and gray CLAY, some Silt, little fine to coarse Gravel, firm, dry to moist	CL	
	22				2.0				
	28				3				
	26	1.7	0	8	3.5		No Recovery		
	15				4		Brown CLAY, some Silt, little fine to coarse Gravel, moist to wet	CL	
	25				4.0				
	27				5				
	28	0.9	0	7.5	5.7		No Recovery		
	36				6		Brown CLAY, some Silt, little fine to coarse Gravel, wet	CL	
	100/.4				6.0				
	100/.4	0.3	0	8	6.9		No Recovery		WSH
					7				
					8		Gray, weathered SHALE	WSH	
					8.0				
					8.3		No Recovery		
					9		Auger Refusal at 9'		
					9.0				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-1

LOG OF BORING NO. MW12-2

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/6/1997
DATE COMPLETED 11/6/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
	1	1	0	7	0		Dark brown SILT, trace fine Sand, Organic rich, moist	ML	FL
	3				0.9				
	8				1		No Recovery		TL
	8	2	0	8	2.0		Gray SILT, little Clay, trace fine to coarse Sand, trace Cobble, moist	ML	
	5				3				
	8								
	12				4				
	35	0.7	0	7.5	4.0		Dark gray SHALE, little fine Sand, dry	WSH	WSH
	98				4.7				
	100/.2				5		No Recovery		
					6				
					6.0		Auger Refusal at 6'		
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-2

LOG OF BORING NO. MW12-3

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/6/1997
DATE COMPLETED 11/6/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 18
DEPTH TO WATER: 7.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	2 9 12	15	0	8	0 – 1		Dark brown SILT, some Clay, little fine to coarse Sand, moist	ML	FL
	19 11 21	18	0	8	1.5 – 2.0 – 3		No Recovery Brown and gray SILT, some Clay, little fine to coarse Gravel, moist, hard	ML	TL
	30 35 13	18	0	8	3.8 – 4.0 – 5		No Recovery Brown, silty CLAY, little fine to coarse Sand, little fine to coarse Gravel, moist, hard	CL	
	42 45 47	19	0	8	5.8 – 6.0 – 7		No Recovery Brown, silty CLAY, little fine to coarse Sand, little fine to coarse Gravel, very moist, hard	CL	
	49 45 42	19	0	7	7.9 – 8.0 – 9		No Recovery Brown, silty CLAY, little fine to coarse Sand, little fine to coarse Gravel, wet, hard	CL	
	37 11 25 38	2	0	8	9.9 – 10.0 – 11		No Recovery Brown, silty CLAY, little fine to coarse Sand, little fine to coarse Gravel, wet, hard	CL	
	87 33 33 32	13	0	7	12.0 – 13		Brown CLAY, some Silt, little fine to coarse Sand, little fine to coarse Gravel (Shale, Siltstone), moist, hard	CL	
	50 12 85	07	0	7	13.3 – 14		No Recovery Brown CLAY and fine to coarse GRAVEL (Shale, Siltstone)	CL	
	100/.2 18 100/.2				14.0 – 14.7 – 15		No Recovery		
	25 46 70	18	0	7	16.0 – 16		Brown CLAY and fine to coarse GRAVEL (Shale, Siltstone)	CL	
	45				17.5 – 17.8 – 18.0 – 18 – 19 – 20		Dark gray SHALE and SILTSTONE Weathered SHALE Auger Refusal at 18'	WSH WSH	WSH

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-3

LOG OF BORING NO. MW12-4

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/4/1997
DATE COMPLETED 11/4/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12.4
DEPTH TO WATER: 8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: DRG
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	3	1 8	BKG	BKG	0		Olive gray to brown, SILT and CLAY, little fine Gravel, trace Roots, trace iron oxide staining, moist	OL	FL
	5				1				
	8								
	10				1 8				
	11	1 2	BKG	BKG	2		No Recovery	ML	TL
	15				2.0		Olive gray to light gray, SILT and fine SAND, little Clay, trace coarse Sand, trace fine Gravel, trace Roots, moist		
	25				3				
	34				3.2		No Recovery		
	12	1 4	BKG	BKG	4		Olive gray to light gray SILT and fine SAND, trace fine Gravel, dry to moist	ML	
	24				4 0				
	27				5				
	32	2	BKG	BKG	5.4		No Recovery		
	55				6		Olive gray to light brown SILT, little fine Sand, trace coarse Sand and Clay, trace fine Gravel, moist, very compact	ML	
	60				6 0				
	60	1 6	BKG	BKG	7				
	60				8		Dark gray to brown SILT, little fine Sand, little coarse Sand, little fine Gravel, trace Cobble (Shale), wet to saturated	ML	
	15				8.0				
	36				9				
	40	0 6	BKG	BKG	9 6		No Recovery		
	35				10		Dark gray SILT and SHALE fragments	WSH	WSH
	50				10 0		No Recovery		
	100/ 1				10 6				
	100/ 4	0 4	BKG	BKG	11				
					12		Competent SHALE	CSH	CSH
					12 0		Auger refusal at 12.4'		
					12 4				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-4

LOG OF BORING NO. MW12-5

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/4/1997
DATE COMPLETED 11/4/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 18.6
DEPTH TO WATER: 9
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: DRG
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	2	1.8	BKG	BKG	0		Brown SILT, some Clay, trace fine Gravel, trace Roots and Organic matter, moist	OL	FL
	6				1				
	7								
	8				1.8				
	8	1.5	BKG	BKG	2		No Recovery		
	15				2.0			ML	TL
	33				2.5		Olive gray SILT, some Clay, trace fine Gravel, trace Roots and Organic matter, moist	ML	
	50				3				
	55	1.4	BKG	BKG	3.5		Olive gray SILT, little fine Gravel and fine to coarse Sand, trace Cobble and Clay, dry	ML	
	24				4				
	38				4.0		No Recovery		
	32				5		Olive gray SILT, little fine Gravel and fine to coarse Sand, trace Cobble and Clay, dry		
	45	0.8	BKG	BKG	5.4				
	65				6		No Recovery	ML	
	107				6.0				
	12	1.7	BKG	BKG	6.8		Olive gray to brown SILT and very fine SAND, some coarse to medium Sand, trace Cobble and coarse Gravel, moist		
	25				7				
	83				8		No Recovery		
	92				8.0		Brown SILT and very fine SAND, some coarse Sand, little fine Sand, trace fine to coarse Gravel, trace iron oxide staining, wet to saturated	ML	
	20	2	BKG	BKG	9				
	22				9.7				
	24				10		No Recovery	ML	
	26	1.8	BKG	BKG	10.0		Brown SILT and very fine SAND, some coarse Sand, little fine Sand, trace fine to coarse Gravel, trace iron oxide staining, wet to saturated		
	35				11				
	38				12				
	42				12.0		Brown SILT and very fine SAND, some coarse Sand, little fine Sand, trace fine to coarse Gravel, trace Cobble (Shale), trace iron oxide staining, wet to saturated	ML	
	46	1	BKG	BKG	13				
	12				13.8				
	38				14		No Recovery	ML	WSH
	42				14.0				
	53	1.8	BKG	BKG	14.2		Brown SILT and very fine SAND, some coarse Sand, little fine Sand, trace fine to coarse Gravel, trace iron oxide staining, wet to saturated	WSH	
	83				15				
	65				15.0				
	85	0.2	BKG	BKG	16		Black, weathered SHALE fragments and cobbles	WSH	
	80				16.0		No Recovery		
	70				17		Black, weathered SHALE fragments and cobbles		
	100/ 1				17.8				
					18		No Recovery	CSH	CSH
					18.0				
					18.2		SHALE chips		
					18.6		No Recovery		
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-5

LOG OF BORING NO. MW12-5

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/4/1997
DATE COMPLETED 11/4/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 18.6
DEPTH TO WATER: 9
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: DRG
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
					20		DESCRIPTION		
							Auger Refusal at 18.6'		
					21				
					22				
					23				
					24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-5

LOG OF BORING NO. MW12-6

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/30/1998
DATE COMPLETED 10/30/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12
DEPTH TO WATER: 5.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123190		1.5	0	9 5 11 10	0 1		Dark brown to light brown, fine SAND, little Silt, little coarse Sand, trace Clay, moist	SM	FL
					1 5		No Recovery		TL
		1 8	0	10 9 11	2 3		Olive gray to light brown, fine to medium SAND, little Clay, little fine Gravel, trace medium Gravel, moist	SC	
					3 8				
123191		2	0	11 10 10	4 5		No Recovery olive gray to light brown, fine SAND, little Clay, little fine to medium Gravel, moist	SC	
					5 8				
123192		2	0	11 10 10	6 7		Light brown, fine SAND and SILT, wet Light brown, fine SAND and SILT, trace fine to medium Gravel, trace Cobble, wet	SM SM	
					7 5		Olive gray, fine SAND, little Silt, little fine to coarse Gravel, little Clay, trace Cobble, moist	GC	
					8		No Recovery		
		2			10		Weathered SHALE	WSH	WSH
					10 0				
					12		Auger Refusal at 12'		
					12 0				
					13 14 15 16 17 18 19 20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-6

LOG OF BORING NO. MW12-7

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/28/1998
DATE COMPLETED 10/28/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123T80		1 8	0	16	0		Light brown, fine SAND, little Silt, little fine Gravel, dry	SM	FL
				11	1				
				11					
		2	0	14	2		No Recovery	SC	TL
				14			Light gray to dark brown, fine SAND, little Clay, little fine to medium Gravel, dry		
				15	3				
123181		2	0	18	4		Light gray to dark brown, fine SAND, little Clay, little fine to medium Gravel, trace Cobble, damp	SC	
				18					
				20	5				
		2	0	18	6		Olive gray, fine SAND, little Clay, little fine to coarse Gravel, trace Cobble, moist	SC	
				16					
				15	7				
123182		2	0	20	8		Olive gray, fine SAND and CLAY, little fine to medium Gravel, trace Cobble, moist	CL	
				29					
				19	9				
					10		No Recovery		WSH
					11				
					12				
					13				
					14		Auger Refusal at 13.6'		
					15				
					16				
					17				
					18				
					19				
					20				

1 8
2.0
4.0
6.0
8.0
10 0
13 6

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-7

LOG OF BORING NO. MW12-8

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/28/1998
DATE COMPLETED 10/28/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12
DEPTH TO WATER: 10
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123183		2	0	10	0		Dark brown to light gray. fine SAND, little Silt, little fine Gravel, trace Clay, moist	SM	FL
				9	1				
				10					
		1 5	0	11	2	2 0	Brown to light gray, fine SAND, little coarse Sand, little Silt, trace Cobble, dry	SM	
				11					
				12	3	3 5			
					4	4 0	No Recovery		TL
123184		2	0	10			Dark brown to light gray, fine SAND, little Silt, little coarse Sand, trace fine to medium Gravel, trace Cobble, moist	SM	
				10	5				
				9					
		2	0	10	6	6 0	Light brown to olive gray, fine SAND, little Silt, little fine to coarse Gravel, trace Cobble, moist	SM	
				10	7				
				10					
123185		2	0	13	8	8 0	Dark brown to olive gray, fine SAND, some Clay, little Silt, little fine to medium Gravel, trace coarse Gravel (Shale), moist	GC	
				11	9				
				11					
					10	10 0	No Recovery		WSH
					11				
					12	12 0	Auger Refusal at 12'		
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-8

LOG OF BORING NO. MW12-9

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/17/1998
DATE COMPLETED 10/17/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER: 11.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations. DESCRIPTION	USCS Class	Stratum Class
123T55	3	1.5	0	8	0		Light brown to light gray, fine SAND, little Silt, little Clay, trace fine to medium Gravel, moist	SM	FL
	6			9	1				
	18			10 5	1.5				
	26				2		No Recovery		TL
	23	2	0	10	2.0		Light brown to light gray, fine SAND, little Silt, little fine to medium Gravel, trace coarse Gravel, dry	GC	
	32			10	3				
	36			9					
	42	1 2	0	9	4		Olive gray, fine SAND, little Silt, little fine to medium Gravel, trace Clay, trace Cobble (Limestone), moist	GC	
	14			10	4 0				
	24				5				
	25				5.2		No Recovery		
	29	2	0	13	6		Olive gray, fine SAND, little Clay, little Silt, little fine to coarse Gravel, moist	SC	
	14			14	6 0				
	13			15	7				
	21				8				
	23				8.0		No Recovery		
	18				9				
	26				10				
	33	2	0	15	10 0		Olive gray to reddish-brown CLAY and fine SAND, little Silt, little fine to coarse Gravel, wet	CL	
	41			14	11				
	10			19	▽				
	15				12				
	26				12 0		No Recovery		WSH
	40				13				
	26				14				
	40				14.1		Auger Refusal at 14.1'		
	75/ 2				15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-9

LOG OF BORING NO. MW12-10

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 9/29/1998
DATE COMPLETED 9/30/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 17
DEPTH TO WATER: 9.4
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
							This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123007	6 9 12	2	0	10 10 10	0 – 1		Light brown, fine SAND, little Silt, little fine Gravel, trace coarse Gravel, dry	SM	FL
	13 11 18	1.5	0	10 10 10	2 – 3		Light brown to light gray, fine SAND, some Silt, little coarse Sand, trace fine Gravel, dry	SM	
	17				3.5		No Recovery		TL
123008	20 8 12	1.7	0	11 11 11	4 – 5		Light brown to olive gray, fine SAND, some Silt, little Clay, little fine to medium Gravel, dry	SM	
	22 23 12	2	0	11 11 11	5.7 6.0		No Recovery		
	24				6 – 7		Dark brown to olive gray, fine SAND, some Silt, little Clay, little fine to coarse Gravel, trace Cobble, moist	GM	
123009	27 32 20	1.8	0	10.5 9 10	8.0 – 9		Dark brown to dark gray/olive gray, fine SAND, some Silt, little Clay, little fine to coarse Gravel, trace Cobble, wet to saturated	GC	
	18 18 19	1.8			9.8 10		No Recovery		
					10.0		Light brown to olive gray, fine SAND and SILT, some clay, little fine to coarse Gravel, trace Cobble, wet	GC	
					11.0		Olive gray, fractured SHALE, some fine Sand and Silt	WSH	WSH
	16 26 18 7	2			11.8 12.0 – 13		No Recovery Weathered SHALE	WSH	
					14.0 – 15 16		No Recovery		
					17.0 – 18 19 20		Auger Refusal at 17'		

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-10

LOG OF BORING NO. MW12-11

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 9/29/1998
DATE COMPLETED 9/29/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER: 9
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123010	5	2	0	11.5	0		Light gray to yellowish-orange, fine SAND, some Silt, little Clay, little coarse Sand, little Organics, trace Gravel, dry	SM	FL
	10			11.5	1				
	20			11.5					
	29	1.6	0	10.5	2	2.0	Light gray to yellowish-orange, fine SAND, some Silt, little Clay, little coarse Sand, little fine Gravel, trace coarse Gravel, trace Roots, dry	SM	
	27			10	3				
	61			11.5					
	45					3.6			TL
123011	53	1.6	0	10	4	4.0	No Recovery		
	23			10			Olive gray to light gray, fine SAND, some Silt, little Clay, little coarse Sand, little fine Gravel, trace coarse Gravel, trace Cobble, dry to moist	SM	
	28			10	5				
	27					5.6			
	28	1.5	0	10	6	6.0	No Recovery		
	23			10			Dark gray to dark brown, fine SAND, some Silt, little Cobble, little Clay, trace fine Gravel, dry to moist	GM	
	47			10	7				
	39					7.5	No Recovery		
123012	63	1.5	0	9	8	8.0	Dark gray to dark brown, fine SAND, some Silt, some fine to coarse Gravel (Shale fragments), moist	GM	
	67			10	9	9.0			
	100/ 3					9.5	Weathered SHALE, saturated	WSH	WSH
					10		No Recovery		
					11				
					12				
					13	13.0	Auger Refusal at 13'		
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-11

LOG OF BORING NO. MW12-12

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 9/30/1998
DATE COMPLETED 9/30/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER: 11
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123013		1.5	0	13.5	0		Light brown to dark gray, fine SAND, some Clay, little Silt, little fine to coarse Gravel, moist	SC	FL
				13.5	1				TL
				13.5	1.5		No Recovery		
		1.8	0	11	2	2.0	Light brown to dark brown, fine to medium SAND, some Clay, little Silt, trace fine Gravel, moist	GC	
				11.5	3				
				11		3.8			
123014		1.6	0	14	4	4.0	No Recovery	GC	
				14	5		Light brown to dark gray, fine to medium SAND, some Clay, little Silt, little fine Gravel, moist		
				14		5.6			
		1.8	0	12	6	6.0	No Recovery	CL	
				11	7		Dark brown to olive gray CLAY, some veins of fine Sand, little Silt, wet		
				13		7.8			
123015		1.8	0	13	8	8.0	No Recovery	CL	
				10	9		Dark brown to olive gray CLAY, some fine Sand, little Silt, little fine to medium Gravel, damp		
				11		9.8			
		1	0	12	10	10.0	No Recovery	CL	
						10.5	Dark brown CLAY, some fine Sand, little Silt, little fine to medium Gravel, wet	WSH	WSH
					11	11.0	Weathered SHALE		
					12		No Recovery		
					13	13.0	Auger Refusal at 13'		
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-12

LOG OF BORING NO. MW12-13

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/1/1998
DATE COMPLETED 10/1/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123016	3	1.5	0	11.5	0		Light brown to dark brown, fine SAND, some Silt, little coarse Sand, little Organics, trace fine to medium Gravel, dry	SM	FL
	9			10	1				TL
	13				1.5		No Recovery		
	16	1.6	0	9	2		Dark brown to olive gray, fine SAND, some Silt, little Clay, little fine Gravel, little Organics, trace Cobble, dry to moist	SC	
	16			10.5	2.0				
	16				3				
	15				3.6		No Recovery		
123015	20	2	0	11	4		Light brown to dark gray, very fine SAND, some coarse Sand, some Silt, little fine to coarse Gravel, trace Cobble, damp	GM	
	11			11	4.0				
	13			10	5				
	28				5.5		SHALE fragments	GW	
	76	1.8	0	9	6		Olive gray to dark gray, fine SAND, some fine to coarse Gravel (Shale), some Silt, trace Cobble, damp	GC	
	18			9.5	6.0				
	25			9.5	7				
	38				7.8		No Recovery		
123018	40	1.6	0	10	8		Olive gray to dark gray, fine SAND, some fine to medium Gravel, some Silt, little Clay, trace Cobble, wet	GC	
	20			11.5	8.0				
	10				9				
	15				9.0		Weathered SHALE	WSH	WSH
	38				9.6		No Recovery		
					10				
					11				
					12				
					13		Auger Refusal at 13'		
					13.0				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-13

LOG OF BORING NO. MW12-14

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/10/1998
DATE COMPLETED 10/15/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.8
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)
123099	2, 6, 10, 16	1.8	0	10	0–2
	17, 28, 28, 34	1.5	0	10, 8.5	2–4
	20, 20, 28, 29	1.6	0	12, 11, 12	4–6
	29, 40, 29, 28	2	0	10, 11, 10	6–8
123100	69, 31, 32, 30	2	0	9, 9.5, 10	8–10
123101	8, 16, 24, 30	1.8	0	8.5, 9, 9	10–12

Depth (ft)	DESCRIPTION	USCS Class	Stratum Class
0–1.8	Light brown to light gray, fine SAND, some Silt, little Clay, little fine Gravel, dry	SM	FL
1.8–2.0	No Recovery		
2.0–3.5	Light gray, fine SAND, some Silt, little fine to coarse Gravel, trace Clay	SM	
3.5–4.0	No Recovery		TL
4.0–5.6	Olive gray to light gray, fine SAND, some Silt, little fine to coarse Gravel, trace Clay, damp	GC	
5.6–6.0	No Recovery		
6.0–8.0	Olive gray, fine SAND, some Clay, little fine to coarse Gravel, trace Cobble, trace Silt, damp	GC	
8.0–10.0	Olive gray, fine SAND and SILT, some Clay, little fine to coarse Gravel, trace Cobble, moist	GC	
10.0–11.8	Olive gray CLAY, some fine Sand, little fine to coarse Gravel, damp	CL	
11.8–13.8	No Recovery		WSH
13.8	Auger Refusal at 13.8'		

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-14

LOG OF BORING NO. MW12-15

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/1/1998
DATE COMPLETED 10/1/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.1
DEPTH TO WATER: 7
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123028	6	1.8	0	10			Light brown to light gray, fine SAND, some Silt, little fine to coarse gravel, trace Clay, dry	SM	FL
	12			9.5	1				
	20								
	22	1.6	0	10.5	1.8				
	17			11	2		No Recovery		
	7				2.0		dark brown to dark gray, fine SAND, some Silt, little fine to coarse Gravel, trace Clay, dry	SM	
	24				3				
	25				3.6		No Recovery		TL
	80				4				
	81				4.0		No Recovery		
	100/.1				5				
123029	12	1.8	0	9	6				
	15			8	6.0		Dark brown to olive gray, fine SAND, some Silt, little fine to medium Gravel, trace Clay, dry	GC	
	16			11					
	15				7.8				
123030	7	2	0	10	8		No Recovery	GC	
	11			10.5	8.0		Olive gray, fine SAND and CLAY, some Silt, little fine to medium gravel, trace Cobble, wet		
	13			10	9				
	17	1.5	0	9	10				
	7			10	10.0		Weathered SHALE, wet	WSH	WSH
	10			11.5	11				
	11				11.5		No Recovery		
	10				12				
					13				
					13.1				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-15

LOG OF BORING NO. MW12-16

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/17/1998
DATE COMPLETED 10/17/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.2
DEPTH TO WATER: 13.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations. DESCRIPTION	USCS Class	Stratum Class
123T49	3	1.5	0	9	0		Light brown to light gray, fine SAND, little Silt, little Clay, trace fine Gravel, trace Cobble, dry	SM	FL
	7			10	1				
	11	—							
	15	—	1.5	0	8	1.5	No Recovery		
	13				2	2.0	Light brown, fine SAND, little Clay, little Silt, trace fine to medium Gravel, trace Cobble, dry	SM	
	18			10.5					
	24	—		10.5	3	3.5			
	40	—	1.5	0	10	4.0	No Recovery		TL
123150	23				4		Light gray to light brown, fine SAND, little Clay, little Silt, little fine to medium Gravel, dry	SM	
	50			11					
—	55	—		9	5	5.5			
	54	—	2	0	9	6.0	No Recovery		
123151	23				6		Light gray to light brown, fine SAND, little Silt, little Clay, trace fine to medium Gravel, trace Cobble (Limestone), dry	SW	
	41			10.5	7				
—	55	—	1	0	9	8.0	Dark brown, fine SAND, little Silt, little fine Gravel, trace Cobble, moist	SW	
	50				8				
	57	—		10	9	9.0	No Recovery		
	68								
	50/.1	—	1.5		10	10.0	Weathered SHALE	WSH	WSH
	23								
	30				11	11.5			
	36	—					No Recovery		
	40				12				
					13				
					14	14.2	Auger Refusal at 14.2'		
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-16

LOG OF BORING NO. MW12-17

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/10/1998
DATE COMPLETED 10/17/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 19.4
DEPTH TO WATER: 14
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123T52	3	1.5	0	9	0		Dark brown to light gray, fine SAND, some Silt, little Clay, trace fine to medium Gravel, moist	SM	FL
	6			11	1				
	14			10					
	20				1.5		No Recovery		
	21	1.5	0	11	2		Light brown to light gray, fine SAND, some Silt, little Clay, little fine to medium Gravel, trace Cobble, dry	SM	
	21			9					
	29			9	3				
	31	1 7	0	9.5	3 5		No Recovery		
	17			10	4		dark brown to light gray, fine SAND, some Silt, little Clay, little Cobble, trace fine Gravel, moist	SM	
	21			10					
	23				5				
					5 7		No Recovery		
123153	30	1 8	0	10	6		Dark brown, fine SAND, some Clay, little Silt, little fine to medium Gravel, trace coarse Gravel, moist	SC	
	20			11					
	31				7				
	44				7.8		No Recovery		
	61				8		No Recovery		
	32				8 0				
	75				9				
123154	20	1.8	0	9	10		Dark brown and olive gray, fine SAND and CLAY, some Silt, little fine to medium Gravel, moist	SC	
	20			9	10 0				
	19			10	11				
	29				11 8		No Recovery		
	21	1 5			12		Weathered SHALE	WSH	WSH
	30				12 0				
	21				13				
	30				13 5		No Recovery		
	38				14				
	44				15				
					16				
					17				
					18				
					19				
					19 4				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-17

LOG OF BORING NO. MW12-17

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/10/1998
DATE COMPLETED 10/17/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 19.4
DEPTH TO WATER: 14
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
					20		DESCRIPTION		
					21		Auger Refusal at 19.4'		
					22				
					23				
					24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-17

LOG OF BORING NO. MW12-18

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/2/1998
DATE COMPLETED 10/2/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.5
DEPTH TO WATER: 8.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123037	5	1.6	0	10.5			Dark brown to light gray, fine SAND, some Silt, little coarse Sand, trace fine to medium Gravel, dry	SM	FL
	16			9.5	1				
	26								
	30	1.8	0	10	1.6		No Recovery		
	19			11.5	2.0		Light gray to olive gray, fine SAND, some Silt, little fine to coarse Gravel, trace Cobble	SM	
	30			11	3				
	41				3.8				
	43	2	0	9	4.0		No Recovery	SC	
	15			10	5		dark brown to olive gray, fine SAND, little Silt, little Clay, little fine to medium Gravel, moist		
	27			8.5					
	38								
123038	27	1.9	0	10	6.0		Dark brown to olive gray, fine SAND, little Clay, little Silt, trace fine to medium Gravel, trace Cobble, wet	SC	TL
	28			11	7				
	27			12					
	22	1.8	0	8.5	7.9				
	32			9	8.0		No Recovery	SC	
	18				8		Light brown to olive gray, fine SAND, some fine to coarse Gravel, little Clay, little Silt, wet		
	19			9.5	9				
					9.8				
123039	12	1.6	0	10.5	10.0		No Recovery	SC	
	20			10	10		Olive gray, fine SAND, some Silt, little Clay, little fine to coarse Gravel, trace Cobble (Shale), damp		
	23				11				
	31				11.6		No Recovery		
	8	1.6	0	11	12.0		Olive gray to dark gray, weathered SHALE	WSH	WSH
	16			11.5	12				
	11				13				
	89				13.6		No Recovery		
					14				
					14.5		Auger refusal at 14.5'		
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-18

LOG OF BORING NO. MW12-19

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/2/1998
DATE COMPLETED 10/3/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11
DEPTH TO WATER: 6.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
123040	4	15	0	7	0		Light brown to light gray, fine to coarse SAND, little Silt, little fine to	GM	FL
	7			6	1		medium Gravel, trace Clay, dry		
	12	—			15				
	12	— 1	0	8	2		No Recovery		TL
	10			75	20		Light brown to olive gray, fine SAND, little Silt, little fine to coarse	GM	
	10	—			3		Gravel, trace Cobble		
	9				30		No Recovery		
	11	— 12	0	8	4		Light gray to yellowish-orange, fine SAND and CLAY, some Silt,	CL	
	9			7	40		trace fine Gravel, damp		
	10	—			5		No Recovery		
	14				52				
123041	16	— 15	0	8	6		Light brown to yellowish-orange/light gray, fine SAND and CLAY,	CL	
	6			7	60		some Silt, trace fine to medium Gravel, damp to saturated		
—	7	—			7				
	13	— 15	0	7	75		No Recovery		
123042	16			8	8		Olive gray to dark gray, fine SAND, some Clay, little Silt, little fine to	GC	
	6				80		medium Gravel, wet		
—	7	—			9				
	25				90		Weathered SHALE, saturated	WSH	WSH
	99				95		No Recovery		
					10				
					11		Auger Refusal at 11'		
					110				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-19

LOG OF BORING NO. MW12-20

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/3/1998
DATE COMPLETED 10/3/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.4
DEPTH TO WATER: 5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123046	15	1.5	0	85	0		Light brown to light gray, fine SAND, little Silt, little Clay, little fine to medium Gravel, dry	GC	FL
	17			9	1				
	9				1.5		No Recovery		
	7	1.8	0	9	2		Light brown to dark gray, fine SAND, little Clay, little Silt, little fine to coarse Gravel, damp	GC	
	7			7	2.0				
	7				3				
	8				3.8				
123047	13	1.8	0	8	4		No Recovery	GC	TL
	9			9	4.0		Light brown to olive gray, fine SAND, some Clay, little Silt, trace fine to coarse Gravel, Organics, damp	WSH	
	10				5				
	6				5.0		Weathered SHALE		
123048	10	1.5	0	9	5.5		No Recovery	GC	
	9			8	6				
	11				6.0		Olive gray, fine SAND, some Clay, little fine to coarse Gravel (Shale), wet	WSH	WSH
	19				7				
					7.0		Weathered SHALE, wet		
					7.5		No Recovery		
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					14.4		Auger refusal at 14.4'		
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-20

LOG OF BORING NO. MW12-21

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/3/1998
DATE COMPLETED 10/3/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11
DEPTH TO WATER: 7
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123044	4	1.5	0	8			Light brown to light gray, fine SAND, little Silt, little fine to medium Gravel, trace Clay, Organics (Roots), dry	SM	FL
	5			8	1				
	8				1.5		No Recovery		
	16	1.5	0	8.5	2		Light brown to olive gray, fine SAND, little Silt, little fine to medium Gravel, trace coarse Gravel, trace Cobble (Shale), dry	GC	
	11			9					
	13				3				
	12				3.3		Fractured SHALE	GW	TL
	10	1.8	0	9	3.5		No Recovery	GC	
	12			7	4		Light brown to olive gray, fine SAND, little fine to coarse Gravel, trace Cobble, wet		
	21								
	34				5				
	20	1.5	0	8	5.8		No Recovery	GM	
	22			9	6		Dark brown to olive gray SILT, some fine to coarse Sand, little fine to coarse Gravel, trace Cobble, wet		
	27				7.5		No Recovery		
	34	0.5			8		Weathered SHALE	WSH	WSH
	34				8.5		No Recovery		
	100/.3				9				
					10				
					11		Auger Refusal at 11'		
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-21

LOG OF BORING NO. MW12-22

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/4/1998
DATE COMPLETED 10/4/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12.6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123068		1.8	0	10 9.5	0 1		Light brown and light gray, fine SAND, little Silt, little Clay, little fine to medium Gravel, dry	SC	FL
123069		1.5	0	9 11	1.8 2 2.0 3		No Recovery	GC	TL
					3.5		Light brown to olive gray, fine SAND, some fine to medium Gravel, little Clay, dry		
		1.3	0		4 4.0		No Recovery		
					5		Weathered SHALE	WSH	WSH
					5.3		No Recovery		
					6 7 8 9 10 11 12				
					12.6		Auger Refusal at 12.6'		
					13 14 15 16 17 18 19 20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-22

LOG OF BORING NO. MW12-23

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/5/1998
DATE COMPLETED 10/5/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.2
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
123079		1.8	0	11 11 11	0 1 2		Light gray to light brown, fine SAND, little Silt, little Clay, little Organics, trace medium Gravel, dry	SC	FL
123080		2	0	9 10 11	3		No Recovery Light gray, fine SAND, little Silt, little Clay, little fine to coarse Gravel	GC	TL
		1.5	0		4		Weathered SHALE	WSH	WSH
					5		Weathered SHALE	WSH	
					6		No Recovery		
					7 8 9 10 11 12 13		Auger Refusal at 13.2'		
					14 15 16 17 18 19 20				

1.8
2.0
3.8
4.0
5.5
13.2

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-23

LOG OF BORING NO. MW12-24

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/19/1998
DATE COMPLETED 10/19/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10
DEPTH TO WATER: 7
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123161		1.8	0	12 11 11	0 1		Light brown to olive gray, fine SAND, little Silt, little coarse Sand, trace fine to medium Gravel, moist	SM	FL
					1.8				
123162		1.5	0	13 11 10.5	2 3		No Recovery	SM	
					2.0		Light brown to yellowish-orange, fine SAND, some Silt, little Clay, trace medium Gravel, moist		
					3.5		No Recovery		TL
		2	0	13 11.5 11.5	4 5		Olive gray, fine SAND, little Silt, little fine to coarse Gravel, trace Cobble, moist	GC	
					4.0				
123163		2	0	15 13.5 12.5	6		Olive gray, fine SAND and CLAY, some fine to coarse Gravel, little Silt, trace Cobble (Shale), wet	GC	
					6.0				
		2			8		Weathered SHALE	WSH	WSH
					8.0				
					10		Auger Refusal at 10'		
					10.0				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-24

LOG OF BORING NO. MW12-25

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/18/1998
DATE COMPLETED 10/18/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.3
DEPTH TO WATER: 9.6
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123164	3	2	6	16	0		Dark brown to light gray, fine SAND, little Silt, little fine to coarse Gravel, moist	GM	FL
	8		0	16	1				
	14		0	17					
	21				2	2.0			
123165	25	2	0	16			Light gray, fine to coarse SAND, little Silt, little fine to coarse Gravel, trace Cobble, moist	GC	TL
	32			17	3				
	24			18					
	27	1.5		16	4	4.0			
	17			17			Olive gray, fine SAND.some coarse Gravel, little coarse Sand, trace Cobble, moist	GC	
	22			18	5	5.0			
	31					5.5	Weathered SHALE	WSH	WSH
123166	51	1.2	0	15	6	6.0	No Recovery		
	18			18			Weathered SHALE	WSH	
	15				7	7.2			
	75/.2						No Recovery		
					8				
					9				
					10	10.3			
							Auger Refusal at 10.3'		
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-25

LOG OF BORING NO. MW12-26

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/18/1998
DATE COMPLETED 10/18/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.1
DEPTH TO WATER: 7.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123167	3	1.5	0	14	0.1		Dark brown to light gray, fine SAND, little Silt, little fine to medium Gravel, moist	GC	FL
	6			14	1			GC	
	11			15	1.5		Light gray to dark gray, fine SAND, little fine to coarse Gravel, little Silt, trace Clay, moist		TL
123168	12	1.8	0	10	2.0		No Recovery	GC	
	7			13	2		Olive gray, fine SAND, little Silt, little fine to coarse Gravel, little Organics (Roots, Wood), piece of Clay or Brick at 3'		
	10			14	3				
	9				3.8				
	9	1.5	0	15	4		No Recovery	GC	
	6			18	4.0		Olive gray, fine SAND, some Clay, little fine to medium Gravel, trace Organics (Wood)	GW	
	10				5				
	30				5.0		SHALE Fragments		
123169	40	2	0	12	5.5		No Recovery	GC	
	12			15	6		Olive gray to dark brown, fine SAND, little Silt, little fine to coarse Gravel, trace Organics (Wood), wet		
	8			13	6.0				
	11				7		Olive gray, fine SAND, some fine to coarse Gravel, little Silt, wet	GC	
	30				7.5		No Recovery		WSH
	30/.2				8				
					8.0				
					9				
					10				
					10.1		Auger Refusal at 10.1'		
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-2(

LOG OF BORING NO. MW12-27

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/4/1998
DATE COMPLETED 10/4/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123061	2	1.5	0	11			Light brown to light gray, fine SAND, little Silt, little Clay, little	SC	FL
	5			10	1		Organics (Roots), dry		
	7	—			1.5				
	13	—			2		No Recovery		
123062	16	1.5	0	11	2.0		Light gray, fine SAND, little Silt, little Clay, dry	SC	
	16			11	3				
—	37	—			3.0		Light gray, fine SAND, little Silt, little Clay, little fine to coarse Gravel	GC	
					3.5		(Shale), dry, reddish staining on Gravel		TL
123063	19	1.3	0	12	4		No Recovery	SC	
	18			12	4.0				
—	44	—			4.8		Light gray, fine SAND, some Silt, little Clay, damp	WSH	WSH
	12				5		Weathered SHALE, little Silt, damp		
	100/ 3				5.3		No Recovery		
	100/ 4				6				
					7				
					8				
					9				
					10				
					10.0		Auger Refusal at 10'		
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-27

LOG OF BORING NO. MW12-29

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/15/1998
DATE COMPLETED 10/15/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123T33		2	0	10	0.2		Dark brown, fine SAND, little Silt, little fine Gravel, moist	SM	FL
				12	1		Light brown to light gray, fine SAND, some Clay, little fine to coarse Gravel (Shale), little Silt, dry	GC	
				10	1.8				
		1.5	0	11	2		Weathered SHALE	WSH	WSH
				10	2.0		Weathered SHALE	WSH	
				11	3				
					3.5		No Recovery		
					4				
					5				
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					14.0		Auger Refusal at 14'		
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-29

LOG OF BORING NO. MW12-30

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/16/1998
DATE COMPLETED 10/16/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
123136	2	1.8	0	12.5	0		Light brown to dark brown, fine SAND, some Silt, little Clay, trace fine Gravel, Organics (Roots), moist	SM	FL
	6			11	1				
	13			10.5					
	18				1.8				
123137	7	1.5	0	10.5	2		No Recovery	SM	TL
	7			11	2.0		Light brown to olive gray, fine SAND, some Silt, little Clay, little fine to medium Gravel, moist		
	15			10.5	3			WSH	WSH
	17	0.9			3.0		Weathered SHALE		
	40				3.5				
	100/.4				4		No Recovery	WSH	
					4.0		Weathered SHALE		
					4.9		No Recovery		
					5				
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					14.1		Auger Refusal at 14.1'		
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-30

LOG OF BORING NO. MW12-31

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/26/1998
DATE COMPLETED 10/26/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.2
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123172	2 5 20	1.5	0	10 15 13	0 1		Dark brown to light gray, fine SAND, little Silt, little fine to medium Gravel, little Organics, moist	SM	FL
					1.5		No Recovery		TL
123174	29 15 26 70	2	0	12 9 10	2.0 2 3		Light gray, fine SAND, little Silt, little Clay, trace fine Gravel, dry	SM	
					3.5		Weathered SHALE	WSH	WSH
					4.0 4		No Recovery		
					5 6 7 8 9 10				
					10.2		Auger refusal at 10.2'		
					11 12 13 14 15 16 17 18 19 20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-31

LOG OF BORING NO. MW12-32

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/26/1998
DATE COMPLETED 10/26/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.5
DEPTH TO WATER: 9.3
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123175	2	2	0	12	0		Olive gray to dark brown, fine SAND and CLAY, little fine to coarse Gravel, trace Cobble, damp	SC	FL
	5			12.5	1				
	10			14					
	15				2	2.0			
123176	86/.5	1	0	11			Olive gray SILT and CLAY, little fine to medium Gravel (Shale), damp	ML	TL
				13	3	3.0			
				13			No Recovery		
					4				WSH
					5				
					6				
					7				
					8				
					9				
					10				
						10.5			
					11		Auger Refusal at 10.5'		
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-32

LOG OF BORING NO. MW12-33

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/31/1998
DATE COMPLETED 10/31/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER: 11.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123195	9	1.2	0	11	0		CONCRETE		FL
	11			12	0.4		Dark brown to light gray, fine SAND, little Clay, little fine to coarse	SC	
	11				1		Sand, moist		
	13				1.2		No Recovery		
	9	1	0	13	2		Dark brown to light gray, fine SAND, little Clay, little fine to coarse	SC	
	10			12	2.0		Gravel, trace Cobble, moist		
	18			12	3		No Recovery		
	21	2	0	10	3.0		Olive gray to dark brown, fine SAND, little Clay, little fine to medium	SC	
	12			12	4		Gravel, trace coarse Gravel, trace Cobble, moist		
	19			13	4.0				
	21				5				
123196	27	2	0	9	6		Olive gray to dark brown, fine SAND, some Clay, little fine to coarse	SC	TL
	6			10	6.0		Gravel, trace Cobble, moist		
	10			12	7				
	13				8				
	29				8.0		No Recovery		
	17				9				
	39				10				
123197	65	2	0	10	10.0		Olive gray, fine SAND and CLAY, some fine to medium Gravel, little	CL	
	64			11			Silt, moist		
	13			10	11				
	17				▽				
	21	2			12		Weathered SHALE, wet	WSH	WSH
	27				12.0				
	14				13				
	17				14				
	21				14.0		Auger Refusal at 14'		
	29				15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-33

LOG OF BORING NO. MW12-34

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/31/1998
DATE COMPLETED 10/31/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123198	4	1.5	0	13	0.4		Dark brown, fine SAND, little Silt, Topsoil, moist	SM	FL
	11			14	1		CONCRETE		
	32				1.0				
	74	1	0		1.5		ASPHALT		
	5			14	2		No Recovery		
	3			14	2.0		Dark brown, fine SAND, little Silt, Topsoil, moist	SM	
	6				3				
123199	8	2	0	11	3.0		No Recovery		
	9			12	4				
	10			11	4.0		Dark brown to light gray, fine SAND, little Silt, little Cobble, little fine to medium Gravel, moist, crushed asphalt in first 2"	SM	
	20				5				
	21	1	0	11	6				
	11			12	6.0		Dark brown, fine SAND, little Silt, little fine to medium Gravel, moist	SM	
	19				7				
	100/4	1.8	0	12	7.0		No Recovery		TL
	19			12	8				
	30			13	8.0		Dark brown, fine SAND, little Clay, little fine to medium Gravel, little Silt, moist	SC	
	15				9				
	28	1.8	0	13	9.8				
	40			11	10		No Recovery	SC	
	75				10.0		Dark brown, fine SAND and CLAY, some fine to medium Gravel (Shale), moist		
					11				
					11.5		Weathered SHALE	WSH	WSH
					11.8		No Recovery		
					12				
					13				
					14				
					14.1		Auger Refusal at 14.1		
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-34

LOG OF BORING NO. MW12-35

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/29/1998
DATE COMPLETED 10/29/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 17.5
DEPTH TO WATER: 10.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123186	8	1.8	0	12			Dark gray to gray, fine SAND, some fine to coarse Gravel, little Silt, damp	GM	FL
	16			13	1				
	17			14					
	25				1.8				
	14	1.5	0	9	2		No Recovery		
	15			11				GC	
	14			10	3		Dark brown to gray fine SAND, some fine to medium Gravel, little Clay, damp		
	18	2	0	11	3.5		No Recovery		
	6			10	4				
	5			11			Olive gray, fine SAND and CLAY, some fine to medium Gravel, trace Cobble, moist	CL	
	11				5				
					6				
					6.0		No Recovery		
					7				
	2	1.5	0	13	8				
	3			12					
	2			14	9				
	3				8.0		Olive gray, fine SAND and CLAY, some fine to medium Gravel, wet	CL	
	3	1.5	0	13	9.5		No Recovery		
123187	3			13	10				
	2			12.5			Olive gray, fine SAND and CLAY, some fine to medium Gravel, wet	CL	
	2				10.0				
	3	1.5	0	11	11				
	4			11					
	28			10	11.5		No Recovery		
123188	28	1.5	0	13	12				
	38			11			Olive gray to dark brown, fine SAND and CLAY, little fine to coarse Gravel, moist	CL	
	51			11	12.0				
					13				
					13.3		Medium to coarse SAND, wet	SC	
					13.5				
					14		No Recovery	SC	
					14.0		Medium to coarse SAND, saturated		
					15				
					15.0		Weathered SHALE	WSH	WSH
					15.5		No Recovery		
					16				
					17				
					17.5		Auger Refusal at 17.5'		
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-35

LOG OF BORING NO. MW12-37

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/1/1998
DATE COMPLETED 11/1/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.5
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123201	3	1 8	0	12	0		Light brown to dark brown, fine SAND and SILT, little fine Gravel	SM	FL
	9			11	0 6		Olive gray, fine SAND, some fine to coarse Gravel, little Silt, moist	SM	
	16			13	1				
	25				1 8				
123203	14	1 5	0	11	2 0		No Recovery		
	20			12			Olive gray to light gray, fine SAND, some fine to coarse Gravel, little Silt, trace Cobble, dry	GM	
	26			10	3				
	27				3 5		No Recovery		WSH
	14	1 5	0	11	4 0		Weathered SHALE	WSH	
	13			12	4				
	21			10	5				
	27	1			5 5		No Recovery		
	17			11	6 0		Weathered SHALE	WSH	
	81				6				
					7 0		No Recovery		
					7				
					8				
					9				
					10				
					10 5				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-37

LOG OF BORING NO. MW12-38

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/1/1998
DATE COMPLETED 11/1/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10
DEPTH TO WATER: 3
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
					0		ASPHALT/CONCRETE, auger to 1'		FL
123204	24	0.4	0	7	1	1.0			
	26					1.4	Brown, fine SAND, some fine to medium Gravel, moist	GM	TL
	24				2		No Recovery		
	16								
123205	27	1	0	9	3	3.0	Olive gray, fine SAND, some Silt, little fine to medium Gravel, trace	GM	
	100/.5			10		3.8	Cobble, moist		
					4	4.0	Weathered SHALE	WSH	WSH
							No Recovery		
					5				
					6				
					7				
					8				
					9				
					10	10.0	Auger Refusal at 10'		
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-38

LOG OF BORING NO. MW12-39

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/1/1998
DATE COMPLETED 11/1/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.8
DEPTH TO WATER: 1.5
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
		0.9	0	8	0		ASPHALT		FL
					0.5		CONCRETE		
					1.0		GRAVEL		
					1.5		Light brown, fine SAND and SILT, some fine to coarse Gravel, wet	GM	
					2.4		No Recovery		TL
									WSH
					10.8		Auger Refusal at 10.8'		

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-39

LOG OF BORING NO. MW12-40

PROJECT:
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/14/1998
DATE COMPLETED 10/14/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123|21	3 5 14	2	0	9 5 10 10 5	0 1		Olive gray, fine SAND, some Organics, little Clay, little Silt, little fine to coarse Gravel, damp	GC	FL
123|22	29 13 23 26	1.5	0	10 9	2 3	2.0 3.5	Olive gray to light gray, fine SAND, little Silt, little Clay, little fine to coarse Gravel, trace Cobble, dry	GC	TL
					4	4.0	No Recovery		
123|23	30 26 30 36	2	0	12 11 9 5	5		Light gray to dark gray, fine SAND, some coarse Sand, little Clay, little fine to coarse Gravel, dry	GC	
	35 100/ 3				6	6 0	No Recovery		W
					7 8 9 10 11	11 0	Auger Refusal at 11'		
					12 13 14 15 16 17 18 19 20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING MW12-40

LOG OF BORING NO. SB12-2

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/14/1998
DATE COMPLETED 10/14/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER: 11.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123112	5 9 8 10	0.2	0	11	0 – 1	0.2	Dark brown, fine SAND, some Silt, little Clay, some metal debris stuck in Split Spoon, wet	SM	FL
							No Recovery		
	8 14 19	1.5	0	11 11	2 – 3	2.0 3.5	Light brown to olive gray, fine SAND, some Clay, little fine to medium Gravel, little Silt, damp	GC	
							No Recovery		
	20 12 16 18	1.8	0	9 10 9	4 – 5	4.0 5.8	Light brown to light gray, fine SAND, some Clay, little fine to coarse Gravel, little Silt, wet	GC	
123113	21 8 10	1.9	0	10 9 9	6 – 7	6.0 7.9	No Recovery Light brown to olive gray, fine SAND, some Clay, some fine to coarse Gravel, little Silt, trace Cobble, wet	GC	
	11 14 9 10	2	0	11 11.5 12.5	8 – 9	8.0	No Recovery Light brown to olive/dark gray, fine SAND, some Clay, little Silt, little fine to coarse Gravel, trace Cobble, wet	GC	
123114	14 14 10 15	2	0	10 11 11.5	10 – 11	10.0	Light brown to olive gray, fine SAND, some Clay, little fine to coarse Gravel, trace Cobble, trace Iron Oxide Zones, wet to saturated	GC	
	23 52 12 18 21 22				12 – 15	12.0	No Recovery		WSH
						14.0	Auger Refusal at 14'		
					16 – 19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-2

LOG OF BORING NO. SB12-3

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/8/1997
DATE COMPLETED 11/8/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11.9
DEPTH TO WATER: 7.8
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	-	0.4	0	900	0		Brown CLAY, little fine to coarse Sand, Cultural debris, dry	CL	FL
	5				0.4		No Recovery		
	13				1				
	16	0.9	0	900	2		Brown CLAY, little fine to coarse Sand, Cultural debris, dry	CL	
	12				2.0				
	25				2.9		No Recovery		
	39				3				
	17				4		No Recovery		
	70				4.0				
	100/ 1				5				
	10				6				
	36				7				
	104				▽				
	20				8				
	20	0.1	0	900	8.0		Brown CLAY, little fine to coarse Sand, Cultural debris, oily sheen	CL	
	43				8.1		on water		
	22				9		No Recovery		
	10	1.8	0	900	10		Black weathered SHALE	WSH	WSH
	10				10.0				
	26				11				
	37				11.8		No Recovery		
	100/ 4				11.9		Auger Refusal at 11.9'		
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-

LOG OF BORING NO. SB12-4

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/8/1997
DATE COMPLETED 11/8/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11.9
DEPTH TO WATER: 6
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	2	12	0	700	0		Brown SILT, little fine to coarse Sand, little Clay, trace fine to coarse Gravel, moist	MLS	FL
	3				1				
	5				12		No Recovery		
	4	14	0	700	2		Brown SILT, little fine to coarse Sand, little Clay, trace fine to coarse Gravel, moist	MLS	
	5				20				
	4				3				
	4				34		No Recovery		
	4	18	0	800	4		Brown SILT, little fine to coarse Sand, little Clay, trace fine to coarse Gravel, moist	MLS	
	2				40				
	3				5		Brown CLAY, some Silt, little fine to coarse Gravel, trace Shale cobble, moist to wet	CLG	TL
	13				50				
	12	18	0	800	58		No Recovery	CLG	
	16				60		Brown CLAY, some Silt, little fine to coarse Gravel, trace Shale cobble, wet		
	21				7				
	22	18	0	800	75		Brown, fine to medium SAND, some Silt, wet	SM	
	21				78				
	7				8		No Recovery	CLS	
	11				80		Brown CLAY, some Silt, little fine to coarse Sand, little fine to coarse gravel, trace Shale cobble, moist		
	14	19	0	800	9				
	17				98		No Recovery	CLS	
	11				10		Brown CLAY, some Silt, little fine to coarse Sand, little fine to coarse Gravel, trace Shale cobble, moist		
	33				100				
	21				11		Weathered SHALE	WSH	WSH
	100/.4				110		Auger Refusal at 11.9'		
					12				
					119				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-4

LOG OF BORING NO. SB12-5A&B

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/13/1998
DATE COMPLETED
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 15.4
DEPTH TO WATER: 13
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
							This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.		
123096	5 10 20 22	1.7	0	10 10 9	0 1 2 1.7 2.0		Light brown to light gray, fine SAND, little fine to medium Gravel, little Silt, trace Clay, dry	GC	FL
							No Recovery Auger down to 3'		TL
	18 20 20 22	1.8	0	10 11 11	3 3.0 4 4.8		Light brown to light gray, fine SAND, little Clay, little Silt, little fine to coarse Gravel, trace Cobble, dry	GC	
					5 5.0		No Recovery Auger down to 6'		
123097	23 23 26 28	2	0	9 9.5 11	6 6.0 7 8 8.0		Dark brown to dark gray, fine SAND, little Clay, little fine to coarse Gravel, little Clay, trace Cobble (Shale), damp	GC	
							Auger down to 9'		
	14 19 21 25	2	0	9.5 9 9	9 9.0 10 11 11.0		Dark brown to olive gray, fine SAND, some Clay, little Silt, little fine to coarse Gravel, damp	GC	
							Auger down to 12'		
123098	8 14 15 21	2	0	9.5 11	12 12.0 13 14 14.0		Olive gray, fine SAND and SILT, some fine to coarse Gravel, trace Cobble, wet	GM	
							No Recovery		WSH
	100/4				15 15.4		Auger Refusal at 15.4'		
					16 17 18 19 20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-5A&B

LOG OF BORING NO. SB12-6

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 11/8/1997
DATE COMPLETED 11/8/1997
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.3
DEPTH TO WATER: 6
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVS1927
INSPECTOR: EAF
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	DESCRIPTION	USCS Class	Stratum Class
	3	16	0	6	0		Brown SILT, little fine to coarse Sand, little fine to coarse Gravel, trace Clay, moist	ML	FL
	8				1				
	8								TL
	9	17	0	65	2		No Recovery		
	4						Brown SILT, little fine to coarse Sand, little fine to coarse Gravel, trace Clay, moist	ML	
	8				3				
	14								
	8	14	0	50	4		No Recovery		
	3						Brown SILT, little fine to coarse Sand, little fine to coarse Gravel, trace Clay, moist	ML	
	3				5				
	4						No Recovery		
	3	16	0	70	6		Brown CLAY, some Silt, little fine to coarse Sand, little fine to coarse Gravel, wet	CL	
	3				7				
	4								
	4	2	0	7	8		No Recovery		
	5						Brown CLAY, some Silt, little fine to coarse Sand, little fine to coarse Gravel, wet	CL	
	12				9				
	21								
	25	2	0	8	10				
	26								
	15				11				
	28								
	30	2	0	70	12				
	26								
	10				13				
	20	03	0		14		Gray CLAY, little fine to coarse Sand, little fine to coarse Gravel, wet	CL	
	28						Weathered SHALE	WSH	WSH
	32				15				
	100/ 3								
					16				
					17				
					18				
					19				
					20				

This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-6

LOG OF BORING NO. SB12-7

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/30/1998
DATE COMPLETED 10/30/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 5.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
					0		Auger down to 2'		FL
	24	2	0	11	1				
	30			11	2				
	41			12	2.0		Dark gray, fine SAND and fine to coarse GRAVEL, dry	GPS	TL
	47				3				
123194	46	1.1	0	11	4				
	50			15	4.0		Dark gray, fine SAND and fine to coarse GRAVEL, dry	GPS	
	50/.1			15	5				
					5.1		Auger refusal at 5.1'		
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-7

LOG OF BORING NO. SB12-8

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/30/1998
DATE COMPLETED 10/30/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
					0		Auger down to 2'		FL
	15	2	0	11	1				
	15			11	2	20	Dark brown, fine SAND, little Silt, little fine to coarse Gravel, shards of metallic substance, dry	SM	
	16			12	3				
	28								
123193	15	2	0	11	4	40	Dark brown to light gray, fine SAND, little Silt, little fine to corase Gravel, shards of metallic substance, dry	SM	
	17			15	5				
	22			15					
	15				6	60	End of boring at 6'		
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-8

LOG OF BORING NO. SB12-9

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/29/1998
DATE COMPLETED 10/29/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
	2	2	0	13	0		Dark brown, fine SAND, little Silt, little fine to medium Gravel, moist	SM	FL
	6			10	1				
	8			10					
	12	2	0	10	2	2.0	Light gray, fine SAND, some fine to medium Gravel, little Silt, dry	GM	TL
	16			9	3				
	27			11					
	31				4	4.0			
123189	43	2	0	10			Light gray, fine SAND, some fine to medium Gravel, little Silt, dry	GM	
	44			9	5				
	40			9					
	51				6	6.0			
	53						End of boring at 6'		
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-

LOG OF BORING NO. SB12-28

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/4/1998
DATE COMPLETED 10/4/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 4
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
123064		1.5	0	10 11	0 1 1.5 2 3 4 4.0 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		Light brown to light gray, fine SAND, some Silt, little Clay, little fine to coarse Gravel (Shale), dry	GC	FL
							No Recovery		WSH
							Auger Refusal at 4'		

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-28

LOG OF BORING NO. SB12-36

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
DATE STARTED: 10/14/1998
DATE COMPLETED 10/14/1998
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 3.3
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY: DRG

Sample Number	Blow Counts (# Blows per 6")	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft)	Soil Description Macro	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named company and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	USCS Class	Stratum Class
							DESCRIPTION		
					0				
1~~2~~3~~4~~5	17 49 100 75/.3				1		ASPHALT, Auger down to 1'		FL
					1.0		No Recovery		TL
					2				
					3				WSH
					3.3		Auger Refusal at 3.3'		
					4				
					5				
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				

NOTES:

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

LOG OF BORING SB12-36

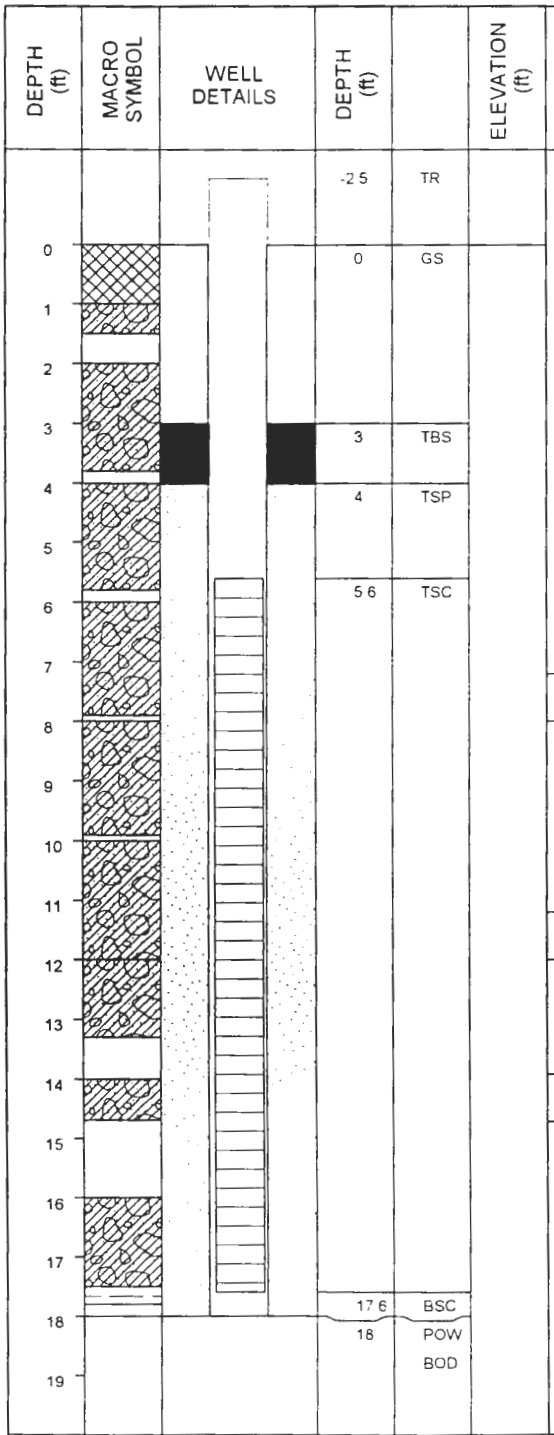
MONITORING WELL INSTALLATION LOGS

TEMPORARY WELL COMPLETION REPORT: MW12-3

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 11/6/97
WELL INSTALLATION COMPLETED 11/6/97
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 18
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: EAF
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 12
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1

SANDPACK
Type: #0, #00
Length (ft): 14

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

TEMPORARY WELL COMPLETION REPORT: MW12-3

OVERBURDEN MONITORING WELL
COMPLETION REPORT & INSTALLATION DETAIL
PROTECTIVE RISER COMPLETION

1 Parsons ES Inc. | CLIENT: Seneca Army Depot | WELL #: MW12-4

PROJECT: Sead-12 RI/FS | PROJECT NO: 730047-01001

LOCATION: Background, North end | INSPECTOR: EAF

CHECKED BY:

DRILLING CONTRACTOR: Maxim Tech | POW DEPTH: 12.4 (BGS)

DRILLER: John Warner | INSTALLATION STARTED: 11/5/97

DRILLING COMPLETED: 11/4/97 | INSTALLATION COMPLETED: 11/5/97

BORING DEPTH: 12.4 (BGS) | SURFACE COMPLETION DATE: 11/7/99

DRILLING METHOD(S): 4¼ HSA | COMPLETION CONTRACTOR/CREW: Maxim Tech

BORING DIAMETER(S): 8" | BEDROCK CONFIRMED (Y/N?) Y

ASSOCIATED SWMU/AOC: Sead-12 | ESTIMATED GROUND ELEVATION:

PROTECTIVE SURFACE CASING:

DIAMETER: 4" LENGTH: 5'

RISER:

TR: -2.5 TYPE: Sch 40 pvc DIAMETER: 2" LENGTH: ~~4.8'~~ (626) 7.27

SCREEN:

TSC: 4.77 TYPE: Sch 40 PVC DIAMETER: 2" LENGTH: 7.21' SLOT SIZE: 0.010"

POINT OF WELL: (SILT SUMP)

TYPE: Sump BSC: 11.98 POW: 12.2

GROUT: None

TG: TYPE: LENGTH:

SEAL: TBS: 2.4' TYPE: Bentonite chip LENGTH: 1'

SAND PACK: TSP: 3.4' 3.9' TYPE: Morie #00 Morie #0 LENGTH: 0.5' 8.3'

SURFACE COLLAR:

TYPE: Concrete RADIUS: 2' THICKNESS CENTER: 1' THICKNESS EDGE: 4"

CENTRALIZER DEPTHS None

DEPTH 1: DEPTH 2: DEPTH 3: DEPTH 4:

COMMENTS:

* ALL DEPTH MEASUREMENTS REFERENCED TO GROUND SURFACE

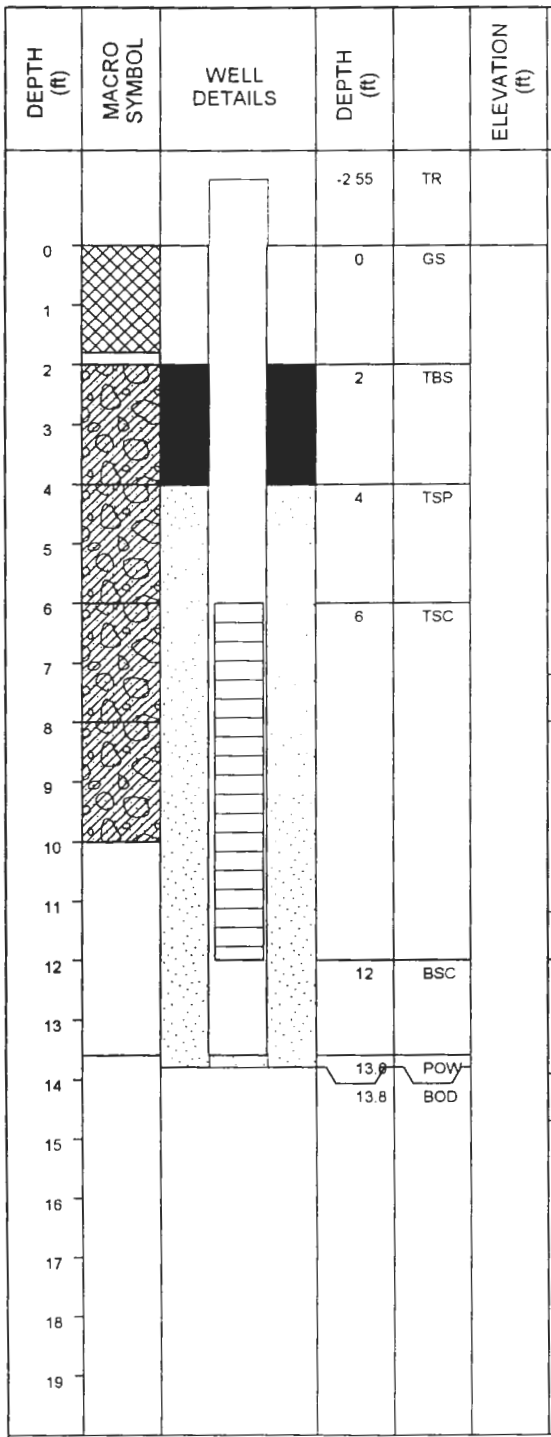
SEE PAGE 2 FOR SCHEMATIC

TEMPORARY WELL COMPLETION REPORT: MW12-7

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/28/98
WELL INSTALLATION COMPLETED 10/28/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.55

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 9.8

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

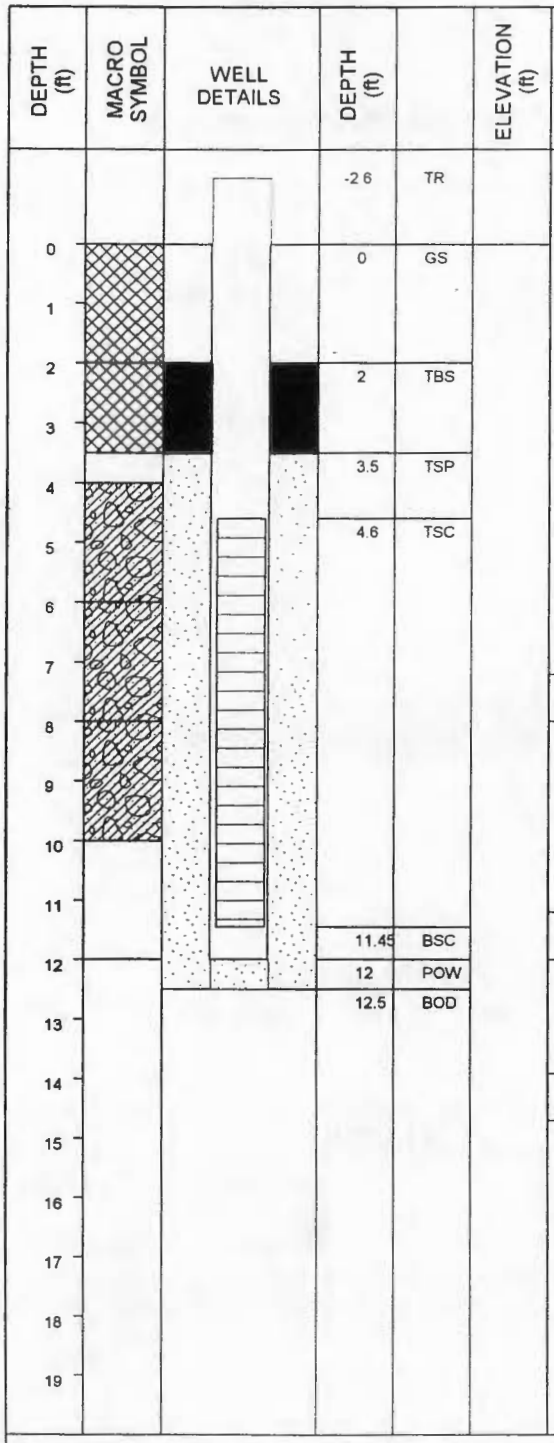
TEMPORARY WELL COMPLETION REPORT: MW12-7

TEMPORARY WELL COMPLETION REPORT: MW12-8

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/28/98
WELL INSTALLATION COMPLETED 11/2/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.6

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6.85
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.5

SANDPACK
Type: #0, #00
Length (ft): 9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

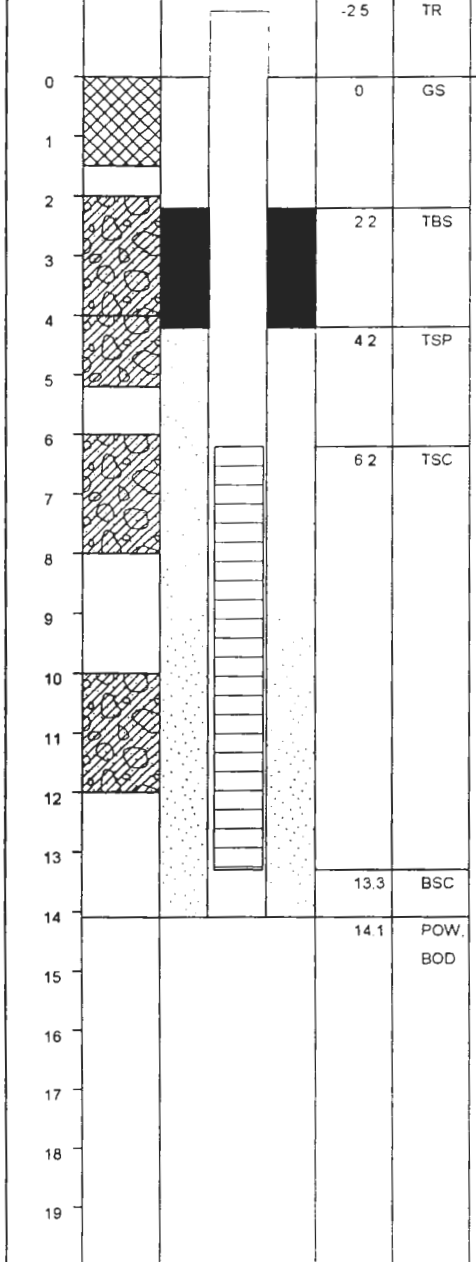
TEMPORARY WELL COMPLETION REPORT: MW12-8

TEMPORARY WELL COMPLETION REPORT: MW12-9

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/17/98
WELL INSTALLATION COMPLETED 10/17/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.3

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.1
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 9.9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

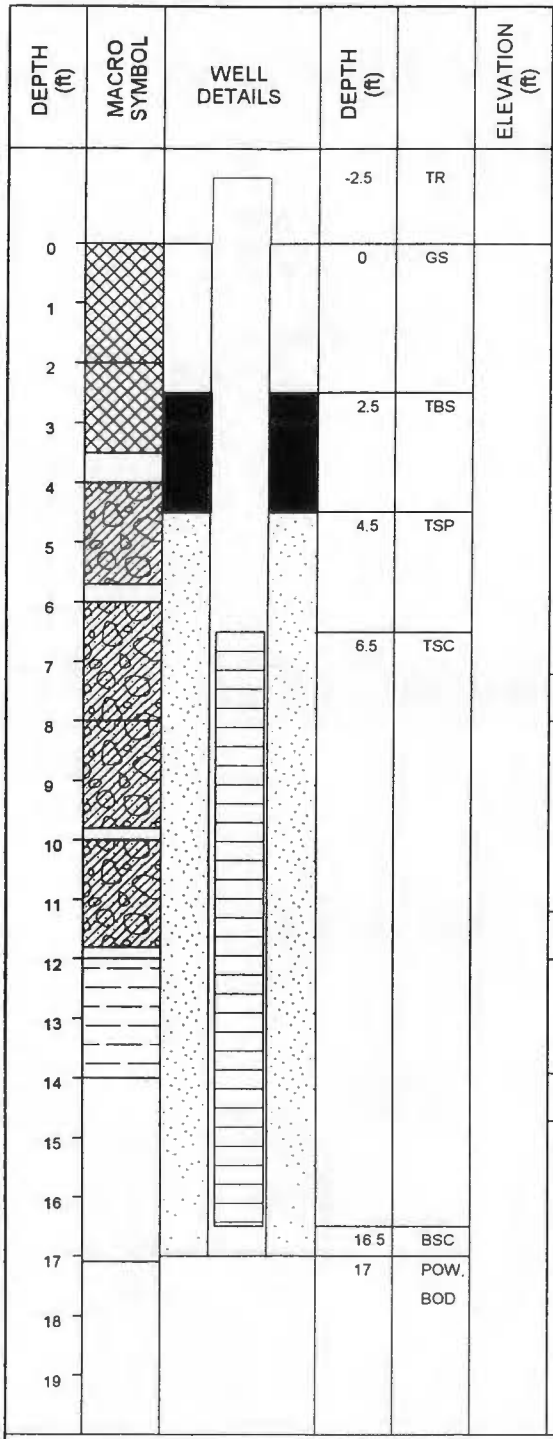
TEMPORARY WELL COMPLETION REPORT: MW12-9

TEMPORARY WELL COMPLETION REPORT: MW12-10

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 9/29/98
WELL INSTALLATION COMPLETED 9/30/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 17.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 9

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 10
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 12.5

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

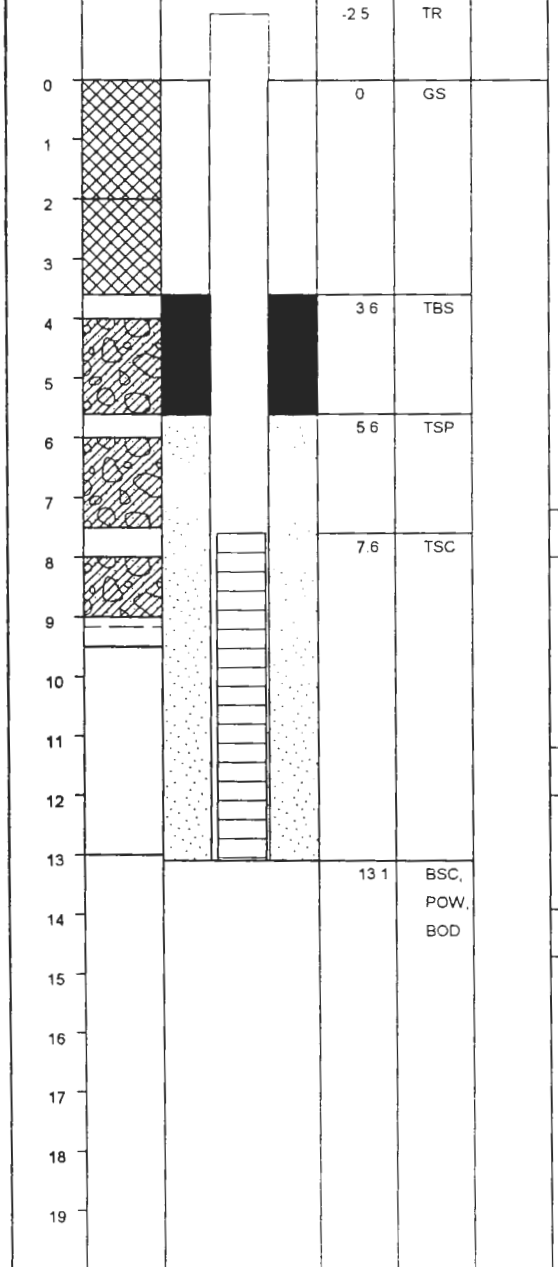
TEMPORARY WELL COMPLETION REPORT: MW12-10

TEMPORARY WELL COMPLETION REPORT: MW12-11

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/29/98
WELL INSTALLATION COMPLETED 10/29/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.9

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 5.5
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 7

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

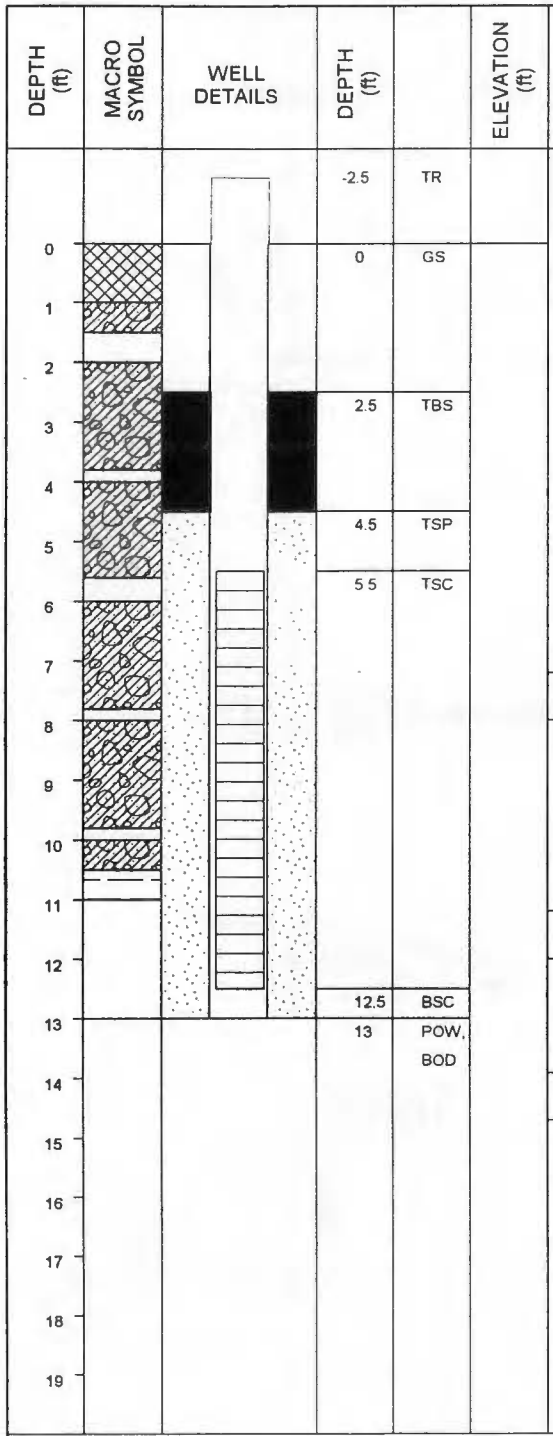
TEMPORARY WELL COMPLETION REPORT: MW12-11

TEMPORARY WELL COMPLETION REPORT: MW12-12

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/6/98
WELL INSTALLATION COMPLETED 10/6/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft):

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 8.5

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK
LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

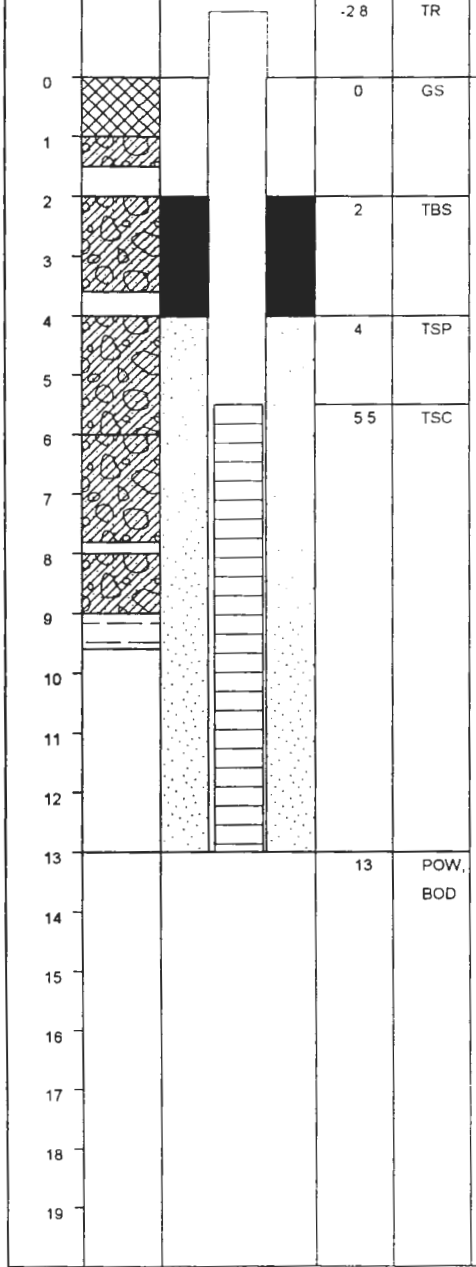
TEMPORARY WELL COMPLETION REPORT: MW12-12

TEMPORARY WELL COMPLETION REPORT: MW12-13

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/1/98
WELL INSTALLATION COMPLETED 10/1/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 10.3

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.5
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

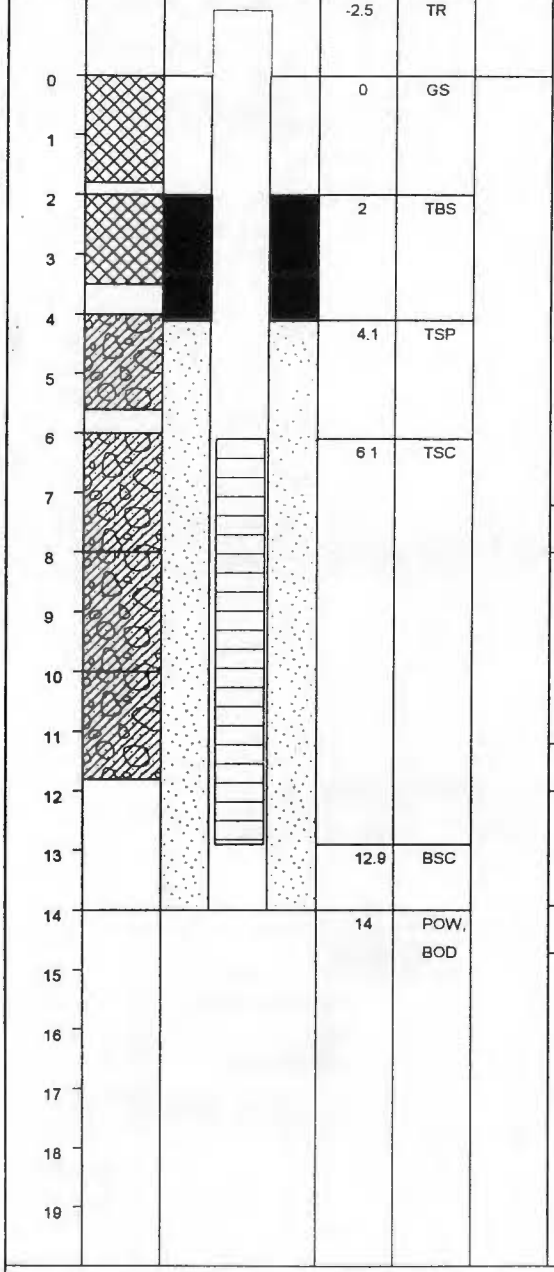
TEMPORARY WELL COMPLETION REPORT: MW12-13

TEMPORARY WELL COMPLETION REPORT: MW12-14

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/15/98
WELL INSTALLATION COMPLETED 10/21/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.6

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6.8
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2.1

SANDPACK
Type: #0, #00
Length (ft): 9.9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

TEMPORARY WELL COMPLETION REPORT: MW12-14

OVERBURDEN MONITORING WELL
COMPLETION REPORT & INSTALLATION DETAIL
PROTECTIVE RISER COMPLETION

1 Parsons ES Inc. | CLIENT: Seneca Army Depot | WELL #: MW12-15

PROJECT: Seneca Sead-12 RI/FS | PROJECT NO: 730097-01001

LOCATION: North of disposal pit ~~A~~ C | INSPECTOR: DRG/ITR

CHECKED BY: DRG

DRILLING CONTRACTOR: Maxim Tech. | POW DEPTH: 13.1

DRILLER: Rodney Bush | INSTALLATION STARTED: 10/1/98

DRILLING COMPLETED: 10/1/98 | INSTALLATION COMPLETED: 10/1/98

BORING DEPTH: 13.1 (BGS) | SURFACE COMPLETION DATE: 10/5/98

DRILLING METHOD(S): 4¼ HSA | COMPLETION CONTRACTOR/CREW: Maxim

BORING DIAMETER(S): 8" | BEDROCK CONFIRMED (Y/N?) Y

ASSOCIATED SWMU/AOC: SEAD-12 | ESTIMATED GROUND ELEVATION:

PROTECTIVE SURFACE CASING:

DIAMETER: 8" LENGTH: 5'

RISER:

TR: 2.6' TYPE: PVC Sch 40 DIAMETER: 2" LENGTH: 10'

SCREEN:

TSC: 5.4 (BGS) TYPE: Sch. 40 PVC DIAMETER: 2" LENGTH: 7.2' SLOT SIZE: 0.010"

POINT OF WELL: (SILT SUMP)

TYPE: Sump BSC: 12.6 (BGS) POW: 13.1 (BGS)

GROUT: ~~None~~

TG: ~~+1' (BGS)~~ ~~Surface (0.0 BGS)~~ (DRG) TYPE: ~~Bentonite Chips~~ (DRG) LENGTH: ~~3.9~~ (DRG) ~~2'~~

SEAL: TBS: 1.9 BGS TYPE: Bentonite chips LENGTH: 2'

SAND PACK: TSP: ~~3.9~~ 4.4 BGS 3.9 fine TYPE: ~~Morie #0~~ Morie #0 LENGTH: ~~0.5'~~ 8.7' 0.5'

SURFACE COLLAR:

TYPE: Concrete/Bentonite RADIUS: 2' THICKNESS CENTER: 1' THICKNESS EDGE: 4"

CENTRALIZER DEPTHS None.

DEPTH 1: DEPTH 2: DEPTH 3: DEPTH 4:

COMMENTS:

* ALL DEPTH MEASUREMENTS REFERENCED TO GROUND SURFACE

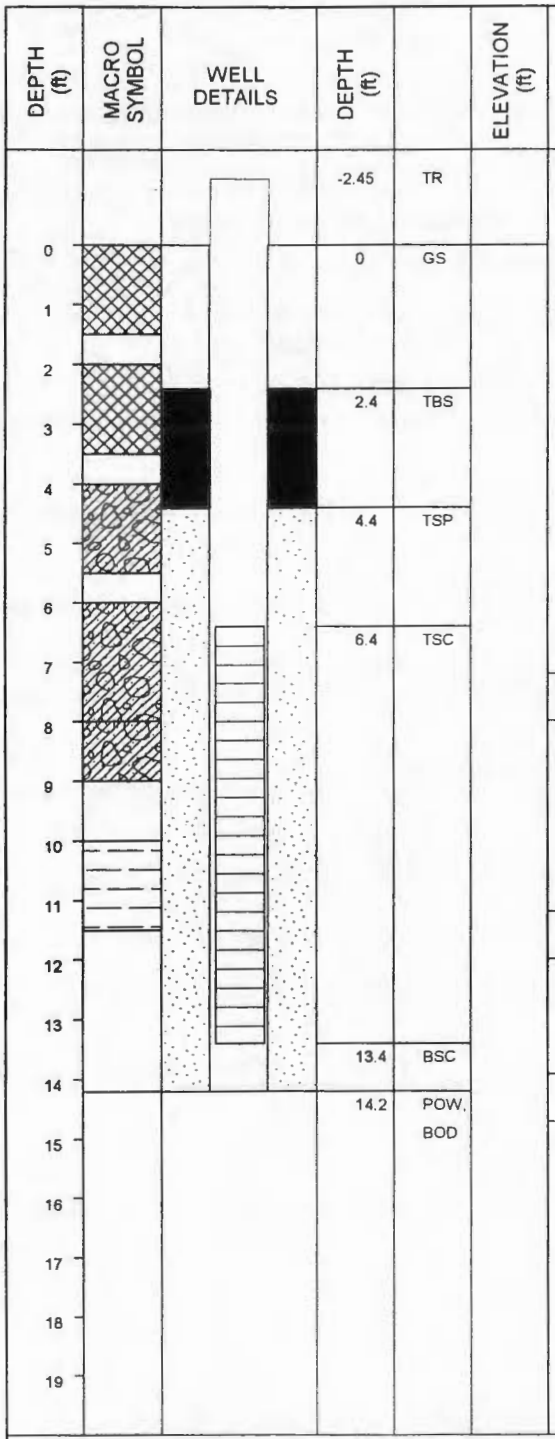
SEE PAGE 2 FOR SCHEMATIC

TEMPORARY WELL COMPLETION REPORT: MW12-16

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/17/98
WELL INSTALLATION COMPLETED 10/17/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.2
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



DEPTH (ft)		ELEVATION (ft)
-2.45	TR	
0	GS	
2.4	TBS	
4.4	TSP	
6.4	TSC	
13.4	BSC	
14.2	POW, BOD	

WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.85

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 9.8

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

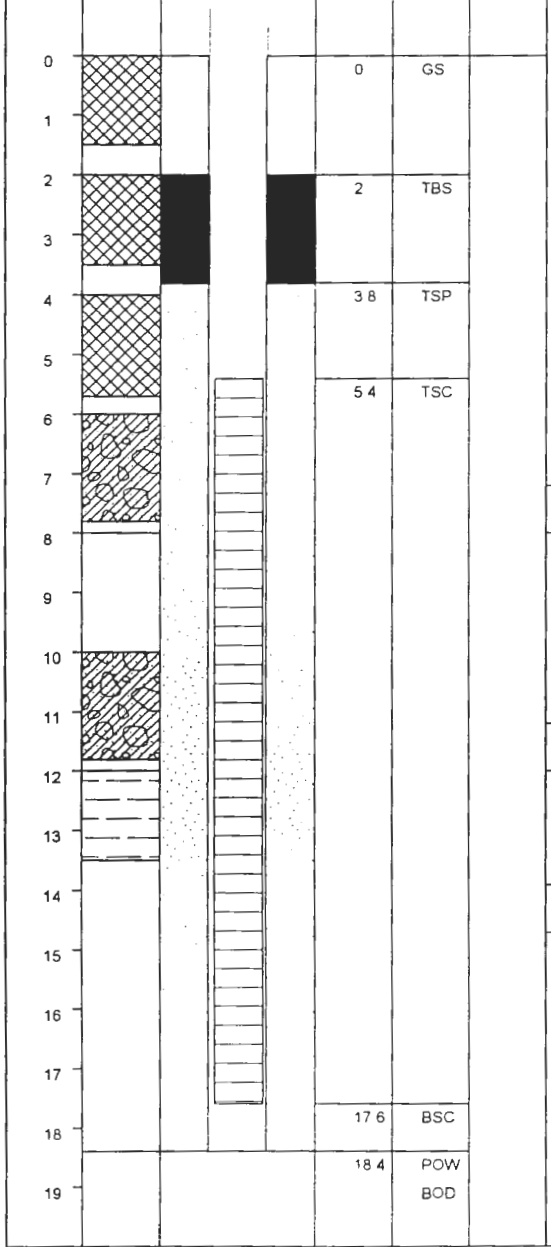
TEMPORARY WELL COMPLETION REPORT: MW12-16

TEMPORARY WELL COMPLETION REPORT: MW12-17

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/17/98
WELL INSTALLATION COMPLETED 10/17/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 18.4
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.3

SEAL
Type: BENTONITE
Length (ft): 1.8

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 12.2
Slot Size (in): 10

SANDPACK
Type: #0, #00
Length (ft): 14.6

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

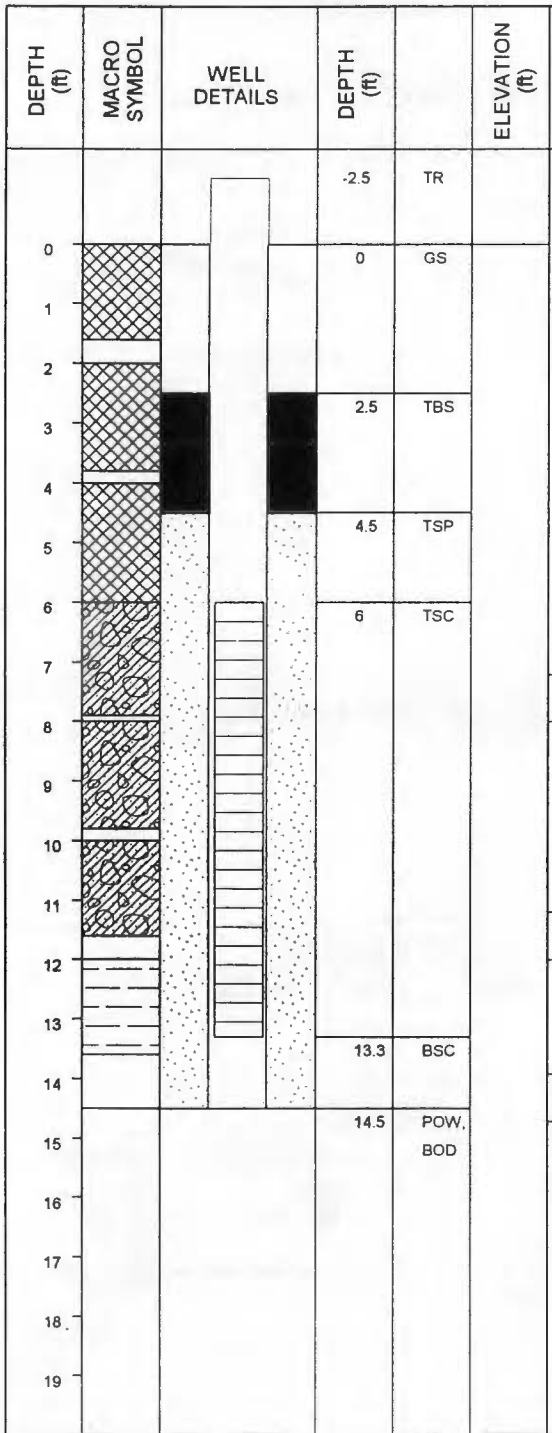
TEMPORARY WELL COMPLETION REPORT: MW12-17

TEMPORARY WELL COMPLETION REPORT: MW12-18

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/2/98
WELL INSTALLATION COMPLETED 10/2/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.5
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.5

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.3
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 10

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

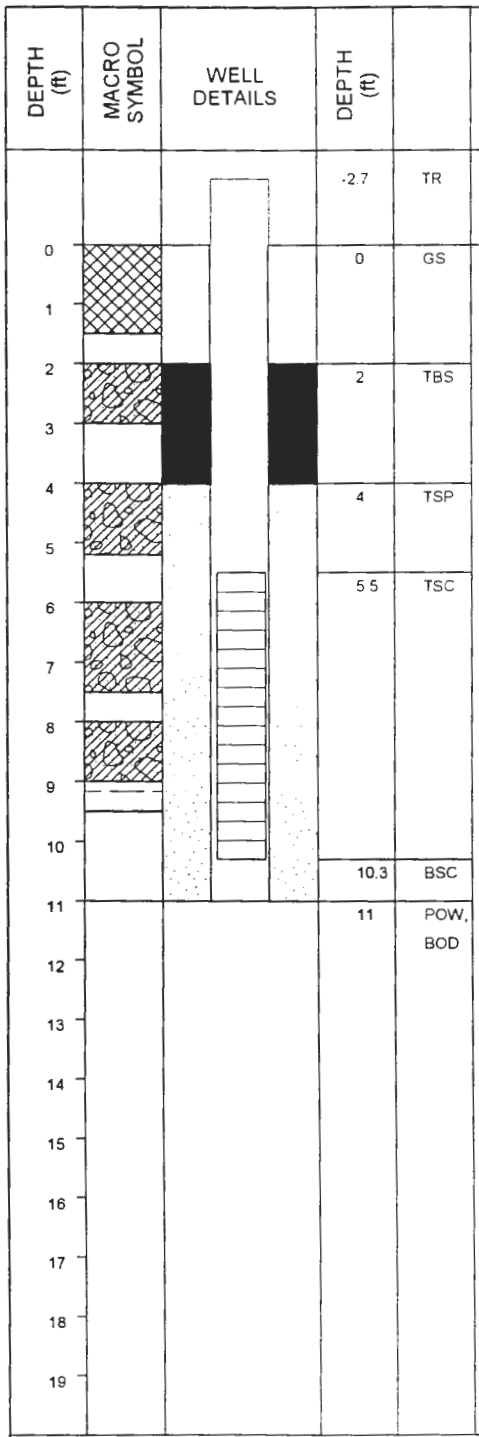
TEMPORARY WELL COMPLETION REPORT: MW12-18

TEMPORARY WELL COMPLETION REPORT: MW12-19

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/3/98
WELL INSTALLATION COMPLETED 10/3/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



DEPTH (ft)		ELEVATION (ft)
-2.7	TR	
0	GS	
2	TBS	
4	TSP	
5.5	TSC	
10.3	BSC	
11	POW, BOD	

WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.2

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.8
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 7

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

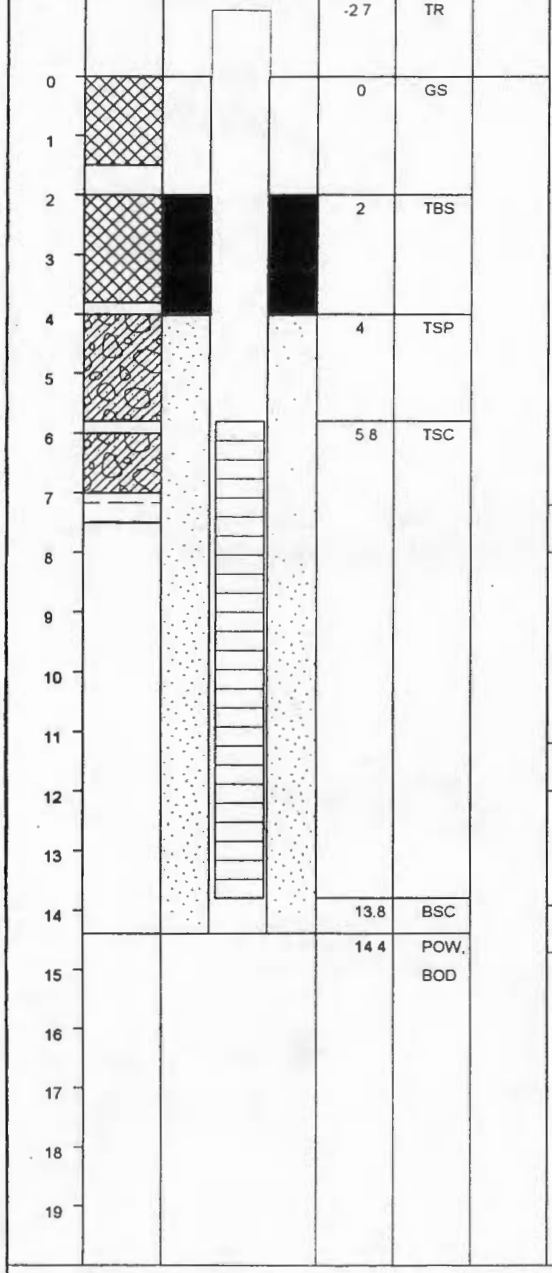
TEMPORARY WELL COMPLETION REPORT: MW12-19

TEMPORARY WELL COMPLETION REPORT: MW12-20

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/3/98
WELL INSTALLATION COMPLETED 10/3/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.4
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



DEPTH (ft)		ELEVATION (ft)
-2.7	TR	
0	GS	
2	TBS	
4	TSP	
5.8	TSC	
13.8	BSC	
14.4	POW, BOD	

WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.5

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 10.4

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

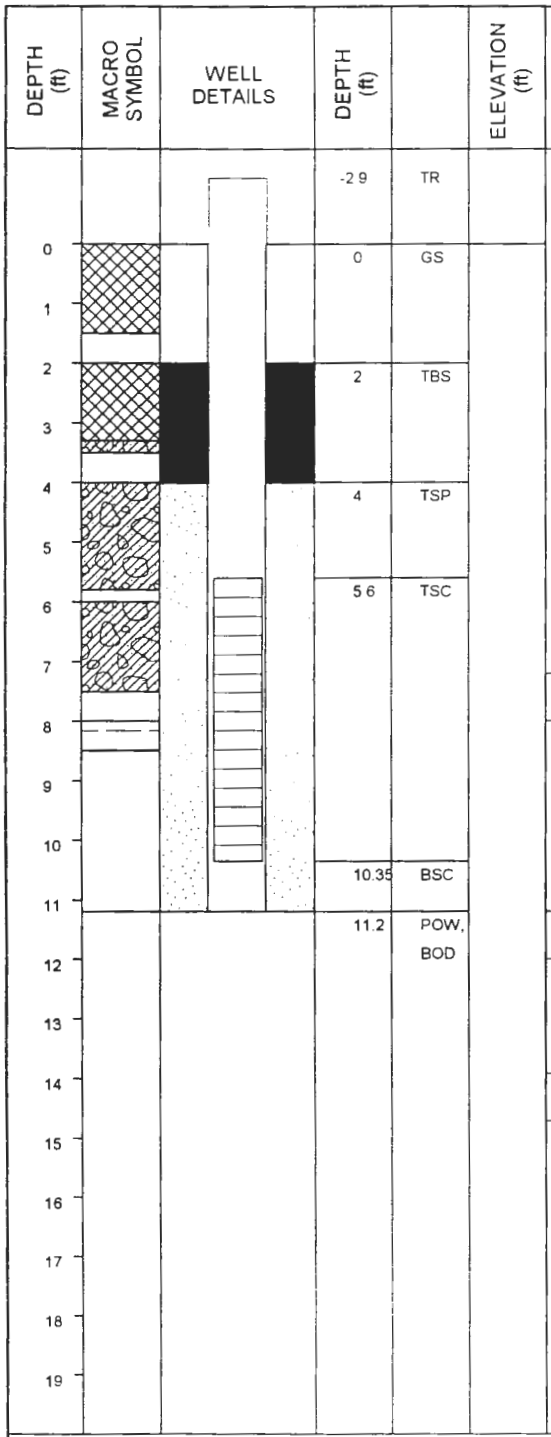
TEMPORARY WELL COMPLETION REPORT: MW12-20

TEMPORARY WELL COMPLETION REPORT: MW12-21

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/3/98
WELL INSTALLATION COMPLETED 10/3/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 11.2
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.3

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.75
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 7

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

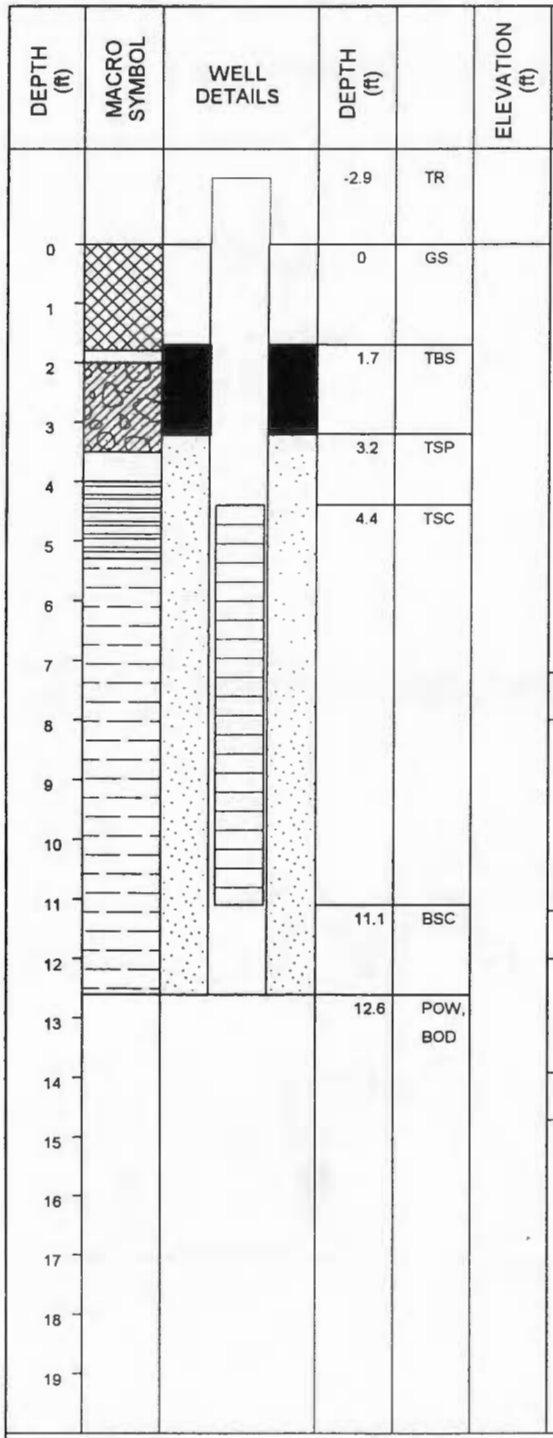
TEMPORARY WELL COMPLETION REPORT: MW12-21

TEMPORARY WELL COMPLETION REPORT: MW12-22

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/4/98
WELL INSTALLATION COMPLETED 10/4/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12.6
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.3

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6.7
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.5

SANDPACK
Type: #0, #00
Length (ft): 9.4

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

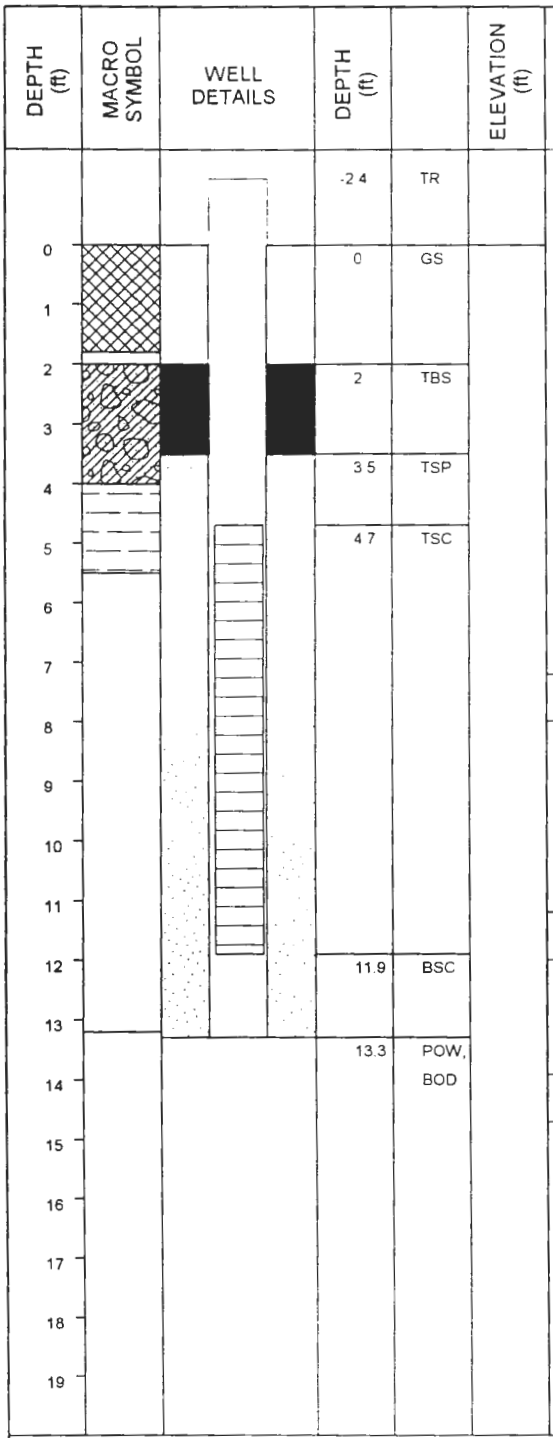
TEMPORARY WELL COMPLETION REPORT: MW12-22

TEMPORARY WELL COMPLETION REPORT: MW12-23

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/5/98
WELL INSTALLATION COMPLETED 10/5/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 13.3
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.1

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.2
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.5

SANDPACK
Type: #0, #00
Length (ft): 8.6

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

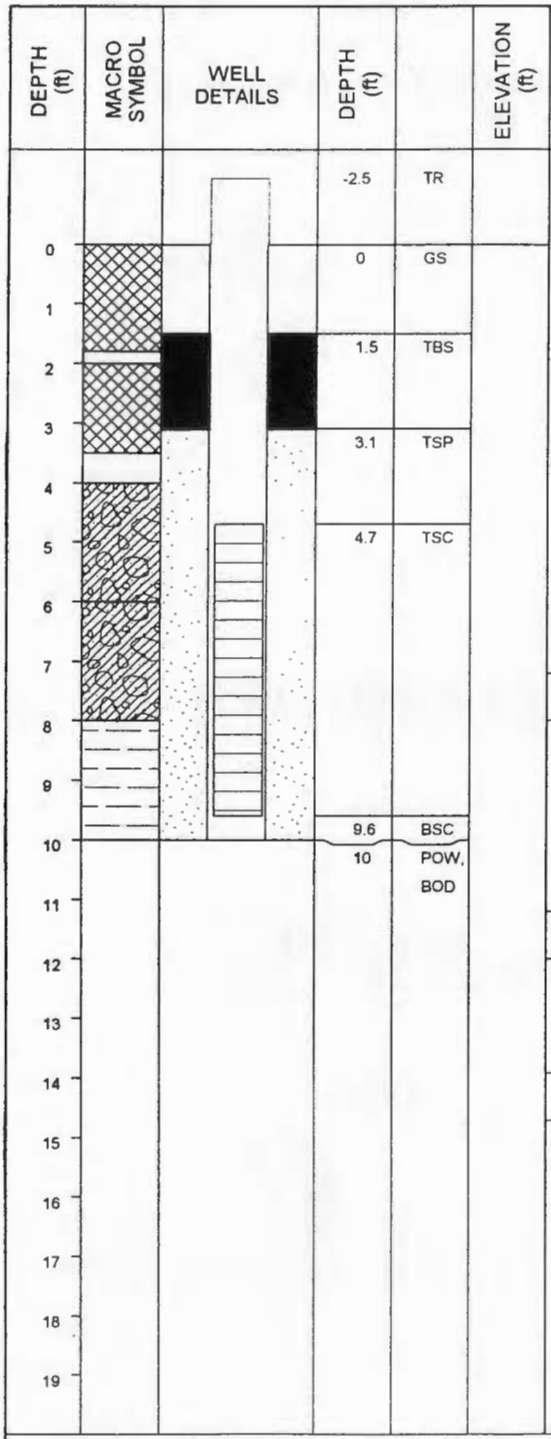
TEMPORARY WELL COMPLETION REPORT: MW12-23

TEMPORARY WELL COMPLETION REPORT: MW12-24

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/19/98
WELL INSTALLATION COMPLETED 10/19/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.2

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.9
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.5

SANDPACK
Type: #0, #00
Length (ft): 6.9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

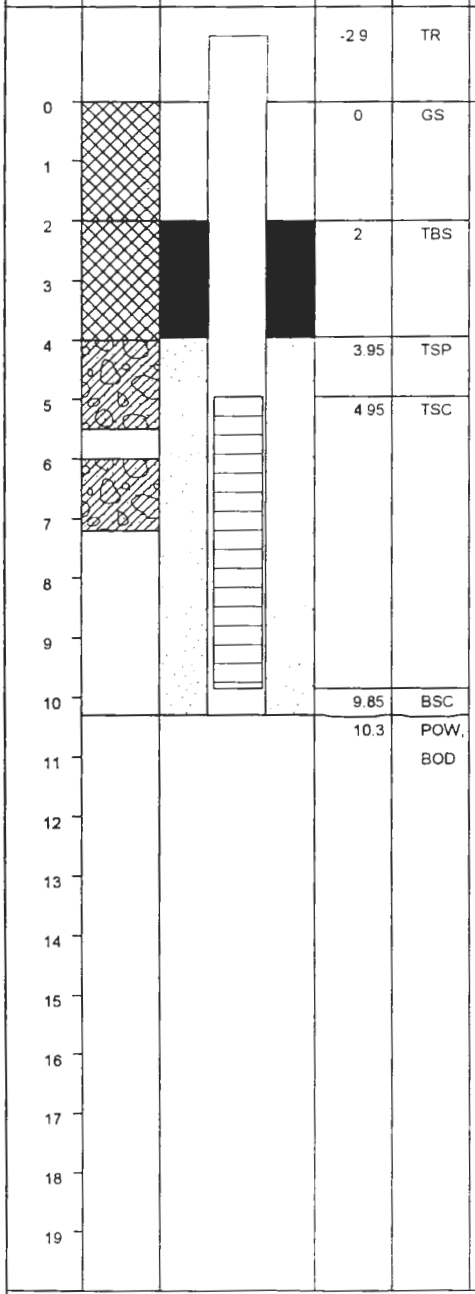
TEMPORARY WELL COMPLETION REPORT: MW12-24

TEMPORARY WELL COMPLETION REPORT: MW12-25

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/18/98
WELL INSTALLATION COMPLETED 10/18/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.3
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



DEPTH (ft)		ELEVATION (ft)
-2.9	TR	
0	GS	
2	TBS	
3.95	TSP	
4.95	TSC	
9.85	BSC	
10.3	POW, BOD	

WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.85

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.9
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.95

SANDPACK
Type: #0, #00
Length (ft): 7.4

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

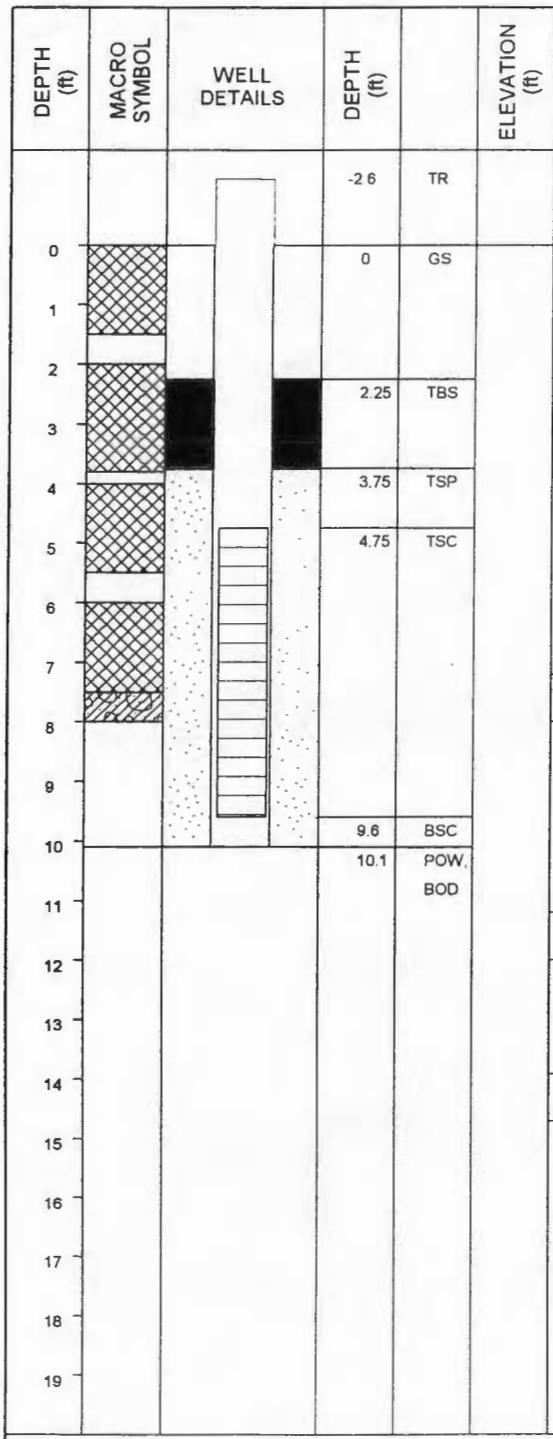
TEMPORARY WELL COMPLETION REPORT: MW12-25

TEMPORARY WELL COMPLETION REPORT: MW12-26

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/18/98
WELL INSTALLATION COMPLETED 10/18/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.35

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.85
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.5

SANDPACK
Type: #0, #00
Length (ft): 6.4

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK
LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

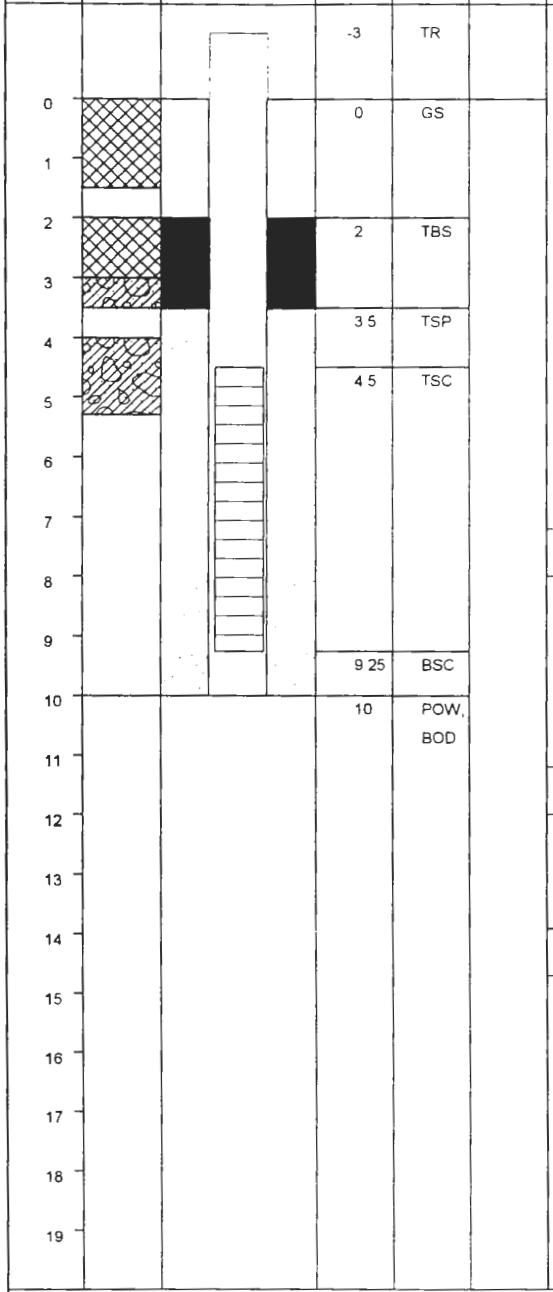
TEMPORARY WELL COMPLETION REPORT: MW12-26

TEMPORARY WELL COMPLETION REPORT: MW12-27

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/4/98
WELL INSTALLATION COMPLETED 10/4/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 12.9
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.5

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.75
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 6.5

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

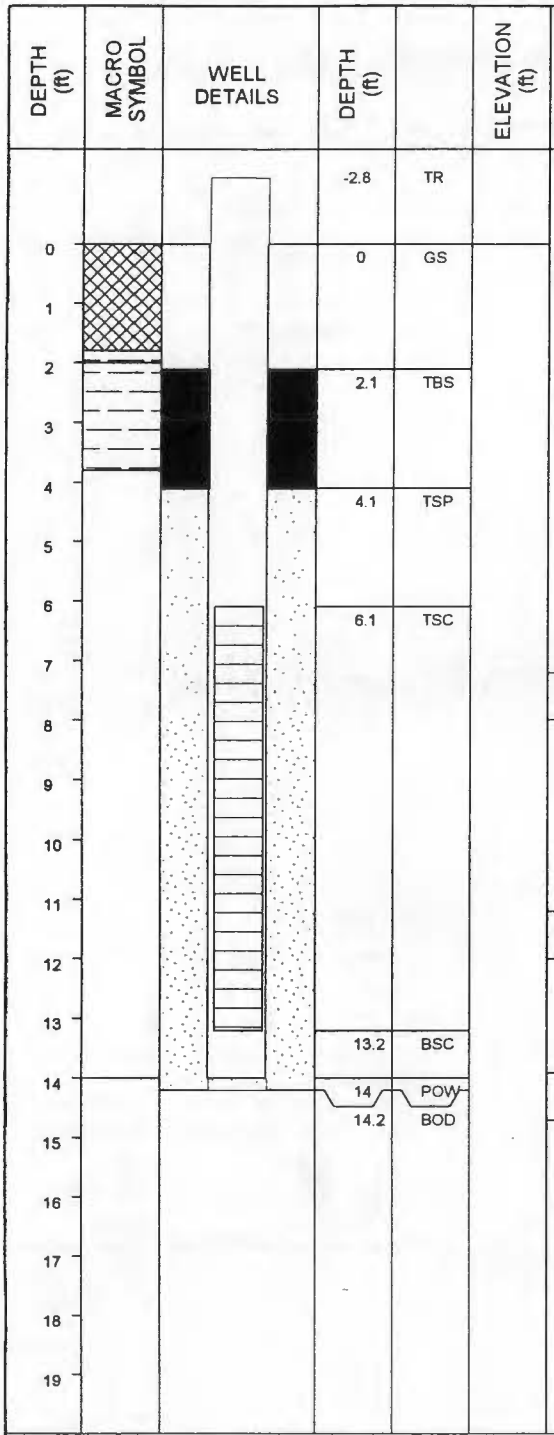
TEMPORARY WELL COMPLETION REPORT: MW12-27

TEMPORARY WELL COMPLETION REPORT: MW12-29

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/15/98
WELL INSTALLATION COMPLETED 10/15/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.9

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.1
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 1.9

SANDPACK
Type: #0, #00
Length (ft): 10.1

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

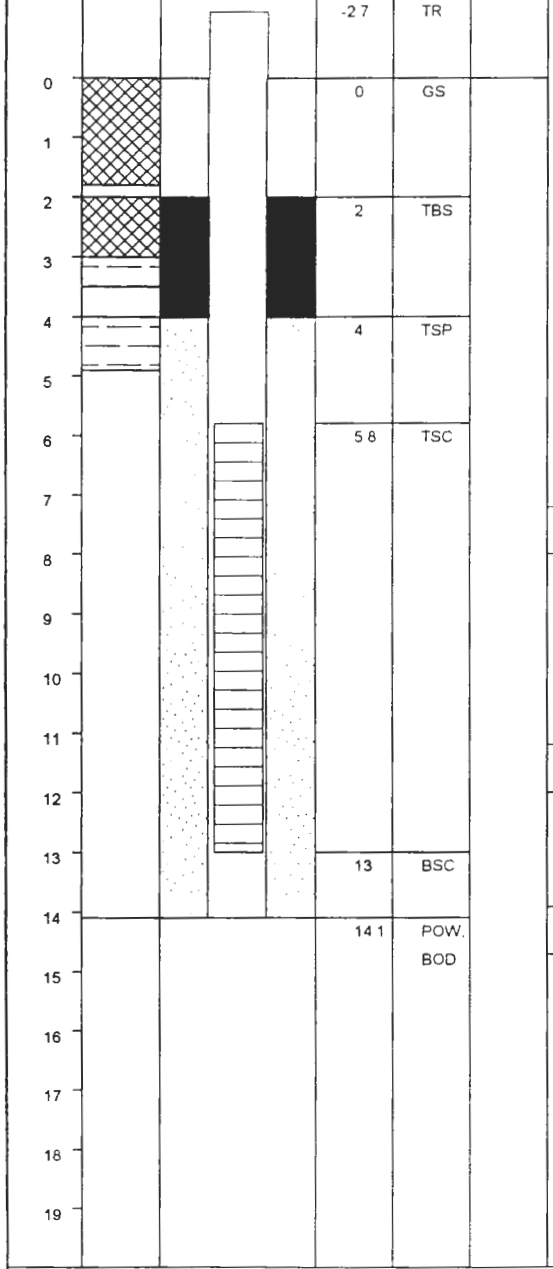
TEMPORARY WELL COMPLETION REPORT: MW12-29

TEMPORARY WELL COMPLETION REPORT: MW12-30

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/16/98
WELL INSTALLATION COMPLETED 10/16/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.5

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.2
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 10.1

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

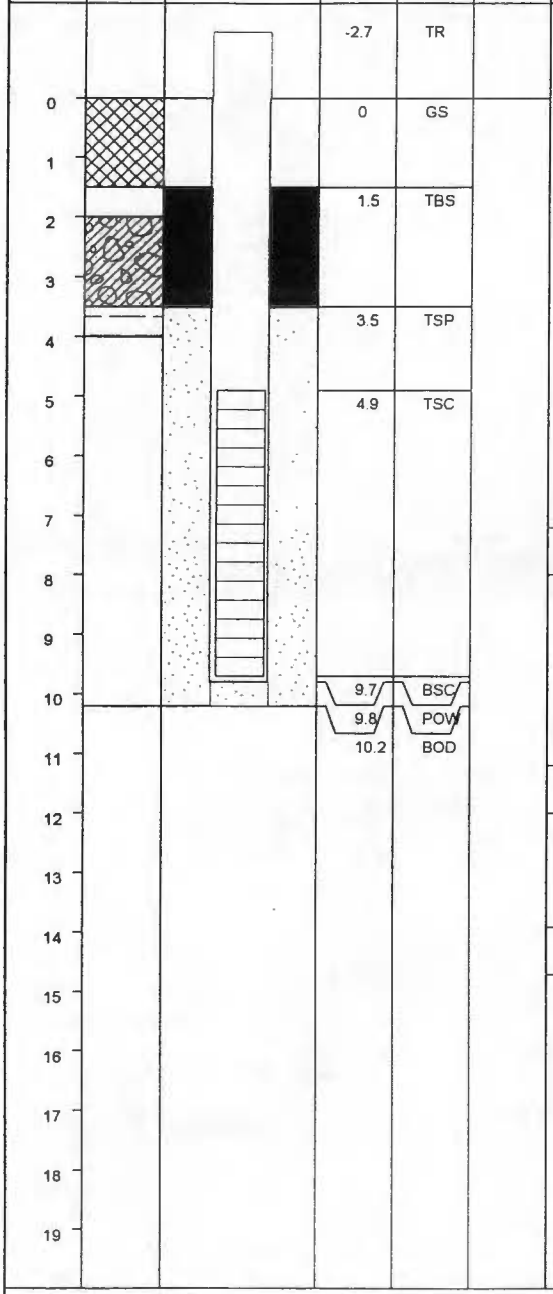
TEMPORARY WELL COMPLETION REPORT: MW12-30

TEMPORARY WELL COMPLETION REPORT: MW12-31

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/26/98
WELL INSTALLATION COMPLETED 10/26/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 9.8
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.6

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.8
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 6.7

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

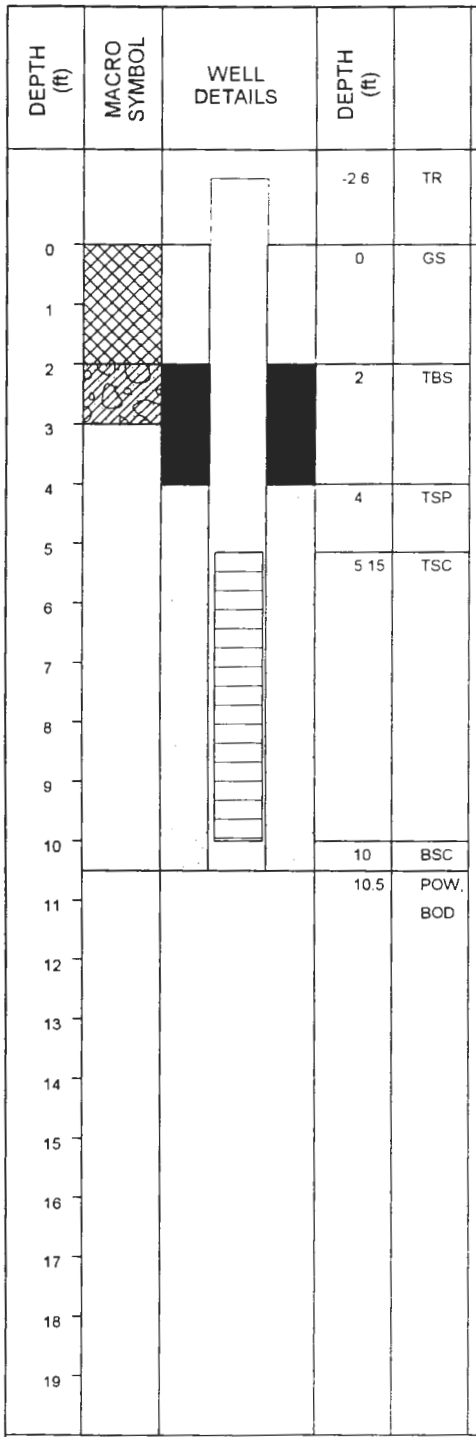
TEMPORARY WELL COMPLETION REPORT: MW12-31

TEMPORARY WELL COMPLETION REPORT: MW12-32

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/26/98
WELL INSTALLATION COMPLETED 10/26/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.5
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.75

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.85
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 6.5

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

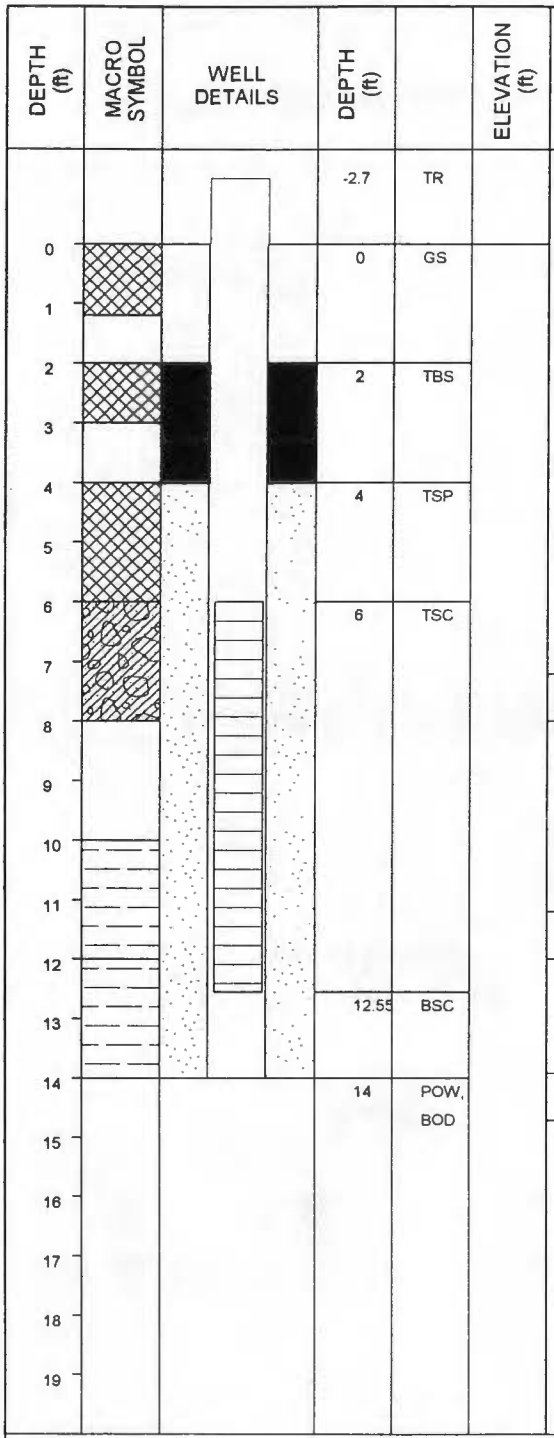
TEMPORARY WELL COMPLETION REPORT: MW12-32

TEMPORARY WELL COMPLETION REPORT: MW12-33

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/31/98
WELL INSTALLATION COMPLETED 10/31/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.7

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6.55
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 9.85

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

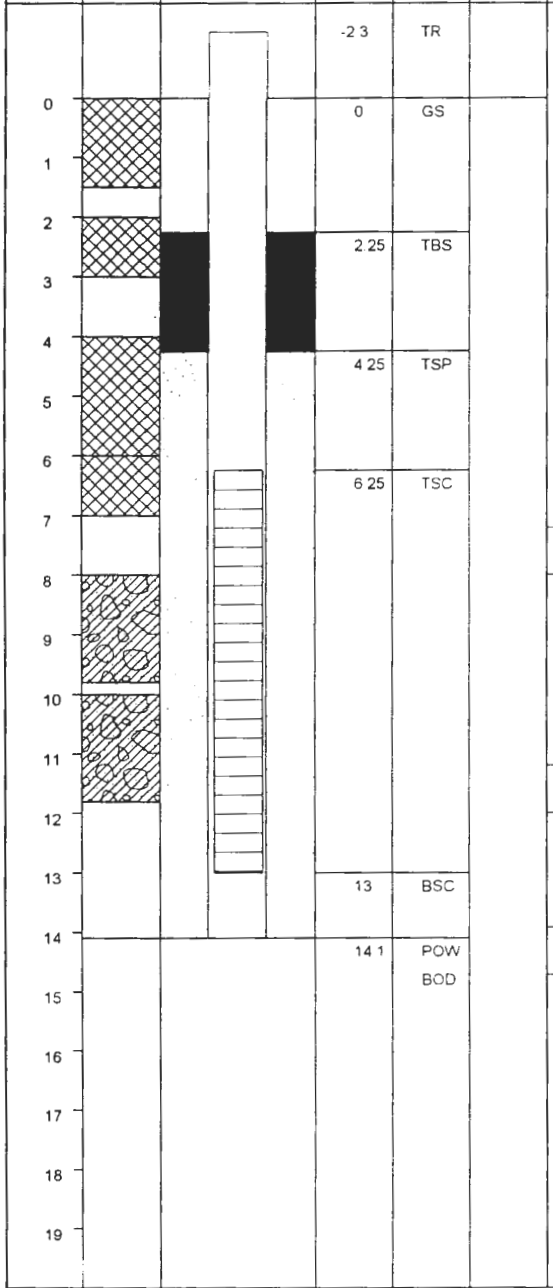
TEMPORARY WELL COMPLETION REPORT: MW12-33

TEMPORARY WELL COMPLETION REPORT: MW12-34

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/31/98
WELL INSTALLATION COMPLETED 10/31/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 14.1
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.55

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 6.75
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0 ,#00
Length (ft): 9.75

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

TEMPORARY WELL COMPLETION REPORT: MW12-34

BEDROCK MONITORING WELL
COMPLETION REPORT & INSTALLATION DETAIL
PROTECTIVE RISER COMPLETION

ENGINEERING-SCIENCE, INC. | CLIENT: Seneca Army Depot | WELL #: MW12-35

PROJECT: Sead-12 RI/FS
PROJECT NO: 730047-01001
LOCATION: North of 804, immediately downgradient of Washout UST
INSPECTOR: DRG/ITR
CHECKED BY: DRG

DRILLING CONTRACTOR: Maxim Technology
POW DEPTH: 38' (BGS)
DRILLER: Rodney Bush
OUTER CASING INSTALLATION: 10/30/98
DRILLING COMPLETED: 11/3/98
INNER CASING INSTALLATION: 11/3/98
DEPTH TO BEDROCK: 16.8'
SURFACE COMPLETION DATE: 11/4/98
BORING DEPTH: 38.8'
COMPLETION CONTRACTOR/CREW: Maxim
DRILLING METHOD(S): HQ core (2.5")
CORE TYPE/SIZE: HQ (2.5")
BORING DIAMETER(S): 3½
FOOTAGE CORED: 2'
ASSOCIATED SWMU/AOC: Sead-12
ESTIMATED GROUND ELEVATION:

PROTECTIVE CASING:
DIAMETER: 6" LENGTH: 19'

OUTER CASING:
TC: -2.5' TYPE: steel DIAMETER: 6" LENGTH: 19' POC: 16.8'

RISER:
TR: -2.5' TYPE: PVC sch 40 DIAMETER: 2" LENGTH: 30.2'

SCREEN:
TSC: 27.7' (BGS) TYPE: sch 40 PVC DIAMETER: 2" LENGTH: ~~10~~ (DRE) 9.8' SLOT SIZE: 0.010"

POINT OF WELL: (SILT SUMP)
TYPE: Sump BSC: 37.5 (BGS) POW: 38' (BGS)

GROUT:
OUTER TG: 2' TYPE: Cement/Bentonite LENGTH: 14.8'
INNER TG: 0' TYPE: Cement/Bentonite LENGTH: 14.8

SEAL: TBS: 14.8' TYPE: Bentonite chip LENGTH: 9.9'

SAND PACK: TSP: ~~24.7~~ 25.7 TYPE: ~~Morie #00~~ Morie #0 LENGTH: ~~1.0'~~ 13.1'

SURFACE COLLAR:
TYPE: Concrete RADIUS: 2' THICKNESS CENTER: 1' THICKNESS EDGE: 4"

CENTRALIZER DEPTHS
DEPTH 1: 38'-37.5' DEPTH 2: 27.5'-27.0' DEPTH 3: DEPTH 4:

COMMENTS: BOD 38.8' Backfill 0.8' with well sand.

* ALL MEASUREMENTS REFERENCED TO GROUND SURFACE

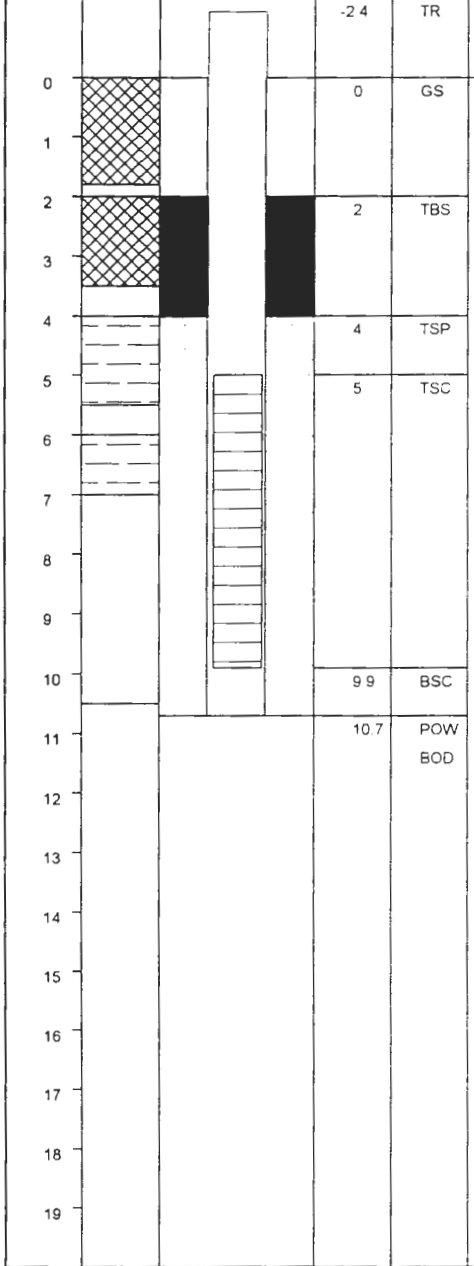
SEE PAGE 2 FOR SCHEMATIC

TEMPORARY WELL COMPLETION REPORT: MW12-37

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 11/1/98
WELL INSTALLATION COMPLETED 11/1/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.7
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 7.4

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.9
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 6.4

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK
LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

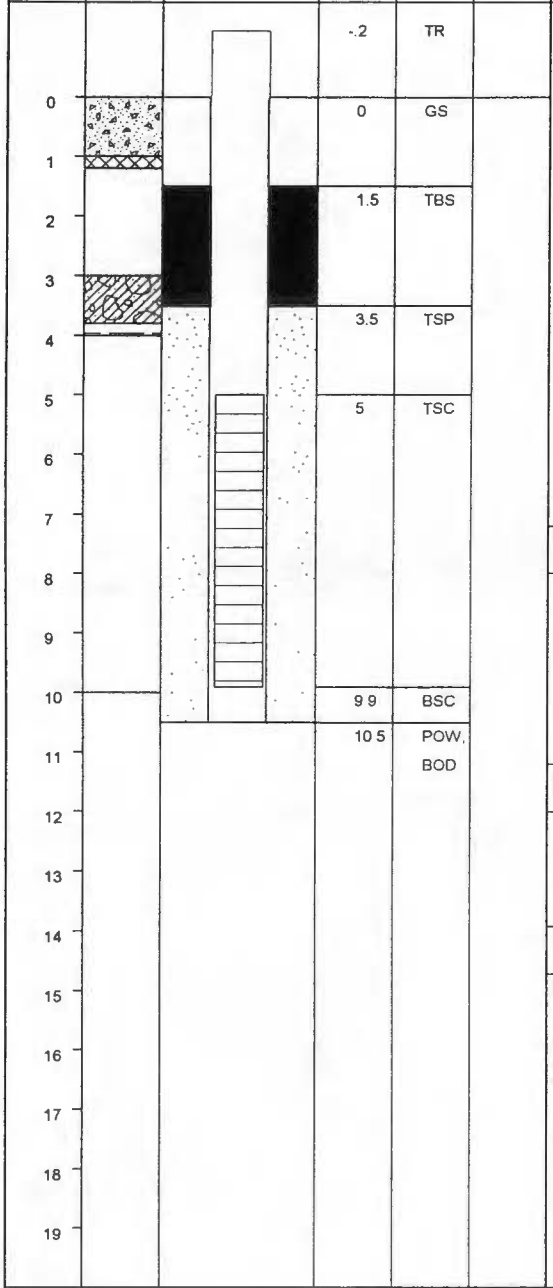
TEMPORARY WELL COMPLETION REPORT: MW12-37

TEMPORARY WELL COMPLETION REPORT: MW12-38

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 11/1/98
WELL INSTALLATION COMPLETED 11/1/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.5
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.8

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.9
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2.5

SANDPACK
Type: #0, #00
Length (ft): 6.3

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK
LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

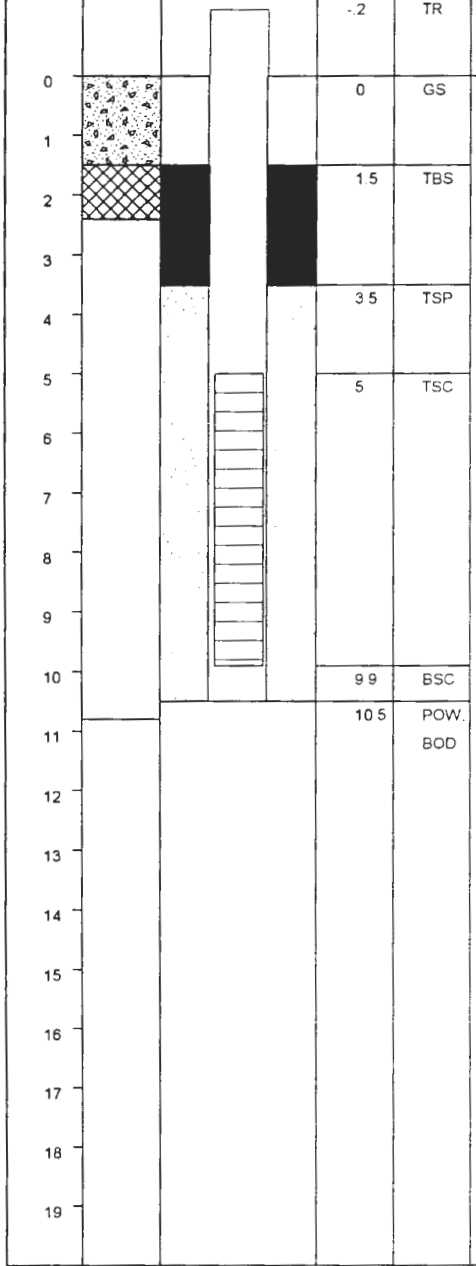
TEMPORARY WELL COMPLETION REPORT: MW12-38

TEMPORARY WELL COMPLETION REPORT: MW12-39

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 11/1/98
WELL INSTALLATION COMPLETED 11/1/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.5
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: TGH
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.8

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.9
Slot Size (in): 10

SEAL
Type: 1.5
Length (ft): 2.5

SANDPACK
Type: #0, #00
Length (ft): 6.3

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			
Installation			

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK
LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY
CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

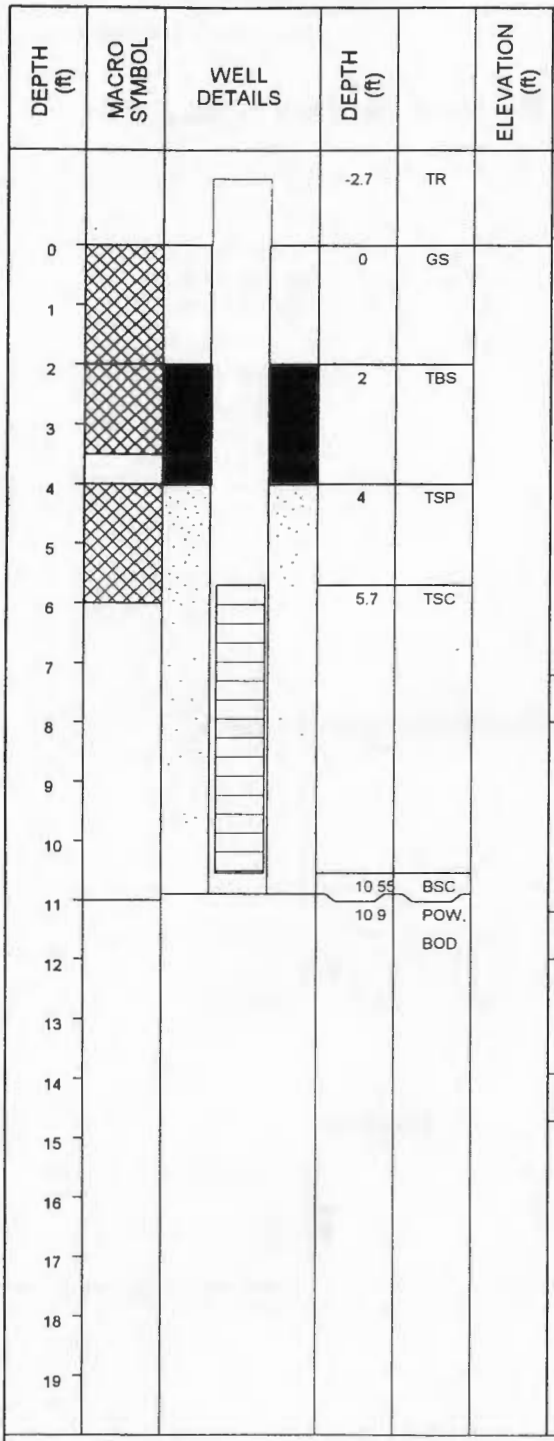
TEMPORARY WELL COMPLETION REPORT: MW12-39

TEMPORARY WELL COMPLETION REPORT: MW12-40

PROJECT: SEDA
PROJECT LOCATION: Seneca Army Depot, Romulus, New York
ASSOCIATED AREA/UNIT: SEAD 12
PROJECT NO.: 730047
WELL INSTALLATION STARTED: 10/15/98
WELL INSTALLATION COMPLETED 10/15/98
DRILLING CONTRACTOR: Maxim
DRILLING METHOD: HSA 8"
SAMPLING METHOD: Split Spoon

TOTAL DEPTH: 10.9
DEPTH TO WATER:
BORING LOCATION:

COORDINATE SYSTEM: NAD83
GROUND SURFACE ELEVATION:
ELEVATION DATUM: NAVD1927
INSPECTOR: ITR
CHECKED BY:



WELL CONSTRUCTION DETAILS

RISER
Diameter (ID) (in): 2
Type: PVC
Length (ft): 8.4

SCREEN
Diameter (ID) (in): 2
Type: PVC
Length (ft): 4.85
Slot Size (in): 10

SEAL
Type: BENTONITE
Length (ft): 2

SANDPACK
Type: #0, #00
Length (ft): 6.9

WELL DEVELOPMENT DATA

Date:
Method:
Duration:
Rate:
Total Volume Removed (gals):

WATER LEVELS

	Date	Time	Depth, TR
Development			▽
Installation			▼

LEGEND

TR	TOP OF WELL RISER
GS	GROUND SURFACE
TBS	TOP BENTONITE SEAL
TSP	TOP OF SANDPACK
TSC	TOP OF SCREEN
BSC	BOTTOM OF SCREEN
POW	POINT OF WELL
BOD	BOTTOM OF DRILL HOLE
in	INCHES
ft	FEET
ID	INSIDE DIAMETER
gals	GALLONS
SCH	SCHEDULE
NA	NOT APPLICABLE

WELL DETAILS: SEAL, SANDPACK

LITHOLOGY: FILL, TILL, SHALE

NOTES:

UNITED STATES ARMY CORPS OF ENGINEERS
Seneca Army Depot
Romulus, New York

TEMPORARY WELL COMPLETION REPORT: MW12-40

APPENDIX C

SURVEY DATA

- GP CONTROL
- GEOPHYSICAL DOWNHOLE
- MONITORING WELLS
- SOIL BORINGS
- SEDIMENTS
- SOIL GAS
- SURFACE SOILS
- SURFACE WATER
- TEST PITS

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
GP CONTROL			
0+00 0000N	1011527.5	741212.37	628.445
0+00 1000N	1012526.4	741168.68	630.668
0+00 2000N	1013525.6	741124.85	632.155
10+00 1000N	1012570.6	742167.44	642.366
20+00 0000N	1011614.9	743210.31	647.89
20+00 1000N	1012614.2	743166.59	648.633
20+00 2000N	1013613.2	743122.82	644.067
20+00 3000N	1014612.2	743079.14	639.175
20+00 4000N	1015610.9	743035.41	636.516
30+00 0000N	1011658.9	744209.2	658.381
30+00 1000N	1012658.4	744166.02	663.8
30+00 2000N	1013657	744121.7	664.403
40+00 0000N	1011702.7	745208.17	661.57
40+00 1000N	1012701.4	745163.43	665.167
40+00 2000N	1013700.3	745119.82	665.618
40+00 3000N	1014701	745077.46	658.131
40+00 4000N	1015699	745032.36	654.951
40+00 4470N	1016168.6	745011.07	650.479
GEOPHYSICAL DOWNHOLE			
GB12-01	1015164.6	745200.1	
GB12-02	1015252	745184.05	
GB12-03	1015331.6	745079.91	
GB12-04	1015299.3	744961.79	
GB12-05	1015257.5	745010.08	
GB12-06	1015241.5	745011.27	
GB12-07	1015226.1	745014.66	
GB12-08	1015211.4	745017.54	
GB12-09	1015198.2	745020.34	
GB12-10	1015182.9	745023.09	
GB12-11	1015185.4	745038.08	
GB12-12	1015187.9	745052	
GB12-13	1015200.4	745035.13	
GB12-14	1015206.1	745064.42	
GB12-15	1015205.9	745049.05	
GB12-16	1015218	745046.43	
GB12-17	1015216	745031.2	
GB12-18	1015221.9	745061.68	
GB12-19	1015225.1	745075.71	
GB12-20	1015198.3	745095.99	
GB12-21	1015195.7	745071.11	
GB12-22	1015194	745080.43	
GB12-23	1015179.1	745083.24	
GB12-24	1015181.7	745098.97	
GB12-25	1015196.9	745096.05	
GB12-26	1015211.6	745092.46	
GB12-27	1015208.6	745076.5	
GB12-28	1015167.2	745102.75	
GB12-29	1015164.9	745085.99	
GB12-30	1015162.6	745072.53	
GB12-31	1015159.8	745058.18	
GB12-32	1015156.4	745043.72	
GB12-33	1015153.5	745029.16	
GB12-34	1015169	745027.12	
GB12-35	1015172.3	745040	
GB12-36	1015174	745054.56	
GB12-37	1015176.7	745069.45	
GB12-38	1015184.3	745113.15	
GB12-39	1015187.7	745127.16	
GB12-40	1015199.4	745110.15	

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
GB12-41	1015203.9	745123.61	
GB12-42	1015217.9	745123.02	
GB12-43	1015215.1	745108.25	
GB12-44	1015236.8	745059.03	
GB12-45	1015232.6	745043.62	
GB12-46	1015230.8	745030.39	
GB12-47	1015244	745027.55	
GB12-48	1015248.4	745043.19	
GB12-49	1015251.6	745056.2	
GB12-50	1015261.8	745041.06	
GB12-51	1015265.7	745054.51	
GB12-52	1015144.9	745060.33	
GB12-53	1015140.5	745045.58	
GB12-54	1015137.2	745030.99	
GB12-55	1015150.5	745014.36	
GB12-56	1015135.8	745012.63	
GB12-58	1015163.2	745011.62	
GB12-59	1015132.2	744997.3	
GB12-59	1015189.3	744976.71	
GB12-60	1015186.6	744961.82	
GB12-61	1015184.1	744946.76	
GB12-62	1015181	744932.25	
GB12-63	1015168.4	744948.9	
GB12-64	1015173.3	744963.05	
GB12-65	1015124.8	744982.97	
GB12-66	1015106.5	745022.15	
GB12-67	1015124.7	745032.49	
GB12-68	1015076.3	745009.12	
GB12-69	1015105.7	744958.24	
GB12-70	1015156.1	744982.45	
GB12-71	1015296.4	745139.93	
MONITORING WELLS			
MW12-1	1015591.7	745456.8	654.941
MW12-10	1015189.8	745007.47	660
MW12-11	1015123.1	744975.84	657.2
MW12-12	1015163	744888.01	657
MW12-13	1015212.4	744875.69	656.9
MW12-14	1015306.3	744664.52	654.6
MW12-15	1015521.9	744743.11	654.1
MW12-16	1015979.9	743879.19	651.1
MW12-17	1015807.7	743883.23	652.5
MW12-18	1016052.4	743572.78	649.5
MW12-19	1013585.1	742593.62	638.7
MW12-2	1013710.3	745536.3	665.727
MW12-20	1013484.6	742579.83	638.6
MW12-21	1013550.6	742955.53	640.7
MW12-22	1013588.1	741426.14	636.5
MW12-23	1013490.5	741441.32	636.4
MW12-24	1012214.6	742040.5	642.5
MW12-25	1012127.7	742084.16	641.1
MW12-26	1012155.9	742161.71	641.4
MW12-27	1012826.3	743875.05	662.6
MW12-29	1013765.6	744296.95	661.1
MW12-3	1015079.9	745477	665.886
MW12-30	1013819.9	744281.41	660.8
MW12-31	1012105.1	744693.71	659.3
MW12-32	1012147	744711.31	659.1
MW12-33	1015645.3	744634.37	656
MW12-34	1015800.3	744650.65	655.9
MW12-35	1015919.1	743562.8	648.4
MW12-37	1014123.3	744790.4	662.6
MW12-38	1014091.5	744716.78	663.4

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
MW12-39	1013935	744716.72	663.2
MW12-4	1016353.4	744983.6	648.785
MW12-40	1014236.4	744470.3	660.7
MW12-5	1016284.4	743429	650.977
MW12-6	1016120.6	742086.61	636.6
MW12-7	1015394.6	744855.88	659.6
MW12-8	1015208.9	745182.94	664.2
MW12-9	1015955.5	744009.17	651.4
MW12A-1	1015496.5	745165.94	656.9
MW12A-2	1015117.1	744926.75	656.3
MW12A-3	1015521.4	744532.25	655.6
MW12B-1	1015934.4	743739.69	652
MW12B-2	1015920.1	743522.88	648.1
MW12B-3	1015995.9	743517.06	655.6
DW12-815	1013994.5	744508.4	664
SOIL BORINGS			
SB12-1	1015197.4	745057.16	
SB12-10	1015919.3	743578.13	649.96
SB12-11	1015925.3	743574.77	647
SB12-12	1015930.6	743575.36	653.41
SB12-2	1015195.6	745035.92	661
SB12-28	1012776	743922	662
SB12-2B	1015204.8	745044.85	665.47
SB12-3	1015184.3	744969	659
SB12-36	1013530	744539	665
SB12-4	1015183.2	744938.56	657
SB12-5	1015962	743613.3	655.38
SB12-5A	1015967.5	743614.65	652.18
SB12-5B	1015962	743613.26	655.38
SB12-6	1015982	743609	648
SB12-7	1009050	740350	
SB12-8	1012375	740925	625
SB12-9	1014038.3	740903.1	632
SB12B-1	1015915.9	743568.19	
SEDIMENTS			
SD12-1	1011512.9	741246.8	621.541
SD12-10	1014003.7	742626.9	634.215
SD12-11	1014115	743892.2	
SD12-12	1013692.5	745304.2	662.503
SD12-13	1014210.2	745280.3	661.085
SD12-14	1014509.6	745272.4	659.125
SD12-15	1014794.6	745182.5	656.199
SD12-16	1014972.7	744609.1	651.504
SD12-17	1014703.7	744576.5	653.972
SD12-18	1015439.7	745226	656.67
SD12-19	1016123.3	745093.5	647.968
SD12-2	1011607.5	743380.8	645.52
SD12-20	1013548.8	742654.8	636.319
SD12-20A	1015726.7	743091.4	635.546
SD12-21	1013510	742585	
SD12-22	1013548	742654.8	
SD12-23	1013660.2	742765	636.491
SD12-24	1013737.3	742692.1	635.394
SD12-25	1013650.6	742853	636.664
SD12-26	1013393.7	742449.7	636.359
SD12-27	1013401.7	742718.2	637.223
SD12-28	1013557.3	744759.1	659.672
SD12-29	1013630	744778.8	
SD12-3	1012209	745411.1	
SD12-30	1013875.8	744756.2	659.645
SD12-31	1014137.7	744799.1	658.566

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SD12-32	1014152.4	744608.4	657.199
SD12-33	1014151.4	744393.1	656.207
SD12-34	1014015	744401	
SD12-35	1014461.5	744618.5	656.586
SD12-36	1014520.9	744366.9	651.905
SD12-37	1014764.6	744353.6	650.365
SD12-38	1015161.1	744289.2	646.772
SD12-39	1015367.7	743617.4	640.28
SD12-4	1012771.8	741651.5	632.472
SD12-40	1015354.2	743300.4	637.093
SD12-41	1015171.9	743087.4	633.972
SD12-42	1015833.1	743614.3	645.347
SD12-43	1015757.4	743685.4	647.814
SD12-44	1015755	743630	
SD12-45	1015743.6	743470.2	642.587
SD12-46	1015901.3	743518.9	644.061
SD12-47	1015895.7	743389.6	641.934
SD12-48	1015139.7	742814.9	631.07
SD12-49	1014480.3	741600.4	628.356
SD12-5	1013162.8	743108.8	641.718
SD12-50	1014533.2	740458.9	622.138
SD12-51	1015350.9	740064.7	617.191
SD12-52	1015901	738730.4	
SD12-53	1015568	738753.8	
SD12-54	1015231	738756.5	
SD12-55	1016874	737920.3	
SD12-56	1016843	734941.7	
SD12-57	1015249	727700.4	
SD12-59	1008958	741740.3	622.36
SD12-6	1013516.7	744048.9	663.705
SD12-60	1007774.3	742682.8	631.903
SD12-61	1007211.7	742679.3	633.858
SD12-62	1006266.3	742751.5	636.324
SD12-63	1005327.9	742792.2	643.757
SD12-64	1007223.3	742929.9	635.94
SD12-65	1007281.2	744360.5	646.326
SD12-66	1006235.9	745355.4	656.986
SD12-7	1012186.1	744951.6	658.712
SD12-8	1013928.1	741257.2	632.316
SD12-9	1014025.7	742199.4	633.16
SD12A-1	1014741.9	745200.21	
SD12A-2	1015131.9	744339.98	
SD12A-3	1015366.4	743805.06	
SD12A-4	1015196	745046	
SOIL GAS			
SG12-117	1014017.4	744788.1	662.812
SG12-118	1014144.2	744753.8	660.041
SG12-120	1014119.2	744755.5	662.859
SG12-121	1014115.9	744783.1	663.285
SG12-122	1014092.6	744716.6	663.278
SG12-123	1014095.7	744742.9	662.999
SG12-124	1014061.9	744740.9	
SG12-125	1014062.9	744717.4	663.283
SG12-126	1014089.2	744789.5	663.362
SG12-127	1014071.1	744802.9	661.298
SG12-128	1014027.3	744712.6	663.263
SG12-129	1014027.9	744734.4	663.162
SG12-129	1014135.7	744780.5	661.714
SG12-130	1014028.6	744740.94	
SG12-131	1014042.7	744751.67	
SG12-132	1014044.1	744781.56	
SG12-133	1014046.4	744792.2	662.822

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SG12-134	1014028.6	744769.45	
SG12-135	1014024.9	744799.6	662.131
SG12-136	1014041.6	744806.2	660.204
SG12-137	1014015.9	744751.67	
SG12-138	1014015.3	744781.31	
SG12-139	1014011.1	744798.5	662.469
SG12-140	1014019	744808.8	659.815
SG12-141	1014061	744830.9	662.272
SG12-142	1014009.8	744838.9	667.02
SG12-143	1013994.7	744720.5	663.226
SG12-144	1013995.3	744741.8	663.224
SG12-145	1013963.9	744722.1	663.163
SG12-146	1013964.3	744742.3	663.162
SG12-147	1013963.6	744791.7	662.834
SG12-148	1013933.5	744717.22	
SG12-149	1013933.5	744737.13	
SG12-150	1013953.6	744839.6	667.253
SG12-151	1013929.8	744797.15	
SG12-152	1013900.1	744763.1	663.166
SG12-153	1013901.1	744787	663.244
SG12-154	1013885.9	744763.9	662.853
SG12-155	1013889.1	744784.7	662.488
SG12-156	1013603.6	744517.8	665.666
SG12-157	1013604.5	744543.1	665.728
SG12-158	1013587.9	744518.9	665.666
SG12-159	1013589.4	744544.7	665.785
SG12-160	1013564.2	744482.9	665.709
SG12-161	1013567.3	744502.9	665.804
SG12-162	1013570.9	744548.9	665.654
SG12-163	1013571.2	744562.9	662.186
SG12-164	1013546.9	744521.9	663.547
SG12-165	1013550.8	744551	663.618
SG12-166	1013551.9	744562.3	662.005
SG12-167	1013538.2	744503.8	662.641
SG12-168	1013532.5	744522	662.37
SG12-169	1013540.5	744540	662.082
SG12-170	1013532.4	744550.5	661.913
SURFACE SOILS			
SS12-1	1016063	739320.5	614.144
SS12-10	1016008	741972.8	636.144
SS12-100	1012175.1	742177.17	643.162
SS12-101	1012178.1	742234.04	645.707
SS12-102	1013606	741528.47	637.269
SS12-103	1013809.9	741548.69	637.526
SS12-104	1013599.3	741564.64	638.562
SS12-105	1013798.9	741497.61	637.793
SS12-106	1013539	741447.97	637.285
SS12-107	1013649.1	741453.3	627.154
SS12-108	1013765	741568.54	628.213
SS12-109	1013779.4	741442.63	639.584
SS12-11	1015896	742092.1	635.51
SS12-110	1013645.9	741491.27	638.424
SS12-111	1013650.8	741543.32	636.041
SS12-112	1013600.1	741475.68	636.726
SS12-113	1013560.1	741564.59	637.355
SS12-114	1013885.6	741524.28	636.228
SS12-115	1013880.6	741553.76	639.092
SS12-116	1013668.8	741564.05	632.548
SS12-117	1013738.1	741472.86	630.67
SS12-118	1013564.3	741493.61	637.422
SS12-119	1013873.2	741475.22	637.446
SS12-12	1015989.8	742350.79	635.397

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SS12-120	1013738.9	741534.86	634.724
SS12-121	1013706.4	741574.63	645.511
SS12-122	1013613.6	742984.14	649.927
SS12-123	1013587.6	743005.23	647.456
SS12-124	1013631.1	743002.51	648.175
SS12-125	1013625.3	742963.38	645.779
SS12-126	1013567.5	742977.66	643.887
SS12-127	1016087	743922.58	645.407
SS12-128	1015910.6	743876.35	649.457
SS12-129	1015959.3	743808.27	651.069
SS12-13	1015763	742301.5	634.33
SS12-130	1016051.8	743739.45	650.309
SS12-131	1015881.1	743789.2	651.127
SS12-132	1015821.9	743796.87	649.435
SS12-133	1015875.4	743973.76	648.526
SS12-134	1016029.5	743988.33	645.826
SS12-135	1015809.4	744000.49	646.831
SS12-136	1016058.7	743804.09	649.72
SS12-137	1016001.2	743699.7	649.544
SS12-138	1015851.7	743572.33	649.258
SS12-139	1015831.6	743612.45	651.44
SS12-14	1015764.3	742143.73	640.369
SS12-140	1015821.5	743679.11	652.109
SS12-141	1015878.4	743670.31	649.911
SS12-142	1016074.9	743650.82	646.213
SS12-143	1016009.9	743590.89	653.907
SS12-144	1015978.2	743627.76	653.507
SS12-145	1015978.2	743610.82	654.487
SS12-146	1015987.4	743622.98	657.72
SS12-147	1015534.4	744684.95	655.129
SS12-148	1015448.5	744589.37	657.228
SS12-149	1015544.9	744593.01	652.47
SS12-15	1015194.8	745070.55	668.174
SS12-150	1015934.1	744694.03	656.296
SS12-151	1015353.8	744826.82	662.948
SS12-152	1015509.7	744557.02	655.009
SS12-153	1015449.2	744832.72	660.928
SS12-154	1015702.2	744667.14	658.354
SS12-155	1015925.4	744639.73	657.701
SS12-156	1015892.5	744589.64	660.439
SS12-157	1015787.9	744596.74	661.05
SS12-158	1015753.8	744703.72	656.99
SS12-159	1015722	744620.09	660.678
SS12-16	1015182.7	745064.23	675.22
SS12-160	1015658.4	744702.76	654.264
SS12-161	1015345.7	744642.16	657.137
SS12-162	1015386.5	744590.58	657.646
SS12-163	1015349.9	744735.06	660.188
SS12-164	1015862.1	744682.73	661.141
SS12-165	1015798.4	744723.82	658.807
SS12-166	1015600.4	744745.99	655.364
SS12-167	1015199.1	744973.74	654.06
SS12-168	1015164	744972.25	660.909
SS12-169	1015102.4	745018.99	665.042
SS12-17	1015184.6	744965.53	660.865
SS12-170	1015108.1	745052.63	665.854
SS12-171	1015103.2	745081.68	661.406
SS12-172	1015110	745106.06	655.435
SS12-173	1015126	745020.92	666.984
SS12-174	1015124.7	745047.1	660.993
SS12-175	1015126.7	745077.18	662.504
SS12-176	1015131.6	745106	661.997
SS12-177	1015154	745022.16	668.05

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SS12-178	1015155.7	745044.93	661.556
SS12-179	1015156	745074.56	666.154
SS12-18	1015482.8	744711.83	654.046
SS12-180	1015160.8	745109.64	673.177
SS12-181	1015179.8	745017.99	663.748
SS12-182	1015186.3	745047.2	664.901
SS12-183	1015186.6	745072.58	665.841
SS12-184	1015192.1	745104	666.67
SS12-185	1015213.7	745014.56	662.04
SS12-186	1015214.7	745043.78	662.825
SS12-187	1015216.4	745070.01	663.249
SS12-188	1015221.8	745103.53	665.94
SS12-189	1015243.9	745011.67	662.056
SS12-19	1015049.8	743334.28	642.083
SS12-190	1015246.4	745041.53	662.666
SS12-191	1015248.2	745068.22	665.123
SS12-192	1015253.7	745099.36	662.794
SS12-193	1015271.4	745009.48	666.661
SS12-194	1015275.3	745038.29	665.802
SS12-195	1015278.6	745066.05	665.683
SS12-196	1015281.4	745098.07	665.544
SS12-197	1015303.1	745007.48	665.727
SS12-198	1015305.9	745036.17	669.123
SS12-199	1015308.8	745067.66	667.975
SS12-2	1016253	742629.6	645.587
SS12-20	1014472.8	743346.7	646.399
SS12-200	1015311.5	745096.89	666.985
SS12-201	1015516.9	744811.52	654.969
SS12-202	1015515.6	744779.71	654.933
SS12-203	1015515.3	744747.47	653.127
SS12-204	1015515.9	744712.83	653.107
SS12-205	1015516.5	744680.03	654.517
SS12-206	1015518	744647.22	656.739
SS12-207	1015479.5	744646.8	664.521
SS12-208	1015482.5	744683.13	655.45
SS12-21	1013661.6	741950.7	618.922
SS12-210	1015481.6	744745.9	656.84
SS12-211	1015482.7	744778.89	656.723
SS12-212	1015482.7	744811.77	658.889
SS12-213	1015449.8	744647.12	648.355
SS12-214	1015450.4	744681.51	654.563
SS12-215	1015449.8	744713.24	654.657
SS12-216	1015451.5	744746.05	656.297
SS12-217	1015450.6	744778.84	657.192
SS12-218	1015451.3	744811.62	659.955
SS12-219	1015387.9	744781.96	655.864
SS12-22	1013940.2	741405.47	614.927
SS12-220	1015418.5	744779.86	657.426
SS12-221	1015417.1	744745.98	656.083
SS12-222	1015417.7	744715.02	654.955
SS12-223	1015419.6	744684.6	654.717
SS12-224	1015418.7	744652.02	650.48
SS12-225	1015387.9	744656.01	653.742
SS12-226	1015387.2	744689.28	657.159
SS12-227	1015386.6	744717.31	657.422
SS12-228	1015386.7	744748.76	657.223
SS12-229	1015418.9	744814.81	658.491
SS12-23	1013966.4	742508.14	625.088
SS12-230	1015386.5	744816.97	658.36
SS12-232	1015017.8	743484.12	638.947
SS12-233	1015047	743442.05	648.576
SS12-234	1013820.6	744203.88	664.057
SS12-235	1013739.8	744222.21	666.345

LOC_ID	NORTHING	EASTING	LOC_ELEV
SS12-236	1012900.7	743948.82	646.252
SS12-237	1012824.3	744020.73	649.162
SS12-238	1013854.5	745162.8	658.141
SS12-239	1013994.9	745165.41	655.758
SS12-24	1013863.7	742869.33	622.118
SS12-240	1014070.3	744533.5	665
SS12-241	1014063	744570.73	664.27
SS12-242	1014075.6	744613.51	646.789
SS12-243	1014046.6	744629.04	670.459
SS12-244	1014019.1	744586.33	681.993
SS12-245	1014026.1	744535.66	676.495
SS12-246	1013984.2	744543.31	676.855
SS12-247	1013963.6	744574.83	674.672
SS12-248	1013990.8	744614.08	676.144
SS12-249	1014007.9	744634.49	679.474
SS12-25	1013842.9	743362.09	632.957
SS12-250	1013961.1	744635.19	674.057
SS12-251	1013927.9	744643.44	670.889
SS12-252	1013931.1	744613.55	671.121
SS12-253	1013943.3	744535.16	668.956
SS12-254	1013922.7	744535.46	661.783
SS12-255	1013916.3	744569.59	666.027
SS12-256	1013890.6	744622.87	674.983
SS12-257	1013889	744574.87	671.352
SS12-258	1013892.3	744494.98	658.329
SS12-259	1013892.5	744660.97	666.027
SS12-26	1013234.9	741644.56	623.777
SS12-260	1013839.6	744517.49	663.716
SS12-261	1013850.6	744562.4	671.707
SS12-262	1013851.7	744607.49	669.743
SS12-263	1013830.5	744632.81	672.482
SS12-264	1013798	744600.7	672.784
SS12-265	1013805.5	744554.21	666.758
SS12-266	1013768	744527.66	681.977
SS12-267	1013759	744562.81	685.406
SS12-268	1013764.9	744633.92	680.606
SS12-269	1013733.8	744637.66	682.219
SS12-27	1012838	742294.42	636.75
SS12-270	1013859.6	744479.07	656.529
SS12-271	1013726.2	744595.76	680.982
SS12-272	1013733.8	744528.02	678.955
SS12-273	1013715.8	744560	684.933
SS12-274	1013706.3	744524.14	685.988
SS12-275	1013688.3	744543.73	683.519
SS12-276	1013679.8	744588.49	679.812
SS12-277	1013704.4	744653.79	685.703
SS12-278	1013656.5	744637.33	665.394
SS12-279	1013646.2	744561.95	666.718
SS12-28	1012859.3	742836.13	645.901
SS12-29	1013311.8	744593.62	659.825
SS12-3	1016334	744432.7	648.02
SS12-30	1012655.6	741865.48	642.847
SS12-31	1014031.7	743438.49	632.889
SS12-32	1012643.7	742709.12	641.045
SS12-33	1015510.1	743973.63	657.361
SS12-34	1012966	743580.48	638.056
SS12-35	1012964	744626.23	660.474
SS12-36	1015868.4	744087.07	643.697
SS12-37	1012543.4	744588.74	681.349
SS12-38	1014775.8	745182.8	663.771
SS12-39	1012549.9	743383.63	652.96
SS12-4	1015688	745706.1	657.027
SS12-40	1011654.1	742027.44	637.549

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SS12-41	1014769.7	744430.88	662.004
SS12-42	1012010.5	743500.98	655.636
SS12-43	1014912.1	744896.41	653.72
SS12-44	1014576.1	745052.86	666.495
SS12-45	1011551.4	741660.94	631.908
SS12-46	1014229.6	745033.13	682.255
SS12-47	1011615.8	742700.08	634.877
SS12-48	1015672.9	745138.47	661.903
SS12-49	1011719.9	743742.24	662.968
SS12-5	1016051	745450.6	654.802
SS12-50	1015138.8	743903.84	654.353
SS12-51	1012181.5	745325.13	658.486
SS12-52	1015296.1	744355.07	656.101
SS12-53	1011882.2	744901.58	678.171
SS12-54	1011913.7	743944.97	667.915
SS12-55	1014864.9	744132.97	655.869
SS12-56	1013604.4	744024.66	667.222
SS12-57	1013914.3	743868.37	662.529
SS12-58	1013370.1	743261.37	635.567
SS12-59	1013095.3	742581.4	631.027
SS12-6	1014833	745485.5	663.485
SS12-60	1013056.7	743056.33	653.682
SS12-61	1011896.5	743689.89	664.871
SS12-62	1011966.2	743481.12	656.181
SS12-63	1011897.6	743756	667.692
SS12-64	1015932.4	738805.37	591.771
SS12-65	1015870.6	738811.19	588.535
SS12-66	1014214.5	744546.93	664.109
SS12-67	1014169.8	744519.47	659.832
SS12-68	1014212.9	744488.58	664.901
SS12-69	1013465.5	742892.63	641.134
SS12-7	1012862	745602.9	668.163
SS12-70	1013460.2	742859.05	635.775
SS12-71	1013500.4	742896.06	637.954
SS12-72	1013495.9	742856.14	645.298
SS12-73	1013529.6	742892.37	642.417
SS12-74	1013526.6	742852.35	646.6
SS12-75	1013560.5	742890.73	643.295
SS12-76	1013556.7	742850.39	644.75
SS12-77	1013587	742881.12	644.093
SS12-78	1013585.6	742849.51	642.617
SS12-79	1013588.7	742657.82	634.396
SS12-8	1011784	745733.8	666.28
SS12-80	1013555.7	742627.61	638.449
SS12-81	1013551.7	742659.95	636.937
SS12-82	1013558.4	742688.98	641.843
SS12-83	1013521.2	742630.66	639.651
SS12-84	1013522.1	742659.77	636.046
SS12-85	1013519.6	742692.38	640.82
SS12-86	1013489.6	742630.27	640.283
SS12-87	1013487.2	742658.92	636.373
SS12-88	1013492.6	742690.26	633.354
SS12-89	1013451.8	742666.95	640.776
SS12-9	1016116.2	742191.97	634.04
SS12-90	1012270.3	742231.79	642.754
SS12-91	1012262.5	742172.24	647.635
SS12-92	1012259.7	742119.87	639.511
SS12-93	1012231.9	742121.54	638.731
SS12-94	1012234.3	742177.9	638.356
SS12-95	1012244.4	742232.99	637.88
SS12-96	1012213.9	742232.82	637.739
SS12-97	1012205.2	742170.21	644.968
SS12-98	1012206.5	742113.49	644.285

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID	NORTHING	EASTING	LOC_ELEV
SS12-99	1012174.1	742118.14	642.172
SURFACE WATER			
SW12-1	1011512.9	741246.8	621.541
SW12-10	1014003.7	742626.9	634.215
SW12-11	1014115	743892.2	
SW12-12	1013692.5	745304.2	662.503
SW12-13	1014210.2	745280.3	661.085
SW12-14	1014509.6	745272.4	659.125
SW12-15	1014794.6	745182.5	656.199
SW12-16	1014972.7	744609.1	651.504
SW12-17	1014703.7	744576.5	653.972
SW12-18	1015439.7	745226	656.67
SW12-19	1016123.3	745093.5	647.968
SW12-2	1011607.5	743380.8	645.52
SW12-20	1013548.8	742654.8	636.319
SW12-20A	1015726.7	743091.4	635.546
SW12-21	1013510	742585	
SW12-22	1013548	742654.8	
SW12-23	1013660.2	742765	636.491
SW12-24	1013737.3	742692.1	635.394
SW12-25	1013650.6	742853	636.664
SW12-26	1013393.7	742449.7	636.359
SW12-27	1013401.7	742718.2	637.223
SW12-28	1013557.3	744759.1	659.672
SW12-29	1013630	744778.8	
SW12-3	1012209	745411.1	
SW12-30	1013875.8	744756.2	659.645
SW12-31	1014137.7	744799.1	658.566
SW12-32	1014152.4	744608.4	657.199
SW12-33	1014151.4	744393.1	656.207
SW12-34	1014015	744401	
SW12-35	1014461.5	744618.5	656.586
SW12-36	1014520.9	744366.9	651.905
SW12-37	1014764.6	744353.6	650.365
SW12-38	1015161.1	744289.2	646.772
SW12-39	1015367.7	743617.4	640.28
SW12-4	1012771.8	741651.5	632.472
SW12-40	1015354.2	743300.4	637.093
SW12-41	1015171.9	743087.4	633.972
SW12-42	1015833.1	743614.3	645.347
SW12-43	1015757.4	743685.4	647.814
SW12-44	1015755	743630	
SW12-45	1015743.6	743470.2	642.587
SW12-46	1015901.3	743518.9	644.061
SW12-47	1015895.7	743389.6	641.934
SW12-48	1015139.7	742814.9	631.07
SW12-49	1014480.3	741600.4	628.356
SW12-5	1013162.8	743108.8	641.718
SW12-50	1014533.2	740458.9	622.138
SW12-51	1015350.9	740064.7	617.191
SW12-52	1015901	738730.4	
SW12-53	1015568	738753.8	
SW12-54	1015231	738756.5	
SW12-55	1016874	737920.3	
SW12-56	1016843	734941.7	
SW12-57	1015249	727700.4	
SW12-59	1008958	741740.3	622.36
SW12-6	1013516.7	744048.9	663.705
SW12-60	1007774.3	742682.8	631.903
SW12-61	1007211.7	742679.3	633.858
SW12-62	1006266.3	742751.5	636.324
SW12-63	1005327.9	742792.2	643.757

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID		NORTHING	EASTING	LOC_ELEV
SW12-64		1007223.3	742929.9	635.94
SW12-65		1007281.2	744360.5	646.326
SW12-66		1006235.9	745355.4	656.986
SW12-7		1012186.1	744951.6	658.712
SW12-8		1013928.1	741257.2	632.316
SW12-9		1014025.7	742199.4	633.16
SW12A-1		1014741.9	745200.21	
SW12A-2		1015131.9	744339.98	
SW12A-3		1015366.4	743805.06	
TEST PITS				
TP12-10A		1012340	742676.04	633.8
TP12-10B		1012351.8	742677.46	620.302
TP12-10C		1012339.4	742676.59	633.476
TP12-10NORT	H_	1012344.7	742675.45	645.61
TP12-10SOUT	H_	1012296.8	742659.85	646.777
TP12-11A		1012232.2	742159.16	644.076
TP12-11B		1012209.3	742135.67	641.571
TP12-11C		1012204.1	742133.75	644.16
TP12-11_SOU	TH	1012193.3	742115.52	638.508
TP12-12A		1012223.9	742134.06	637.691
TP12-12B		1012225	742131.99	639.172
TP12-12C		1012229.6	742128.78	638.679
TP12-12_NWE	ST	1012247.8	742111.31	638.216
TP12-12_SOU	TH	1012195.5	742157.65	640.942
TP12-13A		1012730.9	741307.98	627.148
TP12-13B		1012723.8	741335.06	629.944
TP12-13C		1012721.9	741335.25	627.445
TP12-13_EAS	T_	1012707.1	741353.7	633.65
TP12-13_WES	T_	1012731.4	741301.26	627.76
TP12-14A		1012482.8	744102.21	653.886
TP12-14B		1012473.4	744106.19	664.745
TP12-14C		1012466.9	744111.34	659.592
TP12-14_NOR	TH	1012482.1	744107.28	658.972
TP12-14_SOU	TH	1012464.1	744111.17	662.227
TP12-15A		1013566.9	741513.95	631.95
TP12-15B		1013579.3	741514.33	629.747
TP12-15C		1013588.3	741513.88	631.635
TP12-15_NOR	TH	1013600.4	741514.01	631.147
TP12-15_SOU	TH	1013554.9	741512.51	632.931
TP12-16A		1013689.7	741517.88	637.611
TP12-16B		1013683.1	741535.29	629.116
TP12-16C		1013682.8	741503.69	635.126
TP12-16_EAS	T_	1013676.6	741540.58	635.66
TP12-16_WES	T_	1013668.4	741488.62	639.647
TP12-17A		1013610.2	742966.4	646.138
TP12-17B		1013604.7	742965.63	645.174
TP12-17C		1013599.7	742965.16	645.097
TP12-17NORT	H_	1013621.1	742965.52	644.695
TP12-17_SOU	TH	1013570.8	742970.38	640.746
TP12-18A		1013803.4	744236.6	661.43
TP12-18B		1013803.2	744232.58	653.577
TP12-18C		1013802.7	744235.25	652.86
TP12-18_EAS	T_	1013788.9	744271.47	664.654
TP12-18_WES	T_	1013810.1	744231.33	665.99
TP12-19A		1013778	744229.14	660.715
TP12-19B		1013777.2	744228.73	659.621
TP12-19C		1013777.1	744229.1	659.859
TP12-19_NEA	ST	1013773.8	744259.25	667.526
TP12-19_NWE	ST	1013776.6	744223.2	670.485
TP12-1A		1015242.1	745060.34	664.862
TP12-1B		1015245.7	745062.26	665.751
TP12-1C		1015244.1	745061.22	664.267

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID		NORTHING	EASTING	LOC_ELEV
TP12-1_NORT	HE	1015261.3	745077.72	676.735
TP12-1_SWES	T_	1015238	745059.49	664.325
TP12-20A		1014134.9	745256.54	660.619
TP12-20B		1014134.6	745256.42	659.388
TP12-20C		1014134.2	745256.31	659.65
TP12-20_NOR	TH	1014143.8	745253.72	660.409
TP12-20_SOU	TH	1014123.2	745258.75	655.184
TP12-21A		1012865.9	743981.39	669.844
TP12-21B		1012856.5	743980.6	671.005
TP12-21C		1012859.5	743981.63	669.232
TP12-21_NOR	TH	1012868.8	743983.46	666.001
TP12-21_SOU	TH	1012839.2	743980.55	668.094
TP12-22AA		1011750.1	743817.44	650.821
TP12-22A_EA	ST	1011748.4	743820.73	661.314
TP12-22A_WE	ST	1011746.1	743786.58	660.462
TP12-22BA		1011737.8	743845.24	653.863
TP12-22BB		1011728.2	743857.62	656.16
TP12-22B_NO	RT	1011740.9	743842.72	660.305
TP12-22B_SO	UT	1011726.1	743864.26	658.279
TP12-23A		1015632.6	744650.92	652.675
TP12-23B		1015628.8	744641.02	651.728
TP12-23C		1015630.1	744644.55	653.004
TP12-23_EAS	T_	1015633	744653.19	656.559
TP12-23_WES	T_	1015623	744631.15	653.327
TP12-24 _EA	ST	1012108.5	744770.45	665.51
TP12-24A		1012116.5	744756.83	669.253
TP12-24B		1012119.3	744753.36	668.53
TP12-24C		1012115	744760.72	668.53
TP12-24_WES	T_	1012113.2	744742.2	663.214
TP12-25A		1015851.1	743786.12	638.651
TP12-25B		1015852.6	743759.93	638.108
TP12-25C		1015855.9	743761.15	645.501
TP12-25_EAS	T_	1015859.7	743804.22	645.028
TP12-25_WES	T_	1015858.8	743705.97	647.012
TP12-26A		1015873.2	743899.15	642.822
TP12-26B		1015873.2	743912.55	641.14
TP12-26C		1015878.8	743853.89	654.039
TP12-26_EAS	T_	1015874.1	743944.25	643.788
TP12-26_WES	T_	1015879.3	743854.4	644.277
TP12-2A		1015242.6	745035.94	665.688
TP12-2B		1015242	745037.72	665.193
TP12-2C		1015240.6	745043.1	666.979
TP12-2_NWES	T_	1015257.8	745018.57	664.597
TP12-2_SEAS	T_	1015233.5	745047.91	666.598
TP12-3A		1015459.6	744704.91	653.683
TP12-3B		1015457	744705.91	654.571
TP12-3C		1015454.9	744707.33	653.945
TP12-3_NORT	H	1015491.3	744689.42	651.827
TP12-3_SOUT	H	1015375.3	744714.98	658.714
TP12-4A		1015429.9	744780.29	660.245
TP12-4B		1015429.4	744781.55	662.786
TP12-4C		1015430	744780.12	659.901
TP12-4_NEAS	T	1015455.7	744799.88	659.581
TP12-4_SWES	T_	1015423.1	744775.31	660.962
TP12-5A		1015674.9	744634.57	650.165
TP12-5B		1015674.8	744645.65	651.048
TP12-5C		1015676.4	744651.41	649.431
TP12-5D		1015675.5	744634.68	651.589
TP12-5_EAST	_E	1015674.8	744665.23	650.655
TP12-5_WEST	_E	1015678.5	744623.69	650.912
TP12-6A		1015575	744645.75	649.56
TP12-6B		1015567.6	744651.16	650.966
TP12-6C		1015579.5	744641.93	650.367

Appendix C
Survey Data
SEAD-12 Remedial Investigation
Seneca Army Depot

LOC_ID		NORTHING	EASTING	LOC_ELEV
TP12-6_NWES	T_	1015586.1	744639.54	648.306
TP12-6_SEAS	T_	1015564.6	744655.29	648.471
TP12-7AA		1015714.7	744643.14	652.454
TP12-7A_EAS	T_	1015713.2	744650.76	649.435
TP12-7A_WES	T_	1015709.2	744638.24	648.515
TP12-7BA		1015788.5	744661.5	655.555
TP12-7BB		1015788.9	744664.43	653.346
TP12-7B_NOR	TH	1015797.3	744659.25	654.432
TP12-7B_SOU	TH	1015789.2	744665.28	657.059
TP12-8A		1015831.6	744661.61	652.346
TP12-8B		1015833.8	744644.54	652.762
TP12-8C		1015833.1	744650	652.346
TP12-8_EAST	EN	1015832.8	744665.94	648.893
TP12-8_WEST	_E	1015831.7	744641.64	653.467
TP12-9A		1012433	742048.49	639.686
TP12-9B		1012433	742048.68	641.149
TP12-9C		1012432.4	742048.38	644.032
TP12-9_EAST	_E	1012416.4	742071.54	644.824
TP12-9_WEST	_E	1012440.2	742024.79	644.496
TP12A-1		1015185.2	745067.48	
TP12A-2		1015182.1	744970.74	
TP12A-3		1015418	744748.96	
TP12A-4		1015477.2	744707.44	
TP12A-5		1015686.3	744634.71	
TP12A-6		1015736.2	744639.42	
TP12A-7		1015803.8	744651.74	
TP12A-8		1015891.1	744581.5	
TP12B-1		1015914.2	743579.24	
TP12B-2		1015976.8	743609.61	
TP12B-3		1016014.3	743592.14	
TP12B-4		1016021.8	743560.38	

APPENDIX D

HYDRAULIC CONDUCTIVITY RESULTS

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12A-1**

Test Date: **May 11, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

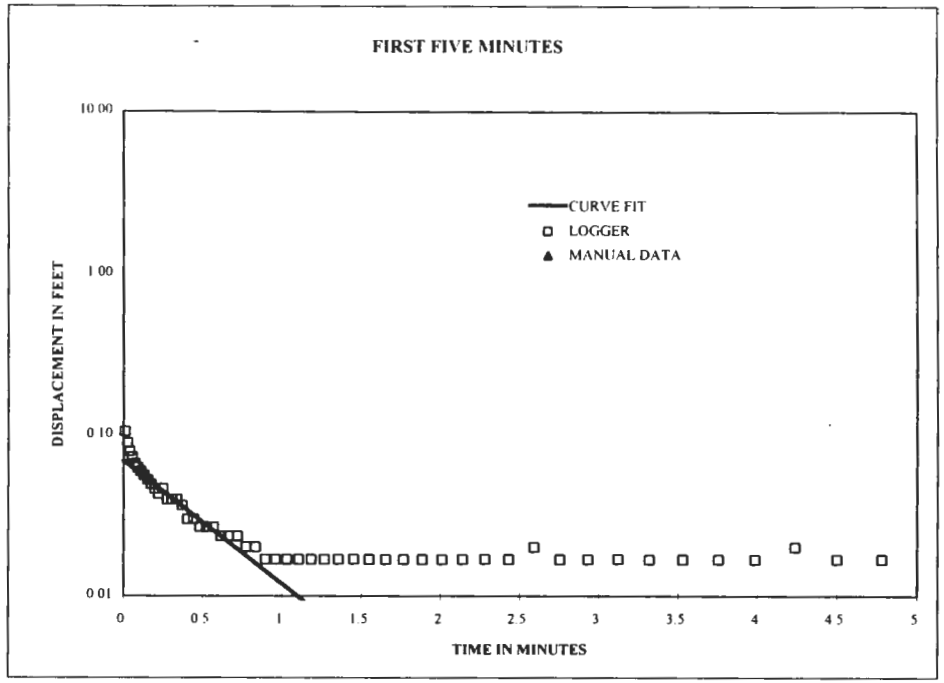
Logger Data File:

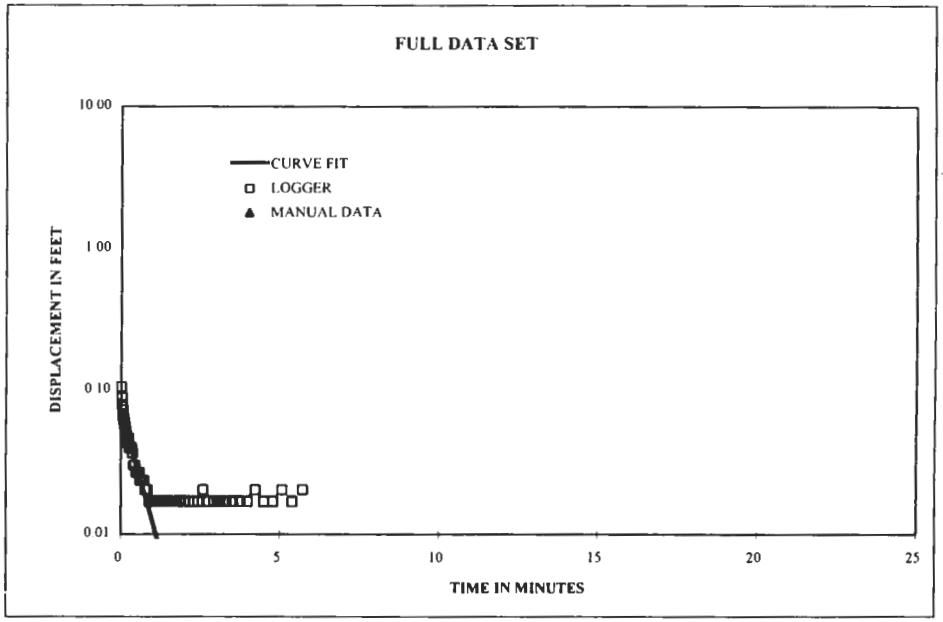
Hydraulic conductivity **8.19E-04 cm/sec**
1.61E-03 ft/min
2.32 ft/day

Casing stickup	1.40	feet
Static water level (from top of casing)	5.81	feet
Depth to bottom of screen (from ground level)	13.00	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	9.00	feet
Depth to "impermeable boundary"	14.00	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	0.069	feet
ΔH at time t (Y_t)	0.008	feet
Time	1.21	min

Bouwer-Rice Parameters

feet	cm		cm	
4.41	134.42	*SW*		
8.59	261.82	*H*	25.77	*L/Rw*
4	121.92	*Ts*	0.90	*H/D*
0.333	10.16	*Rw*	2.30	*A*
0.083	2.54	*Rc*	0.32	*B*
0.167	5.08	*DS*	1.80	*C*
8.59	261.82	*L*	1.10	*Ln[(D-H)/Rw]'*
9.59	292.30	*D*	1.10	*Ln[(D-H)/Rw]*
0.069	2.10	Y_0	2.27	equation (8)
0.0082	0.25	Y_t	2.45	equation (9)
	72.60	*t (seconds)*	2.27	*Ln(Re/Rw)*
	0.30	*n*	8.2E-04	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989

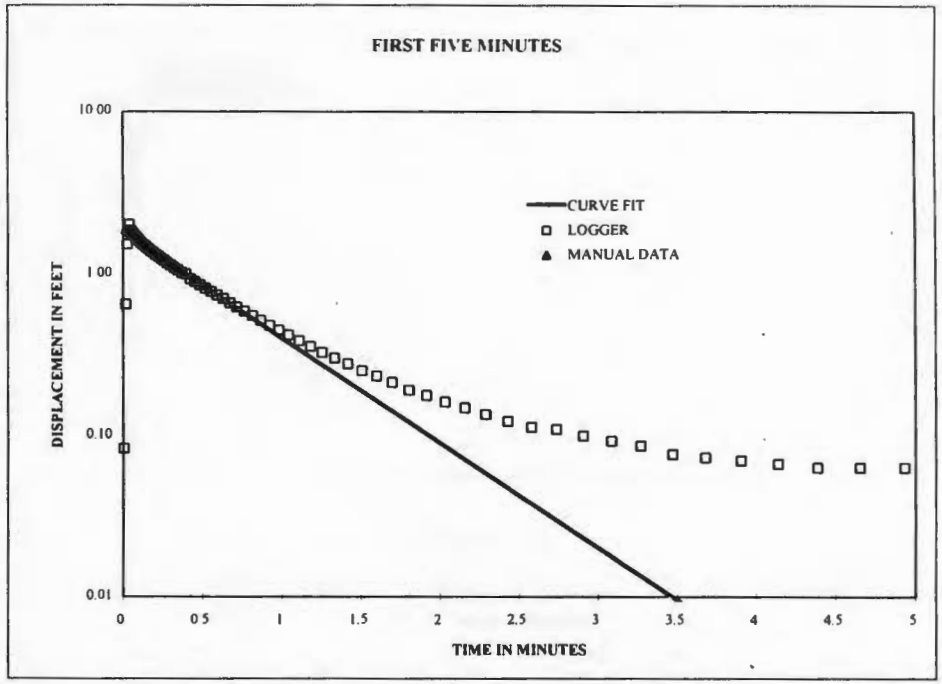
Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976

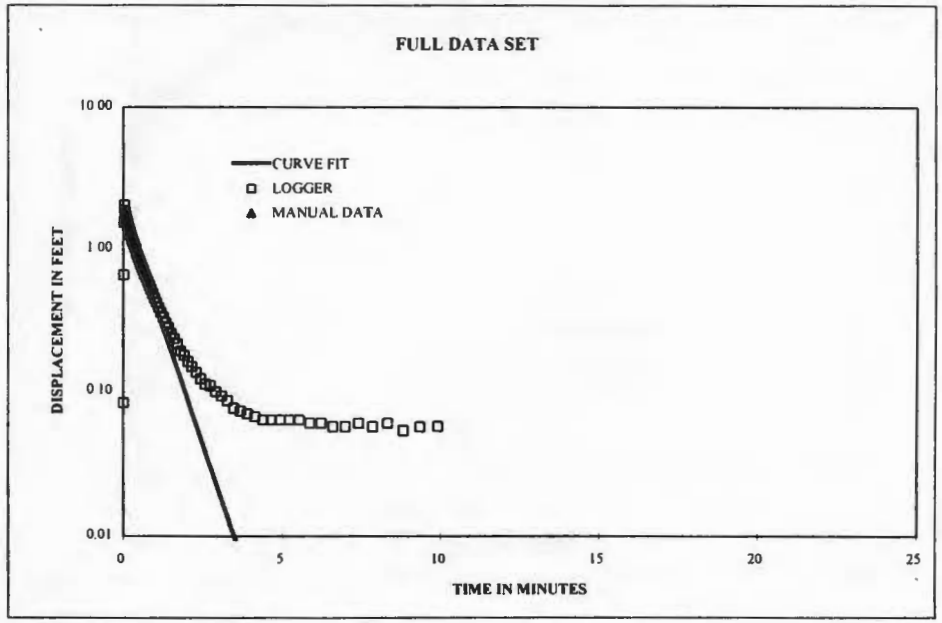
Client:	**Seneca Army Depot Activity**
Project:	**SEAD-12 RI/FS**
Project No.:	**730047-01001**
Well No.:	**MW12A-2**
Test Date:	**May 11, 1999**
Formation Tested:	**Till**
Rising (R) or Falling (F) Head Test:	**rising**
Logger Data File:	
Hydraulic conductivity	**1.27E-03 cm/sec**
	2.50E-03 ft/min
	3.59 ft/day

Casing stickup	2.50	feet
Static water level (from top of casing)	4.13	feet
Depth to bottom of screen (from ground level)	9.64	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	6.80	feet
Depth to "impermeable boundary"	10.54	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.800	feet
ΔH at time t (Y_t)	0.008	feet
Time	3.60	min

Bouwer-Rice Parameters

feet	cm		cm	
1.63	49.68	*SW*		
8.01	244.14	*H*	81.60	*L/Rw*
2.84	86.56	*Ts*	0.90	*H/D*
0.083	2.54	*Rw*	3.80	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.50	*C*
6.80	207.26	*L*	2.38	*Ln[(D-H)/Rw]'*
8.91	271.58	*D*	2.38	*Ln[(D-H)/Rw]*
1.8	54.86	Y_0	3.26	**equation (8)**
0.0082	0.25	Y_t	3.52	**equation (9)**
	216.00	*t (seconds)*	3.26	*Ln(Re/Rw)*
	0.30	*n*	1.3E-03	**equation (5)**





Bouwer, Herman 1989 "The Bouwer and Rice Slug Test - An Update", Ground Water vol 27, no 3, May-June 1989

Bouwer, H and R C. Rice 1976 A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12B-2**

Test Date: **May 11, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

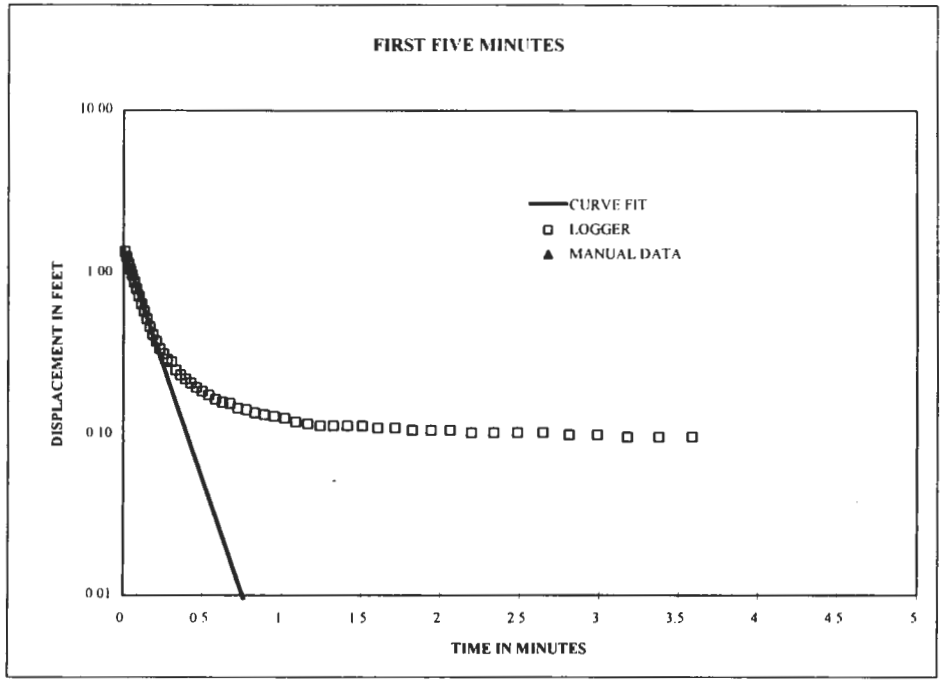
Logger Data File:

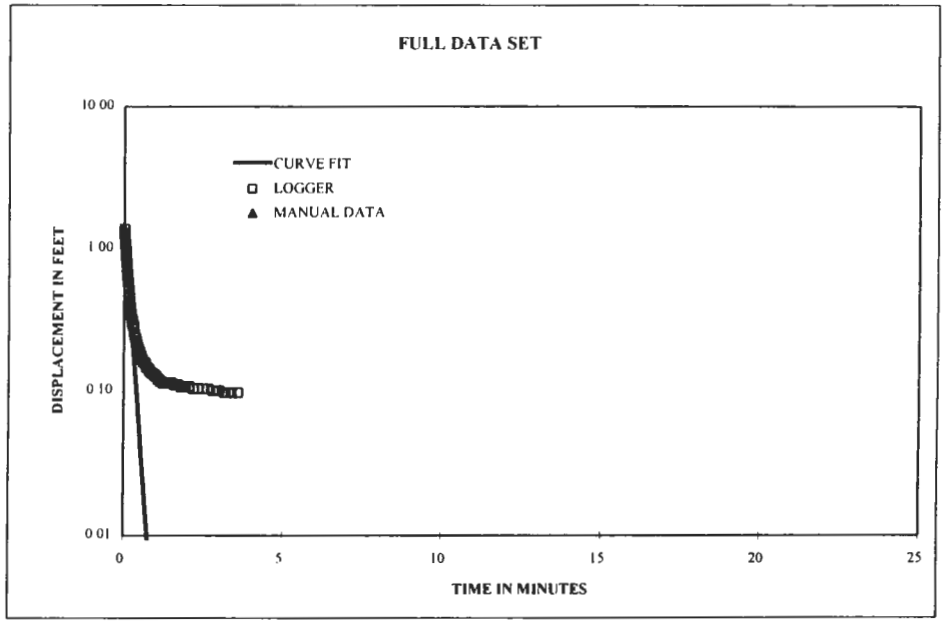
Hydraulic conductivity **3.16E-03 cm/sec**
6.21E-03 ft/min
8.94 ft/day

Casing stickup	2.50	feet
Static water level (from top of casing)	6.74	feet
Depth to bottom of screen (from ground level)	12.40	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	9.00	feet
Depth to "impermeable boundary"	13.50	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.400	feet
ΔH at time t (Y_t)	0.008	feet
Time	0.78	min

Bouwer-Rice Parameters

feet	cm		cm	
4.24	129.24	*SW*		
8.16	248.72	*H*	24.48	*L/Rw*
3.4	103.63	*Ts*	0.88	*H/D*
0.333	10.16	*Rw*	2.25	*A*
0.083	2.54	*Rc*	0.32	*B*
0.167	5.08	*DS*	1.70	*C*
8.16	248.72	*L*	1.19	*Ln[(D-H)/Rw]'*
9.26	282.24	*D*	1.19	*Ln[(D-H)/Rw]*
1.4	42.67	Y_o	2.21	equation (8)
0.0082	0.25	Y_t	2.42	equation (9)
	46.80	*t (seconds)*	2.21	*Ln(Re/Rw)*
	0.30	*n*	3.2E-03	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update" Ground Water vol 27, no. 3, May-June 1989

Bouwer, H. and R.C. Rice 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research vol 12, no 3, June 1976

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12B-3**

Test Date: **May 10, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

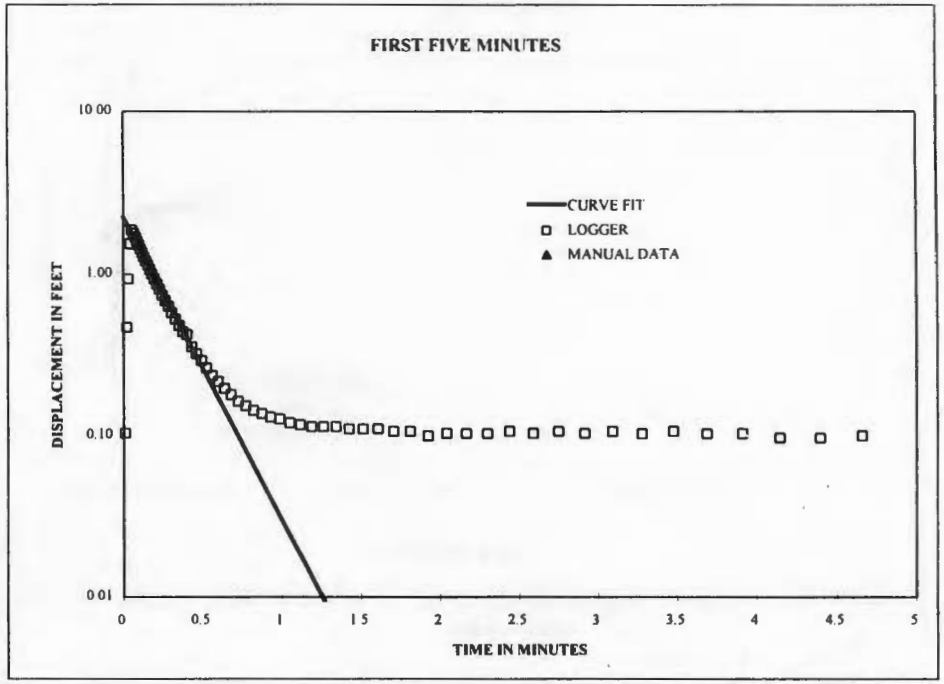
Logger Data File:

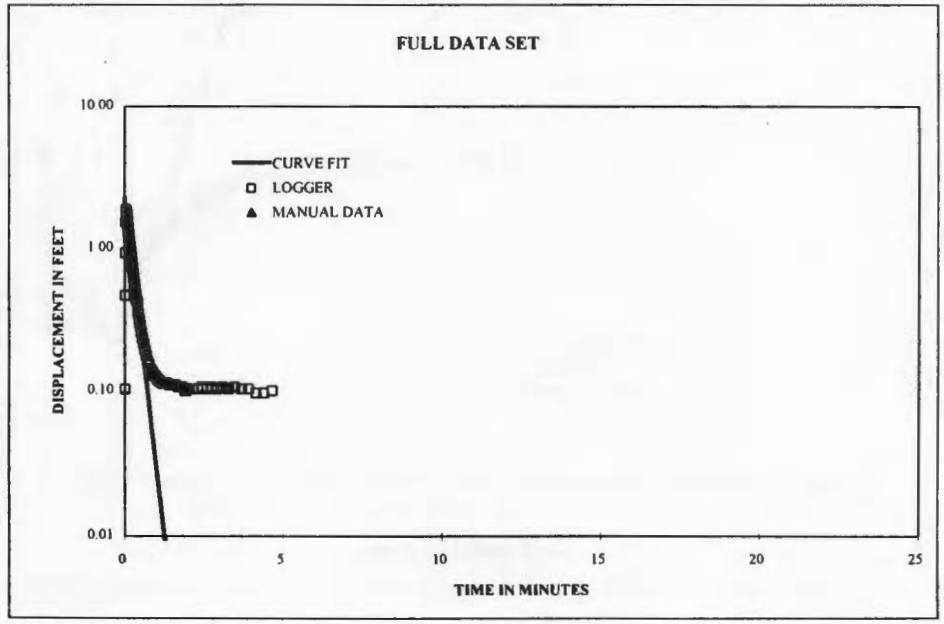
Hydraulic conductivity **2.27E-03** cm/sec
4.47E-03 ft/min
6.43 ft/day

Casing stickup	2.50	feet
Static water level (from top of casing)	6.79	feet
Depth to bottom of screen (from ground level)	12.38	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	14.96	feet
Depth to "impermeable boundary"	12.48	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.250	feet
ΔH at time t (Y_t)	0.008	feet
Time	1.30	min

Bouwer-Rice Parameters

feet	cm		cm	
4.29	130.76	*SW*		
8.09	246.58	*H*	24.27	*L/Rw*
-2.5768	-78.54	*Ts*	0.99	*H/D*
0.333	10.16	*Rw*	2.25	*A*
0.083	2.54	*Rc*	0.31	*B*
0.167	5.08	*DS*	1.70	*C*
8.09	246.58	*L*	-1.20	*Ln[(D-H)/Rw]*
8.19	249.63	*D*	-1.20	*Ln[(D-H)/Rw]*
2.25	68.58	Y_0	2.37	equation (8)
0.0082	0.25	Y_t	2.41	equation (9)
	78.00	*t (seconds)*	2.41	*Ln(Re/Rw)*
	0.30	*n*	2.3E-03	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.
Bouwer, H and R C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-4**

Test Date: **May 11, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

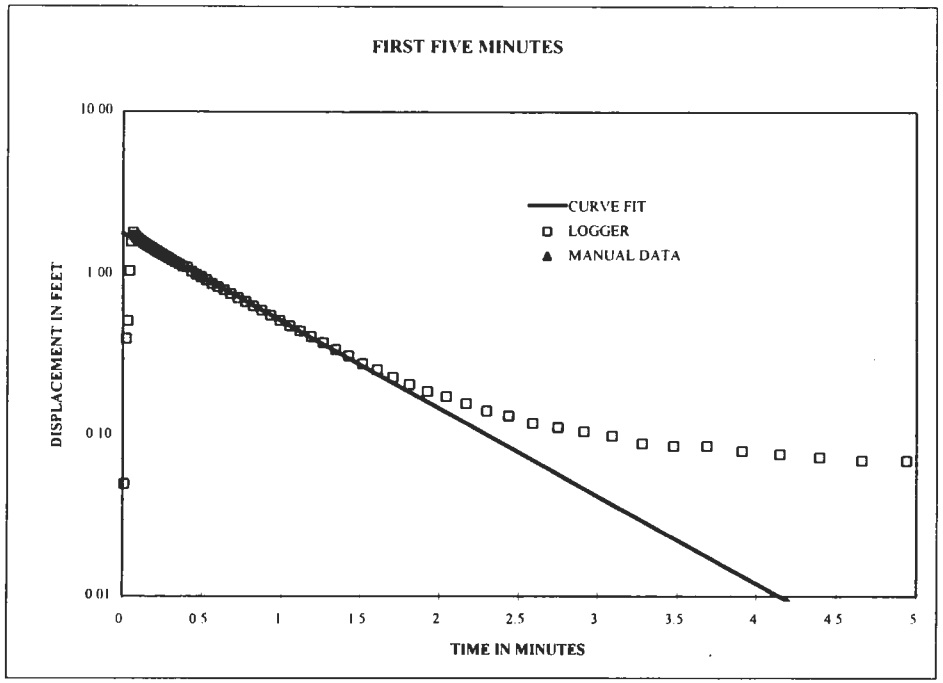
Logger Data File:

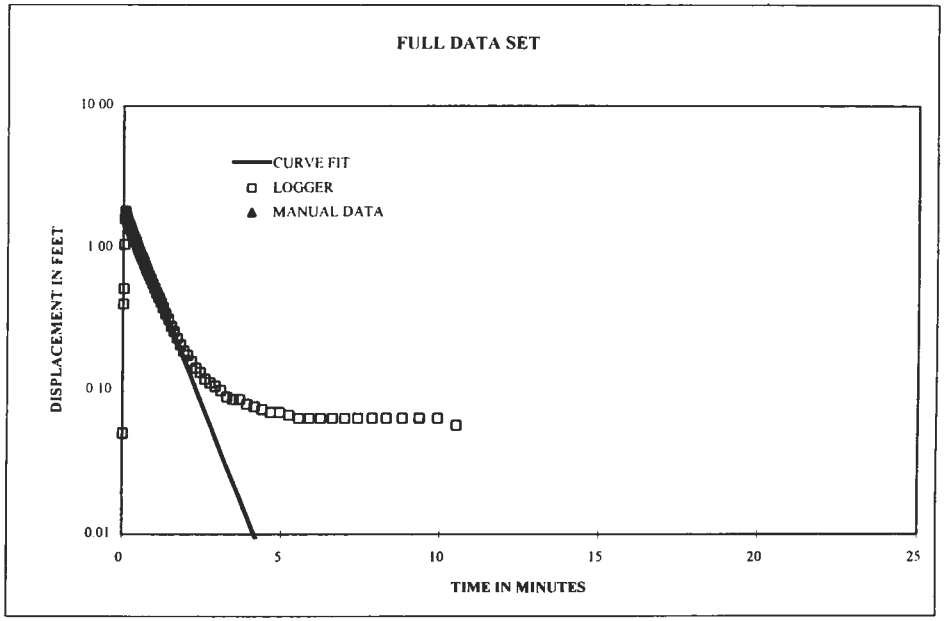
Hydraulic conductivity **1.12E-03 cm/sec**
2.20E-03 ft/min
3.17 ft/day

Casing stickup	2.68	feet
Static water level (from top of casing)	4.80	feet
Depth to bottom of screen (from ground level)	11.56	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.21	feet
Depth to "impermeable boundary"	11.78	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.800	feet
ΔH at time t (Y_t)	0.008	feet
Time	4.30	min

Bouwer-Rice Parameters

feet	cm		cm	
2.12	64.62	*SW*		
9.44	287.73	*H*	86.52	*L/Rw*
4.35	132.59	*Ts*	0.98	*H/D*
0.083	2.54	*Rw*	3.90	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.63	*C*
7.21	219.76	*L*	0.97	*Ln[(D-H)/Rw]'*
9.66	294.44	*D*	0.97	*Ln[(D-H)/Rw]*
1.8	54.86	Y_0	3.51	**equation (8)**
0.0082	0.25	Y_t	3.64	**equation (9)**
	258.00	*t (seconds)*	3.64	*Ln(Re/Rw)*
	0.30	*n*	1.1E-03	**equation (5)**





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-5**

Test Date: **May 11, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

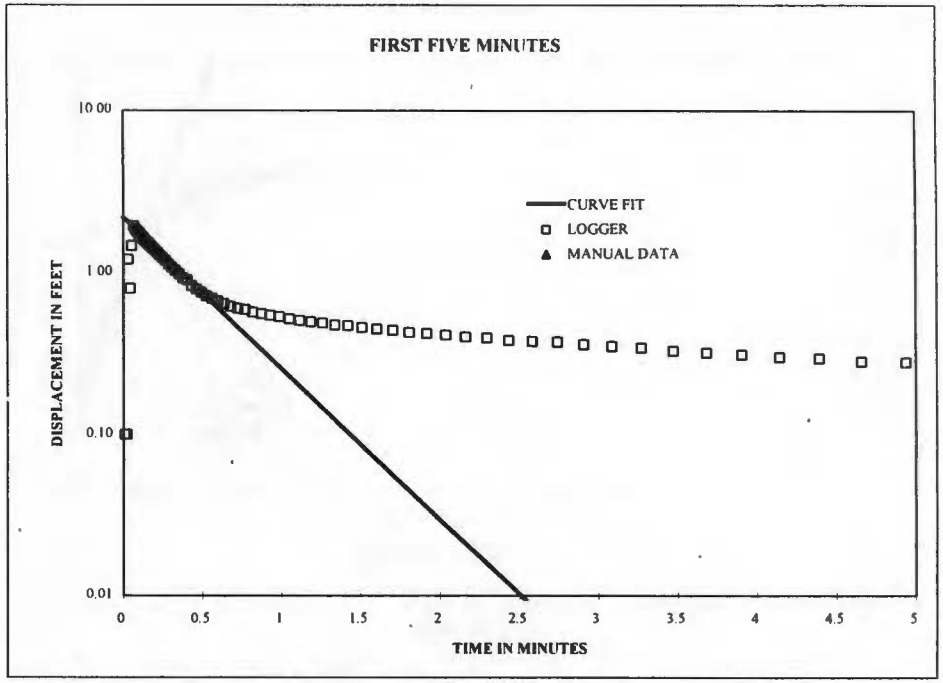
Logger Data File:

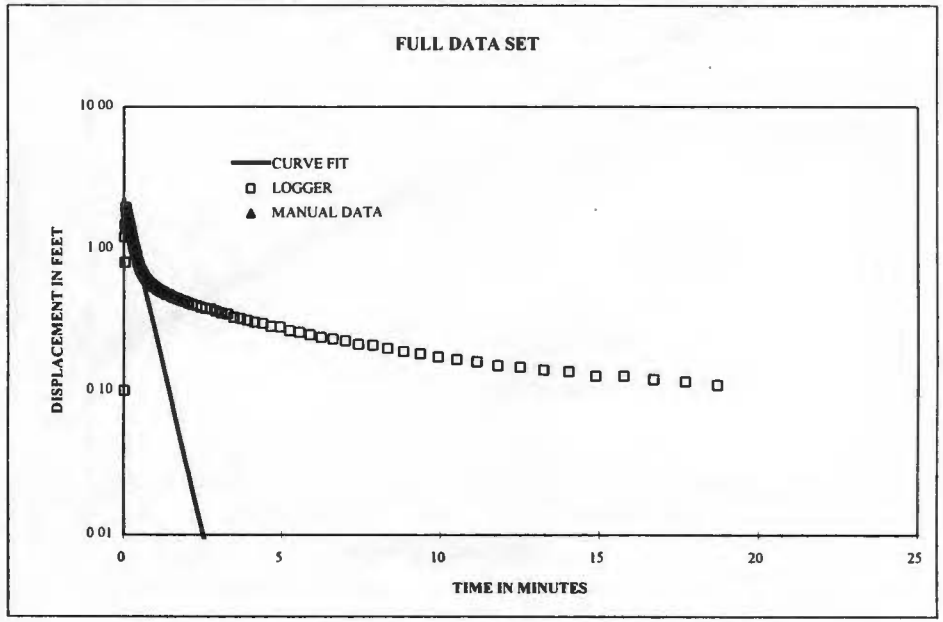
Hydraulic conductivity		
	9.44E-04	cm/sec
	1.86E-03	ft/min
	2.68	ft/day

Casing stickup	2.39	feet
Static water level (from top of casing)	9.77	feet
Depth to bottom of screen (from ground level)	17.90	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	13.00	feet
Depth to "impermeable boundary"	18.40	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.200	feet
ΔH at time t (Y_t)	0.008	feet
Time	2.60	min

Bouwer-Rice Parameters

feet	cm		cm	
7.38	224.94	*SW*		
10.52	320.65	*H*	31.56	*L/Rw*
4.9	149.35	*Ts*	0.95	*H/D*
0.333	10.16	*Rw*	2.40	*A*
0.083	2.54	*Rc*	0.35	*B*
0.167	5.08	*DS*	2.00	*C*
10.52	320.65	*L*	0.41	*Ln[(D-H)/Rw]'*
11.02	335.89	*D*	0.41	*Ln[(D-H)/Rw]*
2.2	67.06	Y_0	2.50	equation (8)
0.0082	0.25	Y_t	2.62	equation (9)
	156.00	*t (seconds)*	2.62	*Ln(Re/Rw)*
	0.30	*n*	9.4E-04	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-7**

Test Date: **May 11, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

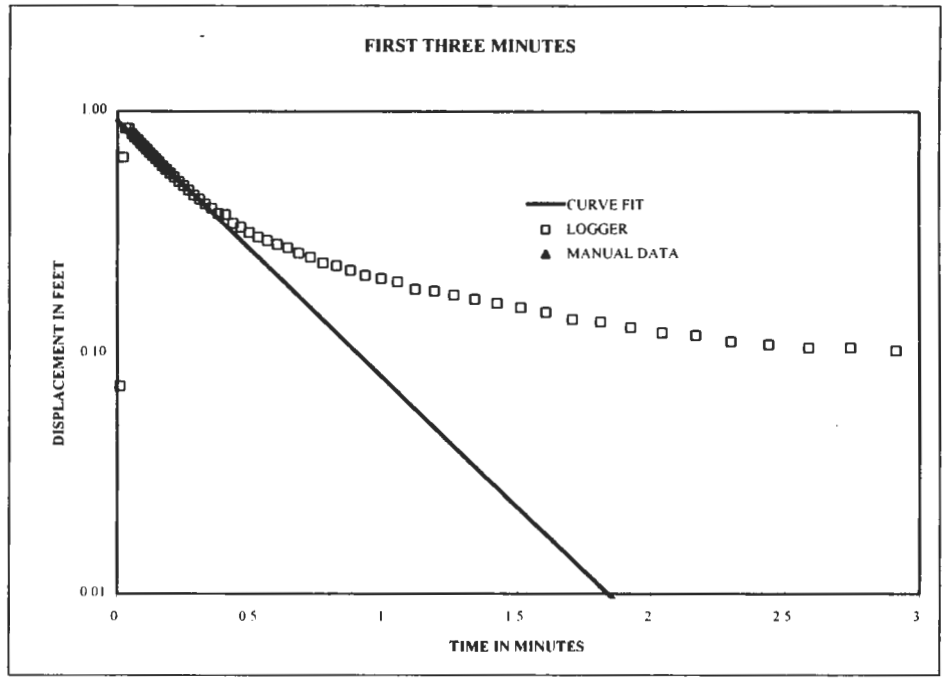
Logger Data File:

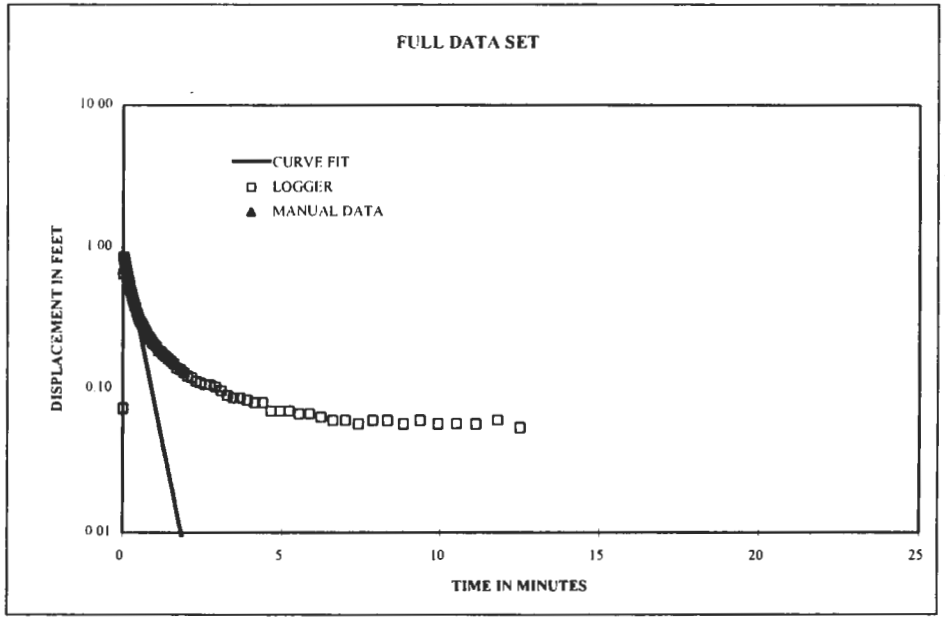
Hydraulic conductivity **8.42E-03 cm/sec**
1.66E-02 ft/min
23.86 ft/day

Casing stickup	2.59	feet
Static water level (from top of casing)	10.00	feet
Depth to bottom of screen (from ground level)	13.59	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.00	feet
Depth to "impermeable boundary"	13.64	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	0.911	feet
ΔH at time t (Y_t)	0.008	feet
Time	1.92	min

Bouwer-Rice Parameters

feet	cm		cm	
7.41	225.86	*SW*		
6.18	188.37	*H*	18.54	*L/Rw*
6.59	200.86	*Ts*	0.99	*H/D*
0.333	10.16	*Rw*	2.10	*A*
0.195	5.96	*Rc*	0.29	*B*
0.167	5.08	*DS*	1.50	*C*
6.18	188.37	*L*	-1.90	*Ln[(D-H)/Rw]'*
6.23	189.89	*D*	-1.90	*Ln[(D-H)/Rw]*
0.9112	27.77	Y_0	2.17	equation (8)
0.0082	0.25	Y_t	2.19	equation (9)
	115.20	*t (seconds)*	2.19	*Ln(Re/Rw)*
	0.30	*n*	8.4E-03	equation (5)





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-9**

Test Date: **May 10, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

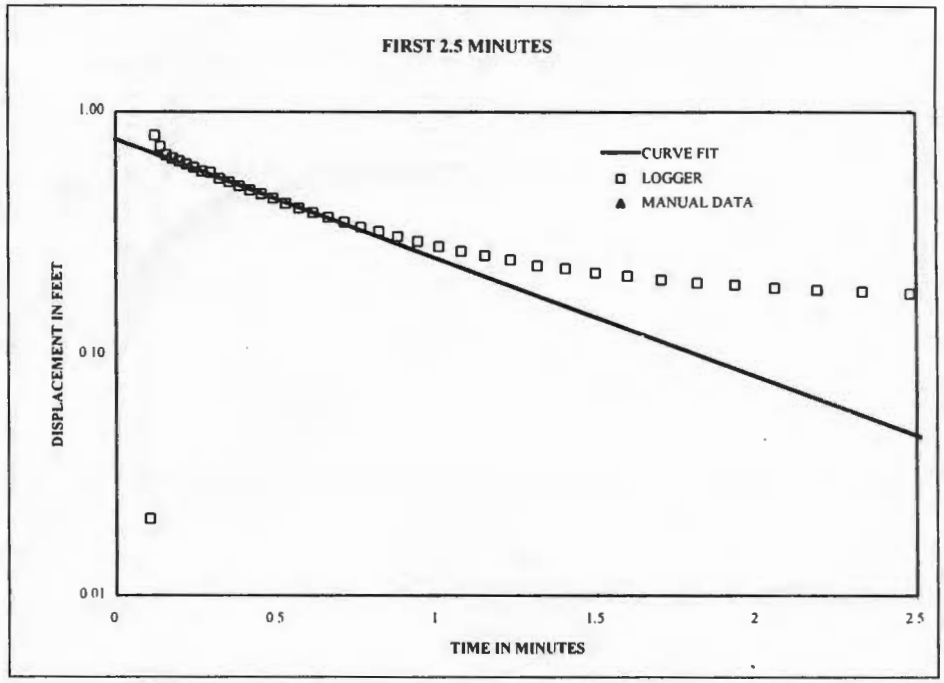
Logger Data File:

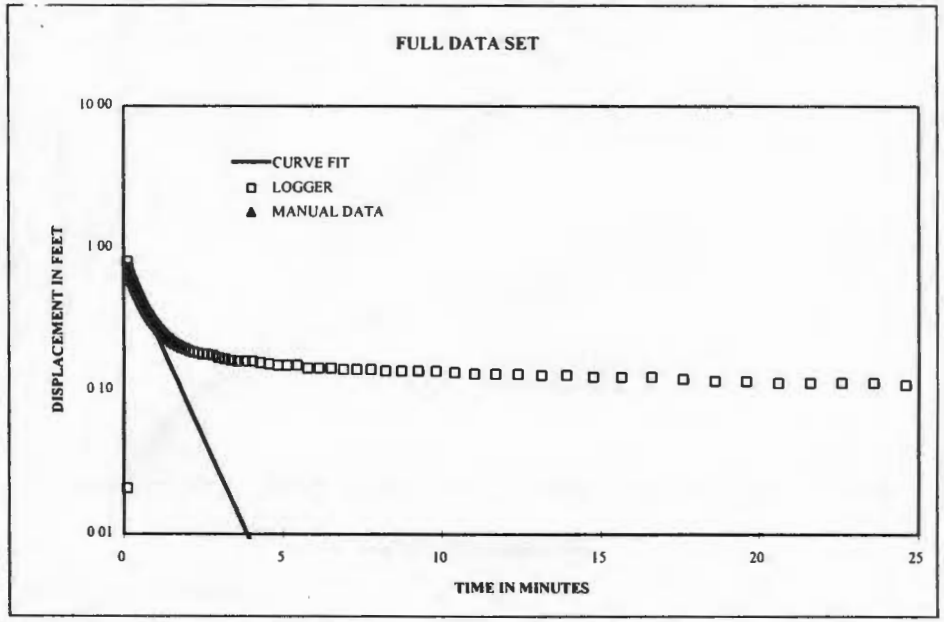
Hydraulic conductivity **3.54E-03 cm/sec**
6.98E-03 ft/min
10.05 ft/day

Casing stickup	2.59	feet
Static water level (from top of casing)	9.88	feet
Depth to bottom of screen (from ground level)	13.30	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.10	feet
Depth to "impermeable boundary"	14.21	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	0.771	feet
ΔH at time t (Y_t)	0.008	feet
Time	4.03	min

Bouwer-Rice Parameters

feet	cm		cm	
7.29	222.20	*SW*		
6.01	183.18	*H*	18.03	*L/Rw*
6.2	188.98	*Ts*	0.87	*H/D*
0.333	10.16	*Rw*	2.10	*A*
0.195	5.96	*Rc*	0.29	*B*
0.167	5.08	*DS*	1.50	*C*
6.01	183.18	*L*	1.00	*Ln[(D-H)/Rw]'*
6.92	210.92	*D*	1.00	*Ln[(D-H)/Rw]*
0.7712	23.51	Y_o	1.95	equation (8)
0.0082	0.25	Y_t	2.16	equation (9)
	242.00	*t (seconds)*	1.95	*Ln(Re/Rw)*
	0.30	*n*	3.5E-03	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **Seneca SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-10**

Test Date: **May 5, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

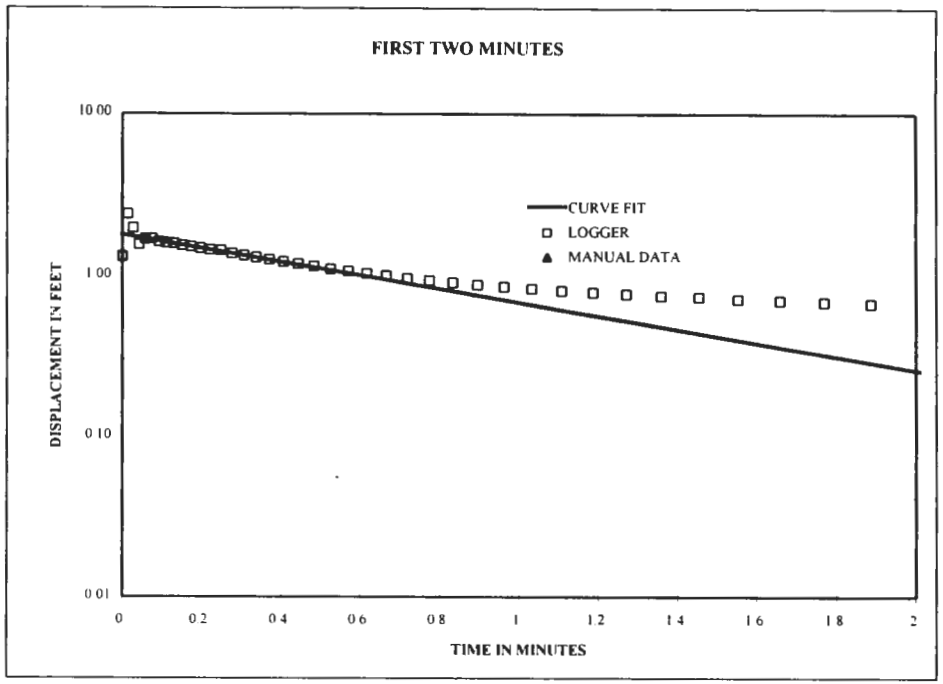
Logger Data File:

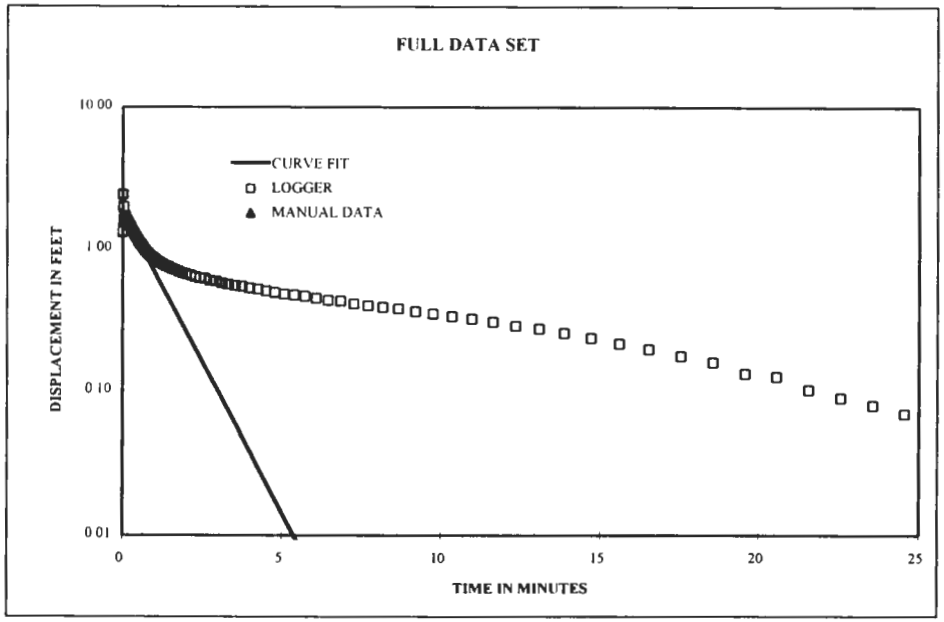
Hydraulic conductivity **4.45E-04** cm/sec
8.75E-04 ft/min
1.26 ft/day

Casing stickup	2.49	feet
Static water level (from top of casing)	9.38	feet
Depth to bottom of screen (from ground level)	16.50	feet
Boring diameter	8.50	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	10.00	feet
Depth to "impermeable boundary"	17.11	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.801	feet
ΔH at time t (Y_t)	0.008	feet
Time	5.57	min

Bouwer-Rice Parameters

feet	cm		cm	
6.89	210.01	*SW*		
9.61	292.91	*H*	27.13	*L/Rw*
6.5	198.12	*Ts*	0.94	*H/D*
0.354	10.80	*Rw*	2.30	*A*
0.083	2.54	*Rc*	0.33	*B*
0.167	5.08	*DS*	1.80	*C*
9.61	292.91	*L*	0.54	*Ln[(D-H)/Rw]'*
10.22	311.51	*D*	0.54	*Ln[(D-H)/Rw]*
1.80120001	54.90	Y_0	2.35	equation (8)
0.0082	0.25	Y_t	2.50	equation (9)
	334.20	*t (seconds)*	2.50	*Ln(Re/Rw)*
	0.30	*n*	4.4E-04	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update" Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-12**

Test Date: **May 5, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

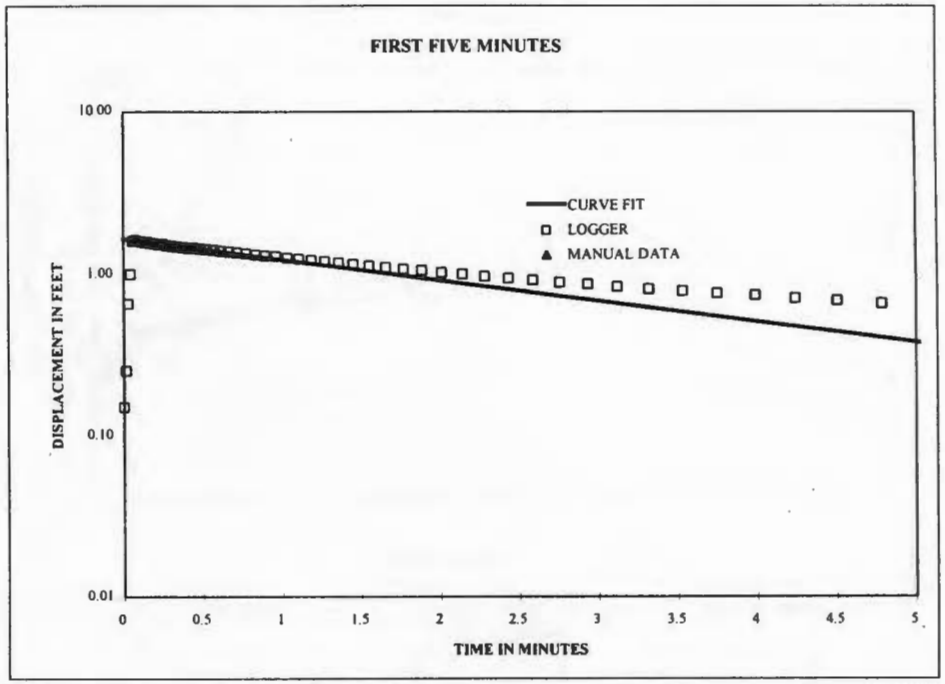
Logger Data File:

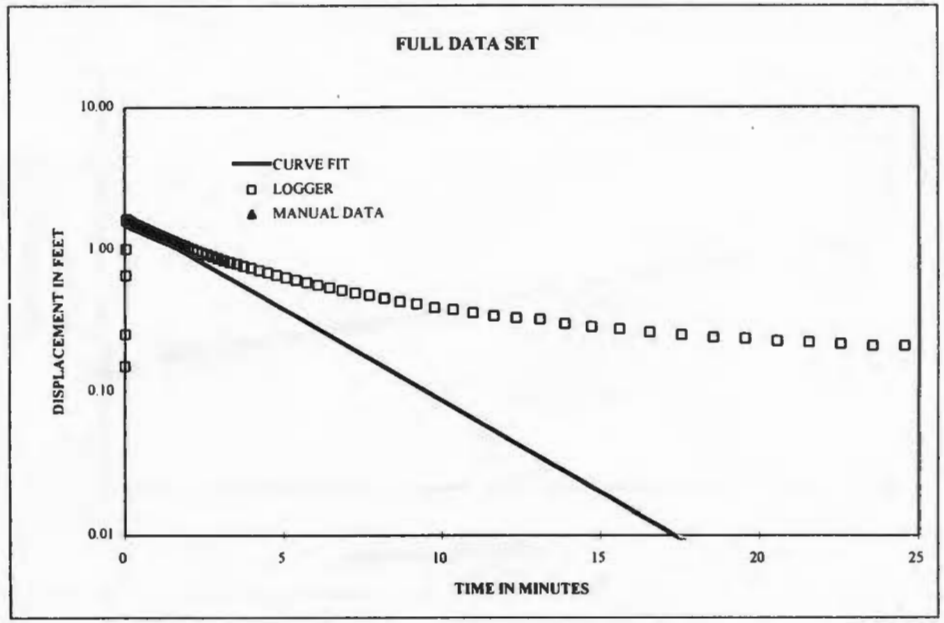
Hydraulic conductivity	2.63E-04	cm/sec
	5.18E-04	ft/min
	0.75	ft/day

Casing stickup	2.69	feet
Static water level (from top of casing)	6.93	feet
Depth to bottom of screen (from ground level)	12.50	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.00	feet
Depth to "impermeable boundary"	13.00	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.650	feet
ΔH at time t (Y_t)	0.008	feet
Time	18.00	min

Bouwer-Rice Parameters

feet	cm		cm	
4.24	129.24	*SW*		
8.26	251.76	*H*	84.00	*L/Rw*
5.5	167.64	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	3.88	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.60	*C*
7.00	213.36	*L*	1.79	*Ln[(D-H)/Rw]'*
8.76	267.00	*D*	1.79	*Ln[(D-H)/Rw]*
1.65	50.29	Y_0	3.34	equation (8)
0.0082	0.25	Y_t	3.54	equation (9)
	1080.00	*t (seconds)*	3.54	*Ln(Re/Rw)*
	0.30	*n*	2.6E-04	equation (5)





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-13**

Test Date: **5/10/99**

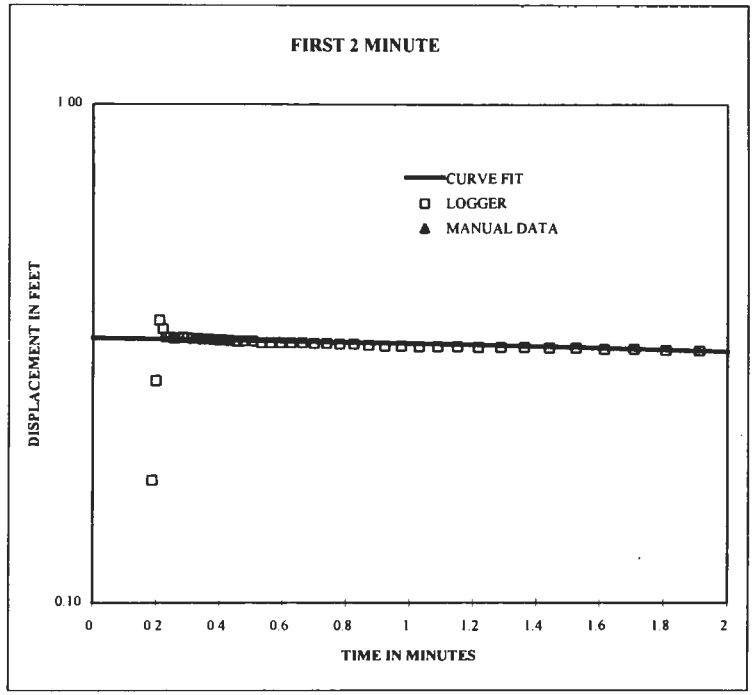
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

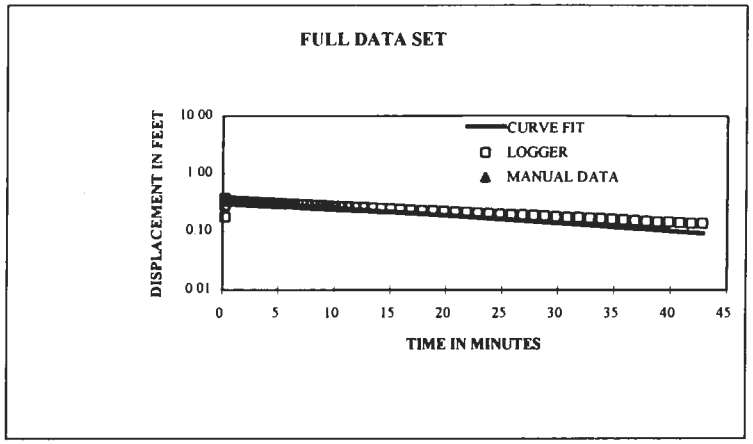
2.52E-05	**cm/sec**
4.95E-05	**ft/min**
0.07	**ft/day**

Casing stickup	**2.68**	feet
Static water level (from top of casing)	**7.27**	feet
Depth to bottom of screen (from ground level)	**12.50**	feet
Boring diameter	**8.00**	inches
Casing diameter	**2.00**	inches
Screen diameter	**2.00**	inches
Screen length	**7.50**	feet
Depth to "impermeable boundary"	**13.00**	feet
Estimated ratio of Kh/Kv	**1.00**	
Porosity of filter pack	**0.30**	
ΔH at time zero (Y_0)	**0.34**	feet
ΔH at time t (Y_t)	**0.32**	feet
Time	**2.00**	minutes



Bouwer-Rice Parameters

feet	cm		cm	
4.59	139.90	*SW*		
7.91	241.10	*H*	90.00	*L/Rw*
5	152.40	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	4.00	*A*
0.083	2.54	*Rc*	0.70	*B*
0.167	5.08	*DS*	3.75	*C*
7.50	228.60	*L*	1.79	*Ln[(D-H)/Rw]'*
8.41	256.34	*D*	1.79	*Ln[(D-H)/Rw]*
0.34	10.36	Y_0	3.33	**equation (8)**
0.32	9.75	Y_t	3.53	**equation (9)**
	120.00	*t (seconds)*	3.53	*Ln(Re/Rw)*
	1.00	*M*	2.5E-05	**equation (5)**
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-14**

Test Date: **May 10, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

Logger Data File:

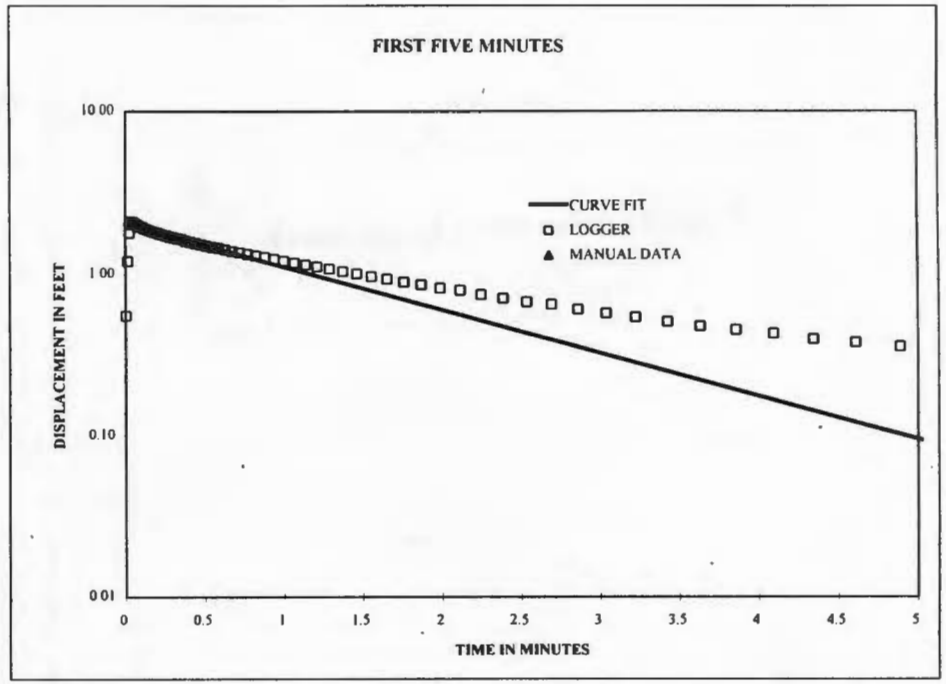
Hydraulic conductivity

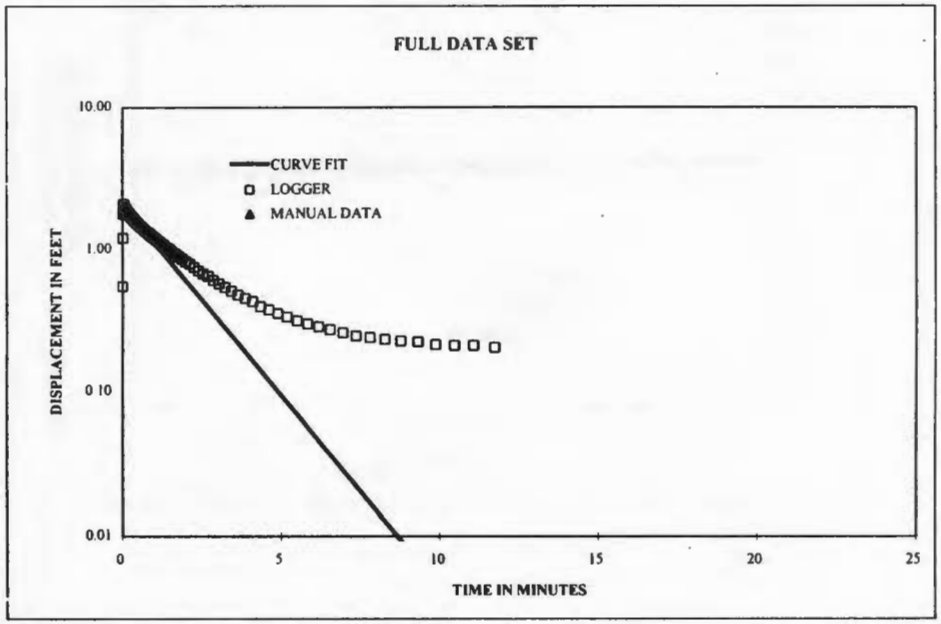
5.89E-04	cm/sec
1.16E-03	ft/min
1.67	ft/day

Casing stickup	2.65	feet
Static water level (from top of casing)	5.24	feet
Depth to bottom of screen (from ground level)	13.10	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	6.80	feet
Depth to "impermeable boundary"	14.00	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.050	feet
ΔH at time t (Y_t)	0.008	feet
Time	9.00	min

Bouwer-Rice Parameters

feet	cm		cm	
2.59	78.94	*SW*		
10.51	320.34	*H*	81.60	*L/Rw*
6.3	192.02	*Ts*	0.92	*H/D*
0.083	2.54	*Rw*	3.80	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.50	*C*
6.80	207.26	*L*	2.38	*Ln[(D-H)/Rw]'*
11.41	347.78	*D*	2.38	*Ln[(D-H)/Rw]*
2.05	62.48	Y_o	3.41	equation (8)
0.0082	0.25	Y_t	3.70	equation (9)
	540.00	*t (seconds)*	3.70	*Ln(Re/Rw)*
	0.30	*n*	5.9E-04	equation (5)





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-15**

Test Date: **May 10, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

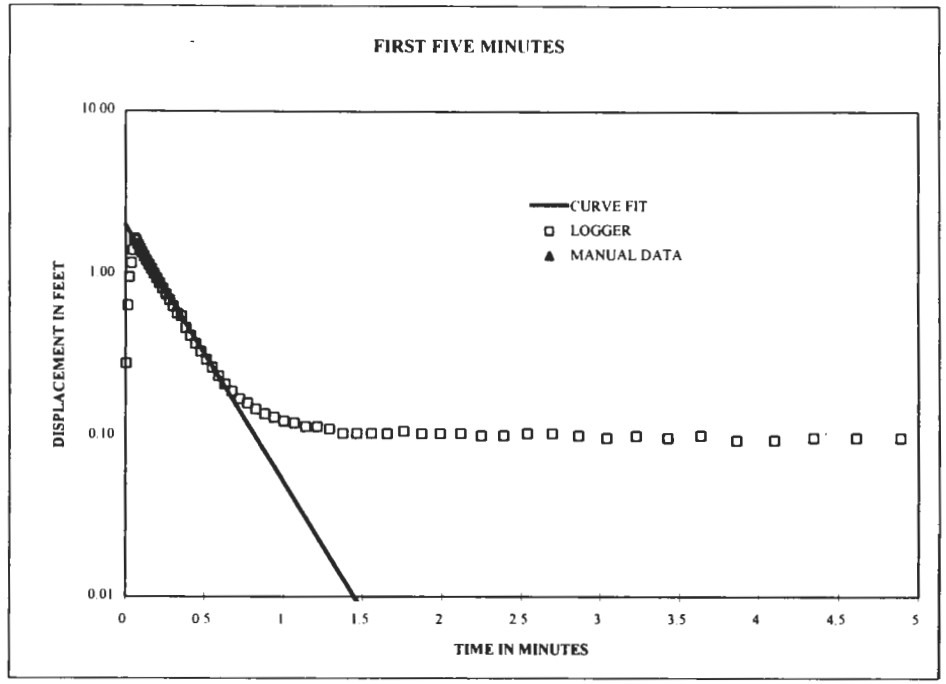
Logger Data File:

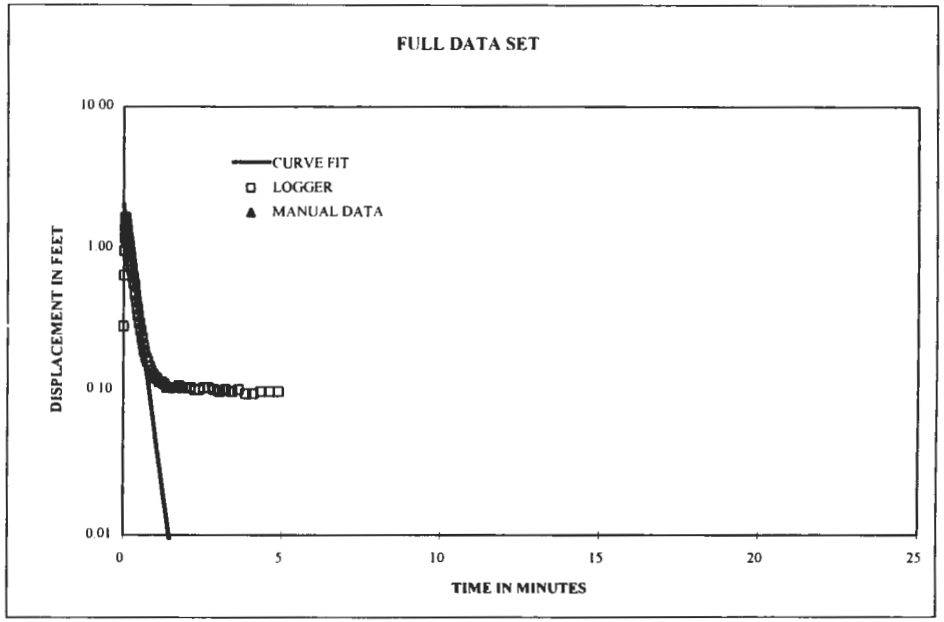
Hydraulic conductivity **3.31E-03 cm/sec**
6.52E-03 ft/min
9.38 ft/day

Casing stickup	2.60	feet
Static water level (from top of casing)	4.54	feet
Depth to bottom of screen (from ground level)	12.04	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.20	feet
Depth to "impermeable boundary"	12.54	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.000	feet
ΔH at time t (Y_t)	0.008	feet
Time	1.50	min

Bouwer-Rice Parameters

feet	cm		cm	
1.94	59.13	*SW*		
10.1	307.85	*H*	86.40	*L/Rw*
4.84	147.52	*Ts*	0.95	*H/D*
0.083	2.54	*Rw*	3.90	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.63	*C*
7.20	219.46	*L*	1.79	*Ln[(D-H)/Rw]'*
10.6	323.09	*D*	1.79	*Ln[(D-H)/Rw]*
2	60.96	Y_o	3.47	equation (8)
0.0082	0.25	Y_t	3.69	equation (9)
	90.00	*t (seconds)*	3.69	*Ln(Re/Rw)*
	0.30	*n*	3.3E-03	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989

Bouwer, H. and R.C. Rice 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976

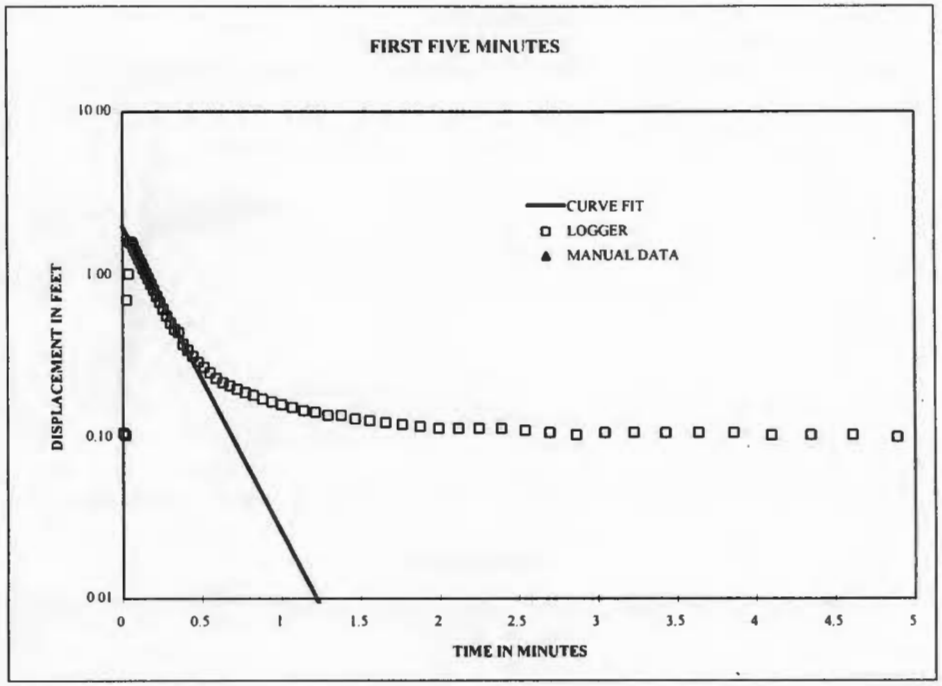
Client: **Seneca Army Depot Activity**
Project: **SEAD-12 RI/FS**
Project No.: **730047-01001**
Well No.: **MW12-17**
Test Date: **May 10, 1999**
Formation Tested: **Till**
Rising (R) or Falling (F) Head Test: **rising**
Logger Data File:

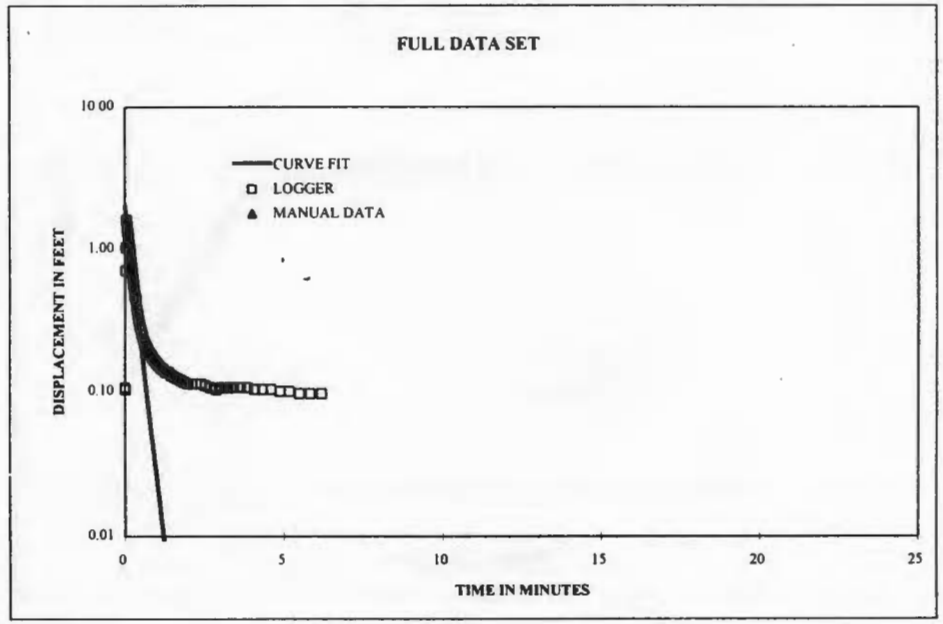
Hydraulic conductivity	1.24E-02	cm/sec
	2.44E-02	ft/min
	35.14	ft/day

Casing stickup	2.78	feet
Static water level (from top of casing)	12.05	feet
Depth to bottom of screen (from ground level)	17.60	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	8.33	feet
Depth to "impermeable boundary"	18.40	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.000	feet
ΔH at time t (Y_t)	0.008	feet
Time	1.26	min

Bouwer-Rice Parameters

feet	cm		cm	
9.27	282.55	*SW*		
8.33	253.90	*H*	24.99	*L/Rw*
9.27	282.55	*Ts*	0.91	*H/D*
0.333	10.16	*Rw*	2.25	*A*
0.195	5.96	*Rc*	0.32	*B*
0.167	5.08	*DS*	1.70	*C*
8.33	253.90	*L*	0.88	*Ln[(D-H)/Rw]'*
9.13	278.28	*D*	0.88	*Ln[(D-H)/Rw]*
2	60.96	Y_o	2.26	equation (8)
0.0082	0.25	Y_t	2.44	equation (9)
	75.60	*t (seconds)*	2.44	*Ln(Re/Rw)*
	0.30	*n*	1.2E-02	equation (5)





Bouwer, Herman 1989 "The Bouwer and Rice Slug Test - An Update". Ground Water vol 27, no. 3, May-June 1989

Bouwer, H and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-18**

Test Date: **5/10/99**

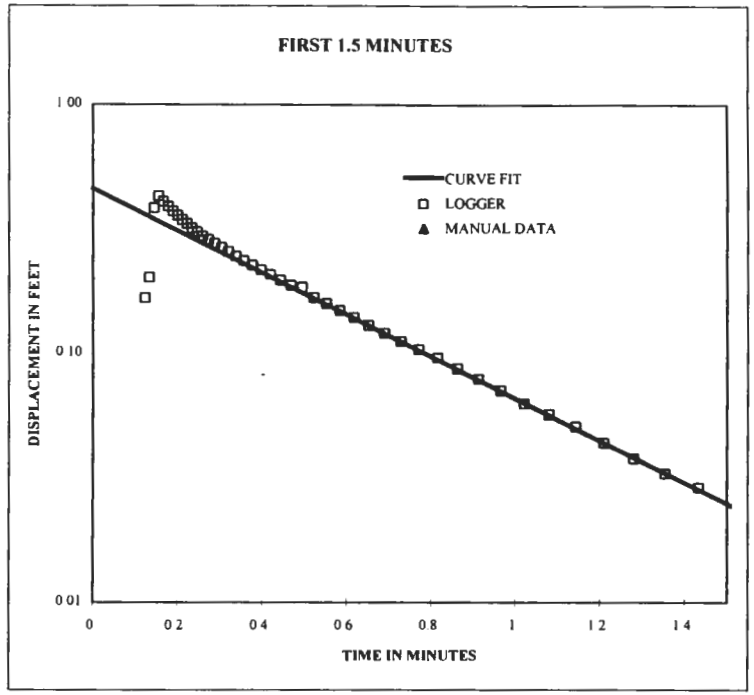
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

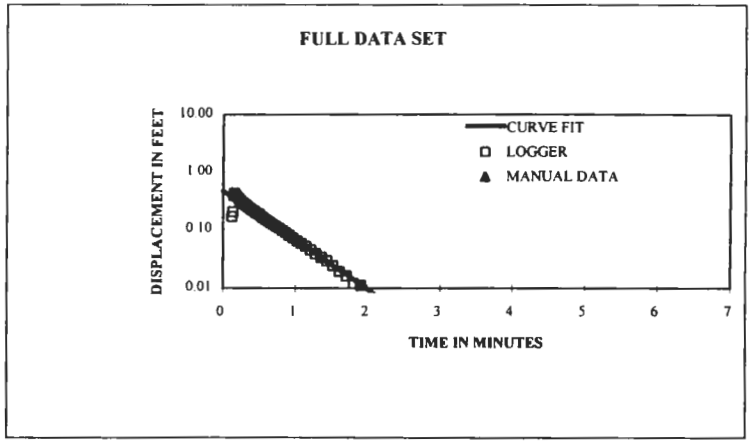
1.66E-03	cm/sec
3.27E-03	ft/min
4.70	ft/day

Casing stickup	2.55	feet
Static water level (from top of casing)	8.59	feet
Depth to bottom of screen (from ground level)	14.00	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.30	feet
Depth to "impermeable boundary"	14.50	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	0.46	feet
ΔH at time t (Y_t)	0.03	feet
Time	1.50	minutes



Bouwer-Rice Parameters

feet	cm		cm	
6.04	184.10	*SW*		
7.96	242.62	*H*	87.60	*L/Rw*
6.7	204.22	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	3.90	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.63	*C*
7.30	222.50	*L*	1.79	*Ln[(D-H)/Rw]'*
8.46	257.86	*D*	1.79	*Ln[(D-H)/Rw]*
0.46	14.02	Y_0	3.34	equation (8)
0.025	0.76	Y_t	3.54	equation (9)
	90.00	*t (seconds)*	3.54	*Ln(Re/Rw)*
	1.00	*M*	1.7E-03	equation (5)
	0.30	*n*		



Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no 3, May-June 1989

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research vol 12, no 3, June 1976

Client: **Seneca Army Depot**
Project: **SEAD-12 RI/FS**
Project No.: **730047-01001**
Well No.: **MW12-19**
Test Date: **5/10/98**

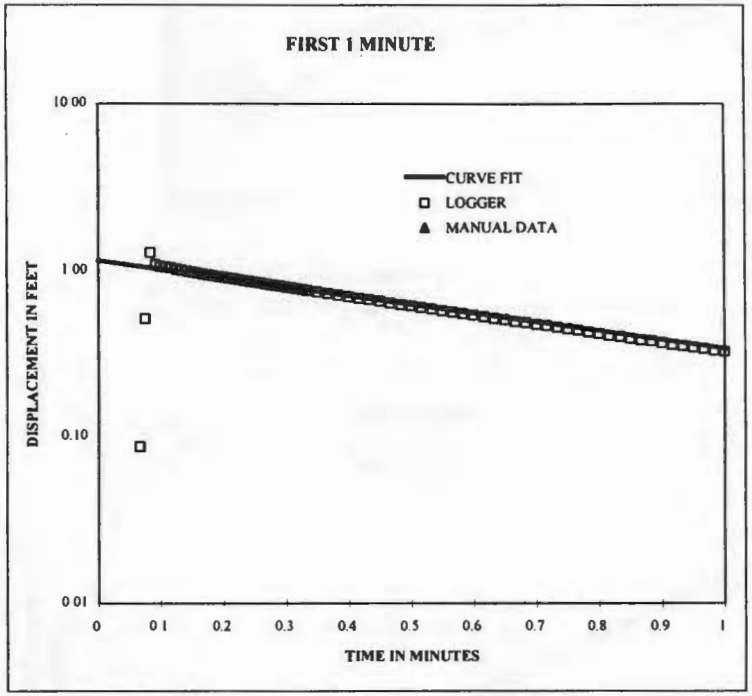
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

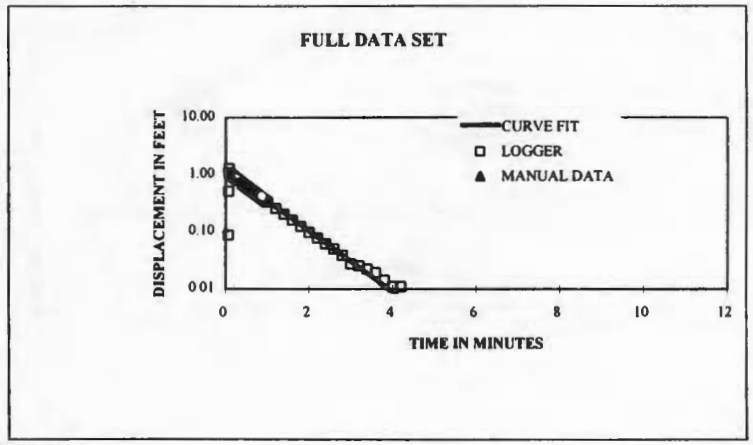
1.50E-03	cm/sec
2.94E-03	ft/min
4.24	ft/day

Casing stickup	2.10	feet
Static water level (from top of casing)	5.71	feet
Depth to bottom of screen (from ground level)	10.50	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	4.80	feet
Depth to "impermeable boundary"	11.00	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.15	feet
ΔH at time t (Y_t)	0.01	feet
Time	3.70	minutes



Bouwer-Rice Parameters

feet	cm		cm	
3.61	110.03	*SW*		
6.89	210.01	*H*	57.60	*L/Rw*
5.7	173.74	*Ts*	0.93	*H/D*
0.083	2.54	*Rw*	3.20	*A*
0.083	2.54	*Rc*	0.48	*B*
0.167	5.08	*DS*	2.80	*C*
4.80	146.30	*L*	1.79	*Ln[(D-H)/Rw]'*
7.39	225.25	*D*	1.79	*Ln[(D-H)/Rw]*
1.15	35.05	Y_0	3.13	equation (8)
0.013	0.40	Y_t	3.36	equation (9)
	222.00	*t (seconds)*	3.36	*Ln(Re/Rw)*
	1.00	*M*	1.5E-03	equation (5)
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.
Bouwer, H. and R.C. Rice 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-20**

Test Date: **5/9/99**

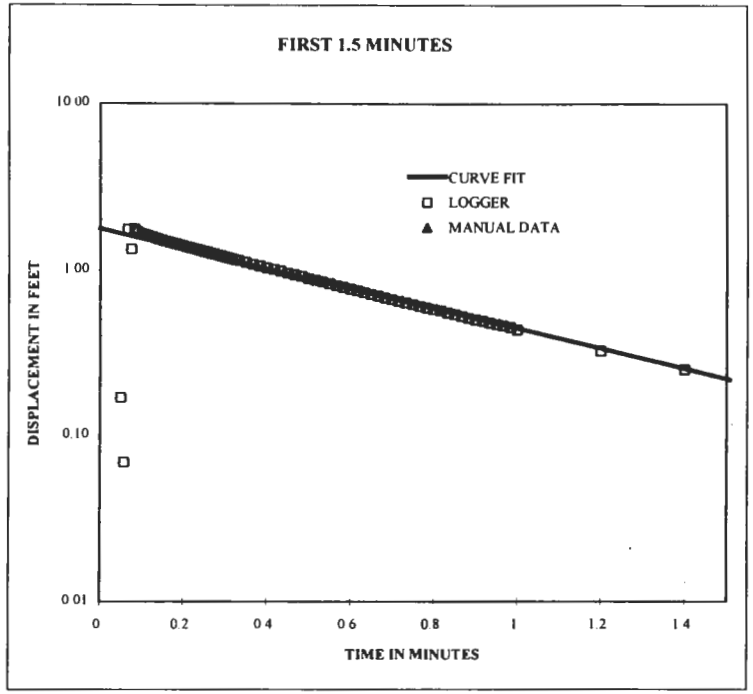
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

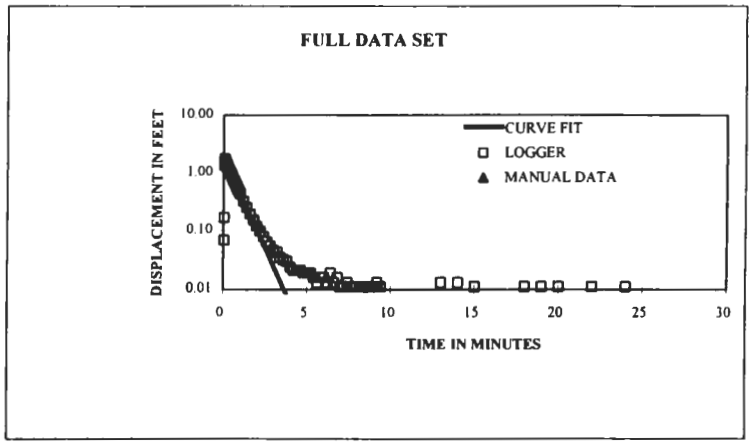
Hydraulic conductivity

1.35E-03	cm/sec
2.65E-03	ft/min
3.82	ft/day

Casing stickup	2.55	feet
Static water level (from top of casing)	5.30	feet
Depth to bottom of screen (from ground level)	13.70	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.00	feet
Depth to "impermeable boundary"	14.40	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.78	feet
ΔH at time t (Y_t)	0.02	feet
Time	3.20	minutes



Bouwer-Rice Parameters				
feet	cm		cm	
2.75	83.82	*SW*		
10.95	333.76	*H*	84.00	*L/Rw*
6.7	204.22	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	3.88	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.60	*C*
7.00	213.36	*L*	2.13	*Ln[(D-H)/Rw]'*
11.65	355.09	*D*	2.13	*Ln[(D-H)/Rw]*
1.78	54.25	Y_0	3.47	equation (8)
0.018	0.55	Y_t	3.73	equation (9)
	192.00	*t (seconds)*	3.73	*Ln(Re/Rw)*
	1.00	*M*	1.3E-03	equation (5)
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update" Ground Water vol. 27, no. 3, May-June 1989.

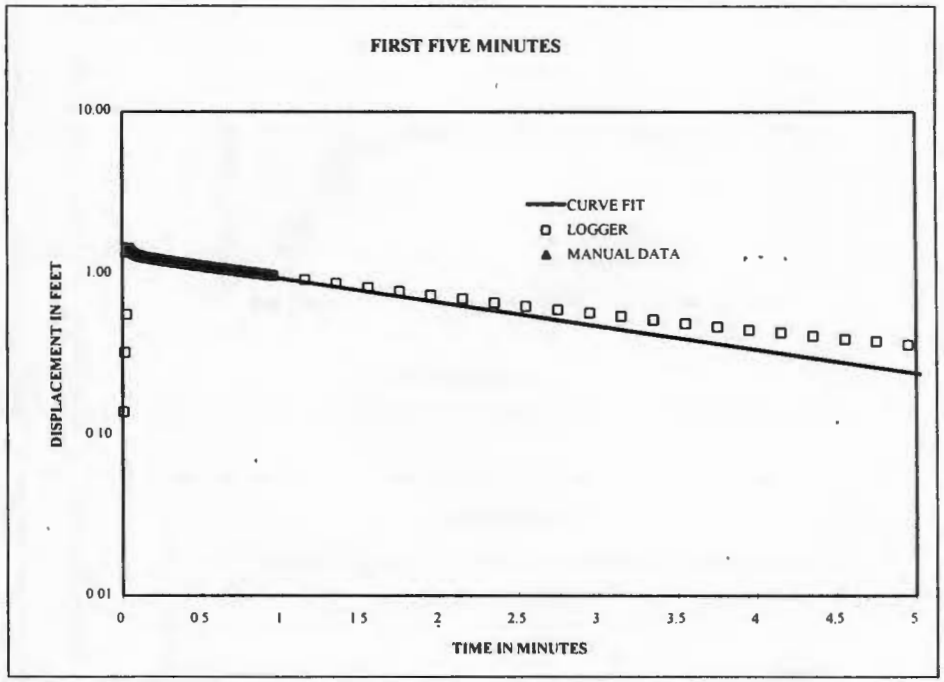
Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976.

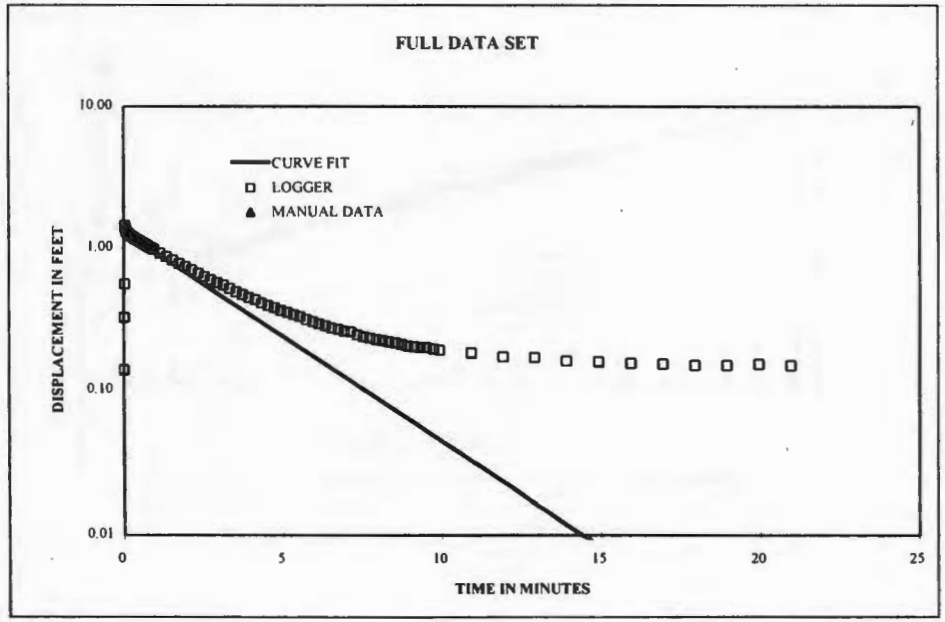
Client: **Seneca Army Depot Activity**
Project: **SEAD-12 RI/FS**
Project No.: **730047-01001**
Well No.: **MW12-21**
Test Date: **May 10, 1999**
Formation Tested: **Till**
Rising (R) or Falling (F) Head Test: **rising**
Logger Data File:
Hydraulic conductivity **4.26E-04 cm/sec**
8.39E-04 ft/min
1.21 ft/day

Casing stickup	2.91	feet
Static water level (from top of casing)	5.85	feet
Depth to bottom of screen (from ground level)	10.35	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	4.75	feet
Depth to "impermeable boundary"	10.79	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	1.300	feet
ΔH at time t (Y_t)	0.008	feet
Time	15.00	min

Bouwer-Rice Parameters

feet	cm		cm	
2.94	89.61	*SW*		
7.41	225.86	*H*	57.00	*L/Rw*
5.6	170.69	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	3.20	*A*
0.083	2.54	*Rc*	0.48	*B*
0.167	5.08	*DS*	2.80	*C*
4.75	144.78	*L*	1.66	*Ln[(D-H)/Rw]'*
7.85	239.27	*D*	1.66	*Ln[(D-H)/Rw]*
1.3	39.62	Y_0	3.17	equation (8)
0.0082	0.25	Y_t	3.40	equation (9)
	900.00	*t (seconds)*	3.40	*Ln(Re/Rw)*
	0.30	*n*	4.3E-04	equation (5)





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.
Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-22**

Test Date: **5/9/99**

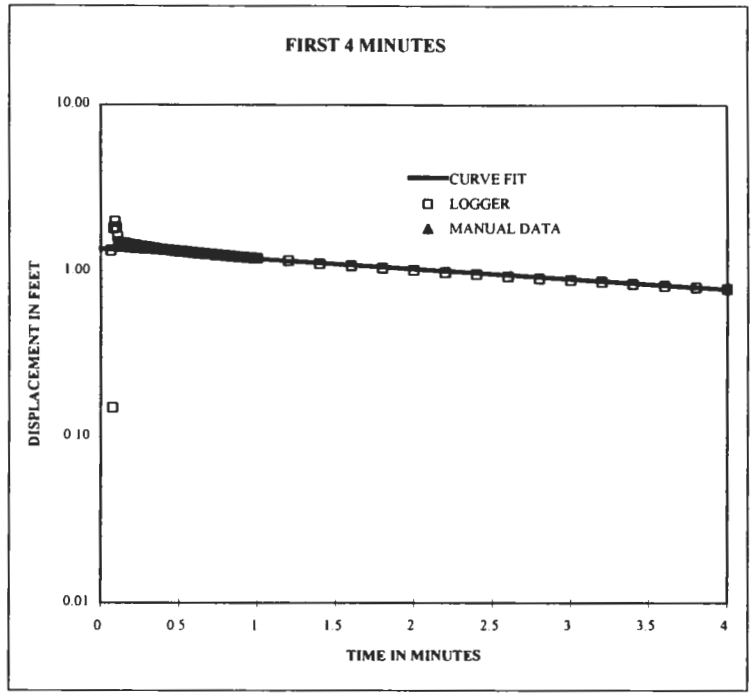
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

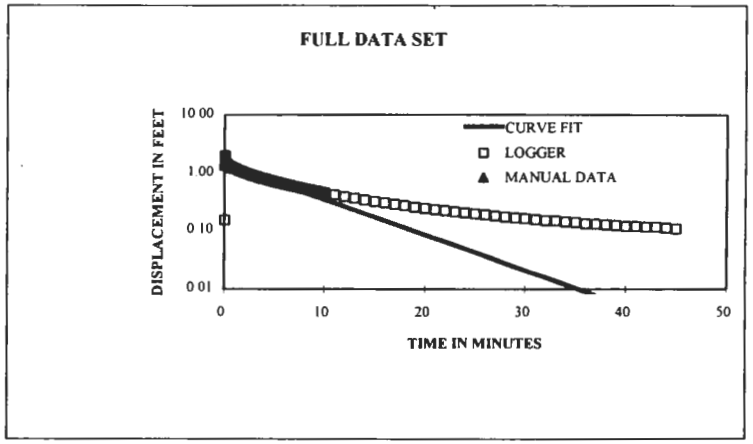
1.34E-04	cm/sec
2.64E-04	ft/min
0.38	ft/day

Casing stickup	3.12	feet
Static water level (from top of casing)	5.40	feet
Depth to bottom of screen (from ground level)	12.10	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	6.70	feet
Depth to "impermeable boundary"	12.60	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.36	feet
ΔH at time t (Y_t)	0.06	feet
Time	23.00	minutes



Bouwer-Rice Parameters

feet	cm		cm	
2.28	69.49	*SW*		
9.82	299.31	*H*	80.40	*L/Rw*
5.4	164.59	*Ts*	0.95	*H/D*
0.083	2.54	*Rw*	3.80	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.50	*C*
6.70	204.22	*L*	1.79	*Ln[(D-H)/Rw]'*
10.32	314.55	*D*	1.79	*Ln[(D-H)/Rw]*
1.36	41.45	Y_0	3.42	equation (8)
0.055	1.68	Y_t	3.65	equation (9)
	1380.00	*t (seconds)*	3.65	*Ln(Re/Rw)*
	1.00	*M*	1.3E-04	equation (5)
	0.30	*n*		



Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-23**

Test Date: **5/10/99**

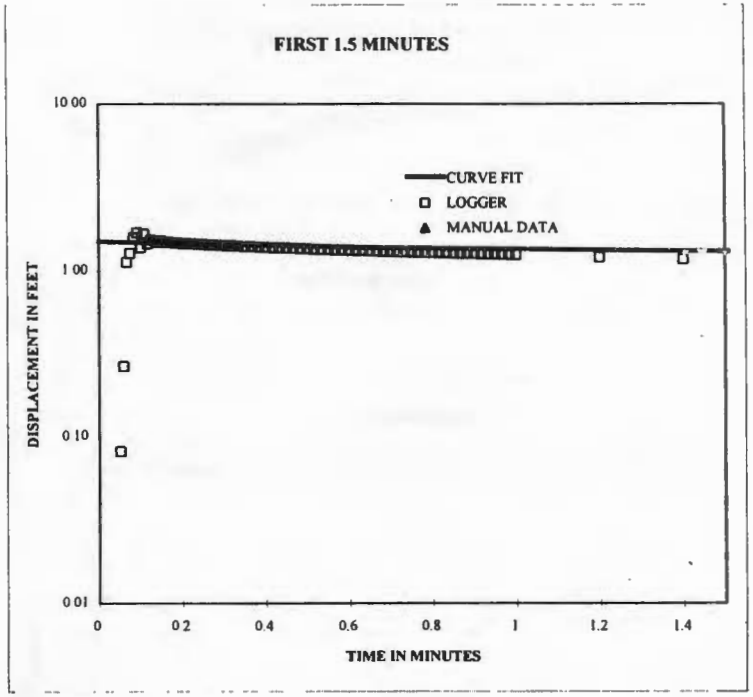
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

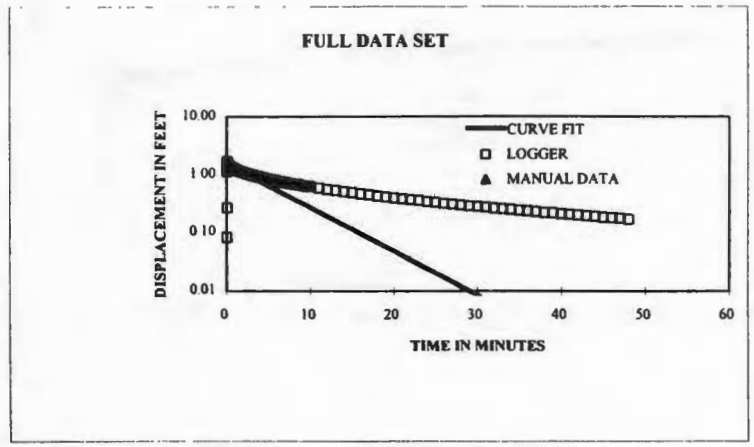
1.57E-04	cm/sec
3.09E-04	ft/min
0.44	ft/day

Casing stickup	2.36	feet
Static water level (from top of casing)	4.71	feet
Depth to bottom of screen (from ground level)	12.70	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.20	feet
Depth to "impermeable boundary"	13.30	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.50	feet
ΔH at time t (Y_t)	0.55	feet
Time	5.80	minutes



Bouwer-Rice Parameters

feet	cm		cm	
2.35	71.63	*SW*		
10.35	315.47	*H*	86.40	*L/Rw*
5.5	167.64	*Ts*	0.95	*H/D*
0.083	2.54	*Rw*	3.90	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.63	*C*
7.20	219.46	*L*	1.97	*Ln[(D-H)/Rw]'*
10.95	333.76	*D*	1.97	*Ln[(D-H)/Rw]*
1.5	45.72	Y_0	3.47	equation (8)
0.55	16.76	Y_t	3.70	equation (9)
	348.00	*t (seconds)*	3.70	*Ln(Re/Rw)*
	1.00	*M*	1.6E-04	equation (5)
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-25**

Test Date: **5/9/99**

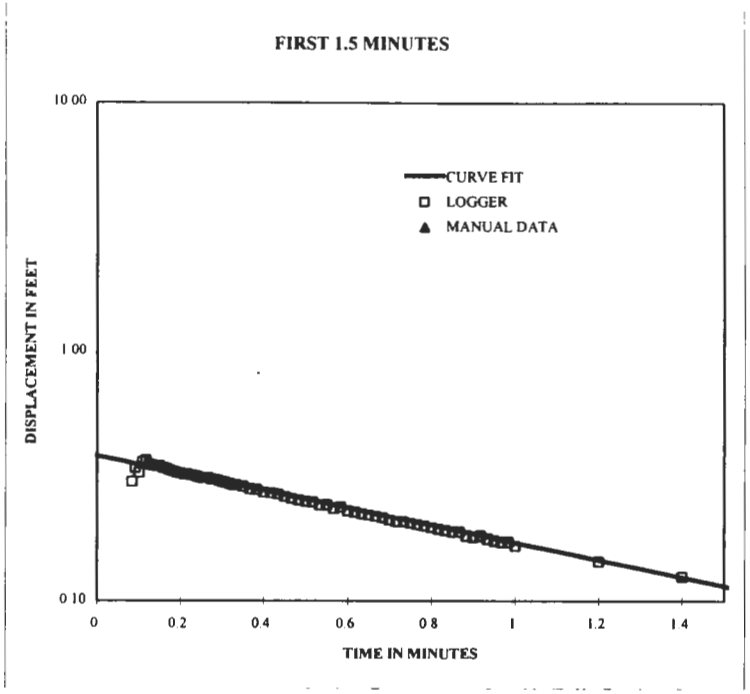
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

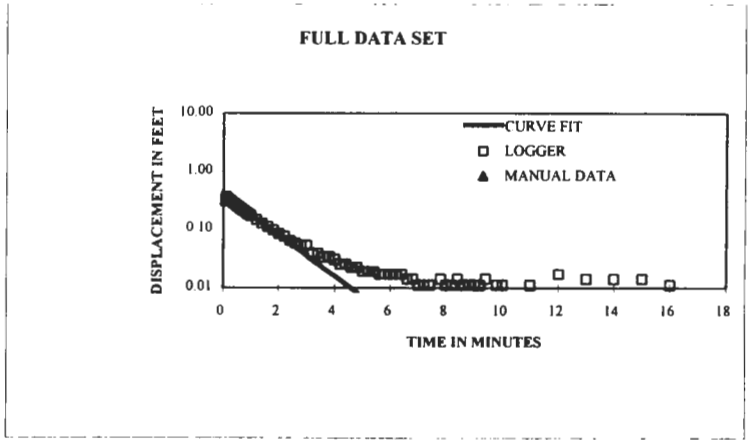
9.29E-04	cm/sec
1.83E-03	ft/min
2.63	ft/day

Casing stickup	2.78	feet
Static water level (from top of casing)	6.95	feet
Depth to bottom of screen (from ground level)	9.80	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	4.90	feet
Depth to "impermeable boundary"	10.30	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	0.38	feet
ΔH at time t (Y_t)	0.12	feet
Time	1.50	minutes



Bouwer-Rice Parameters

feet	cm		cm	
4.17	127.10	*SW*		
5.63	171.60	*H*	58.80	*L/Rw*
4.9	149.35	*Ts*	0.92	*H/D*
0.083	2.54	*Rw*	3.20	*A*
0.083	2.54	*Rc*	0.48	*B*
0.167	5.08	*DS*	2.80	*C*
4.90	149.35	*L*	1.79	*Ln[(D-H)/Rw]'*
6.13	186.84	*D*	1.79	*Ln[(D-H)/Rw]*
0.38	11.58	Y_o	3.03	equation (8)
0.115	3.51	Y_t	3.24	equation (9)
	90.00	*t (seconds)*	3.24	*Ln(Re/Rw)*
	1.00	*M*	9.3E-04	equation (5)
	0.30	*n*		



Bouwer, Herman 1989 "The Bouwer and Rice Slug Test - An Update" Ground Water vol. 27, no 3, May-June 1989.

Bouwer, H. and R.C. Rice 1976 A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot**
Project: **SEAD-12 RI/FS**
Project No.: **730047-01001**
Well No.: **MW12-30**
Test Date: **5/10/99**

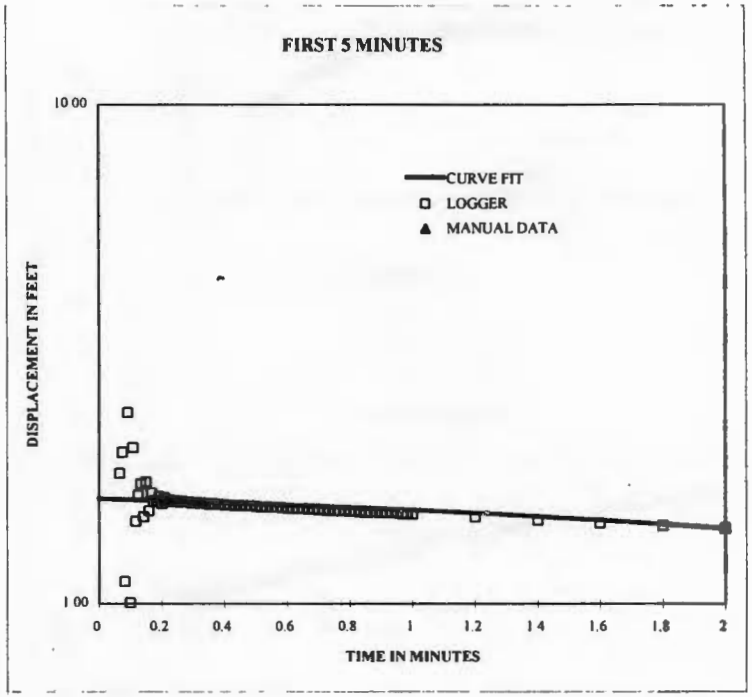
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

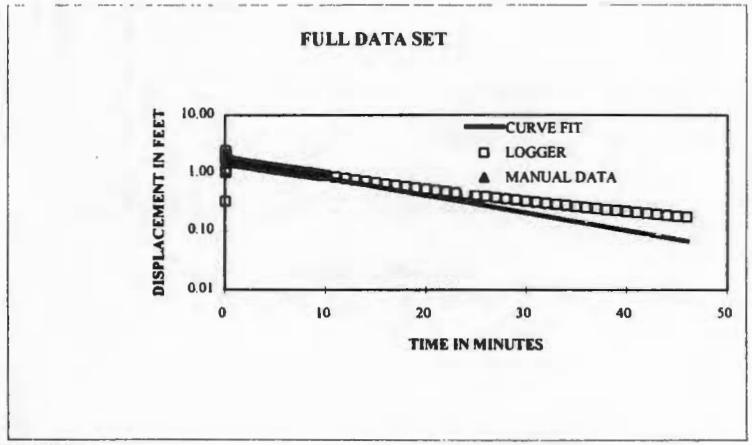
6.37E-05	cm/sec
1.25E-04	ft/min
0.18	ft/day

Casing stickup	2.30	feet
Static water level (from top of casing)	4.55	feet
Depth to bottom of screen (from ground level)	13.30	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	7.20	feet
Depth to "impermeable boundary"	14.10	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.62	feet
ΔH at time t (Y_t)	1.41	feet
Time	2.00	minutes



Bouwer-Rice Parameters

feet	cm		cm	
2.25	68.58	*SW*		
11.05	336.80	*H*	86.40	*L/Rw*
6.1	185.93	*Ts*	0.93	*H/D*
0.083	2.54	*Rw*	3.90	*A*
0.083	2.54	*Rc*	0.65	*B*
0.167	5.08	*DS*	3.63	*C*
7.20	219.46	*L*	2.26	*Ln[(D-H)/Rw]*
11.85	361.19	*D*	2.26	*Ln[(D-H)/Rw]*
1.62	49.38	Y_o	3.48	equation (8)
1.41	42.98	Y_t	3.74	equation (9)
	120.00	*t (seconds)*	3.74	*Ln(Re/Rw)*
	1.00	*M*	6.4E-05	equation (5)
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-33**

Test Date: **May 9, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

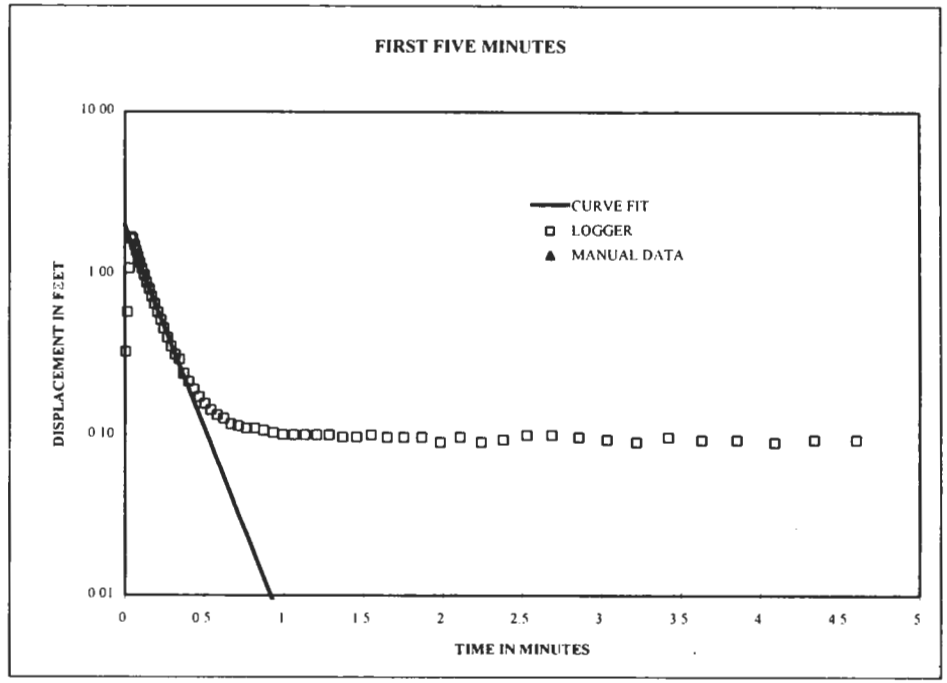
Logger Data File:

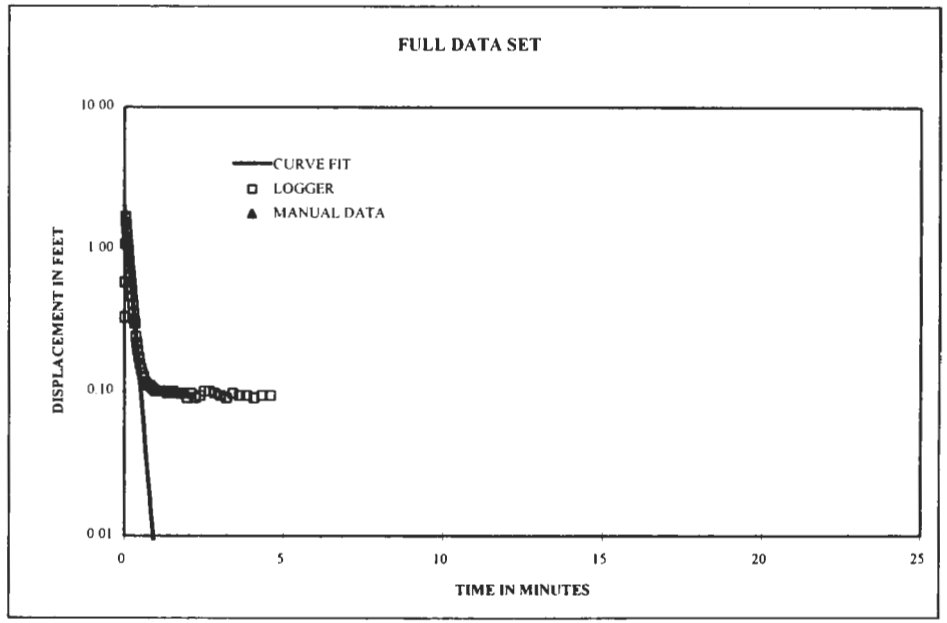
Hydraulic conductivity **5.04E-03 cm/sec**
9.92E-03 ft/min
14.29 ft/day

Casing stickup	2.84	feet
Static water level (from top of casing)	6.61	feet
Depth to bottom of screen (from ground level)	12.55	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	6.55	feet
Depth to "impermeable boundary"	15.04	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.000	feet
ΔH at time t (Y_t)	0.008	feet
Time	0.95	min

Bouwer-Rice Parameters

feet	cm		cm	
3.77	114.91	*SW*		
8.78	267.61	*H*	78.60	*L/Rw*
6	182.88	*Ts*	0.78	*H/D*
0.083	2.54	*Rw*	3.70	*A*
0.083	2.54	*Rc*	0.60	*B*
0.167	5.08	*DS*	3.40	*C*
6.55	199.64	*L*	3.40	*Ln[(D-H)/Rw]'*
11.27	343.51	*D*	3.40	*Ln[(D-H)/Rw]*
2	60.96	Y_o	3.23	equation (8)
0.0082	0.25	Y_t	3.58	equation (9)
	57.00	*t (seconds)*	3.23	*Ln(Re/Rw)*
	0.30	*n*	5.0E-03	equation (5)





Bouwer, Herman 1989. "The Bouwer and Rice Slug Test - An Update" Ground Water vol 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells" Water Resources Research vol 12, no 3, June 1976.

Client: **Seneca Army Depot**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-38**

Test Date: **5/10/99**

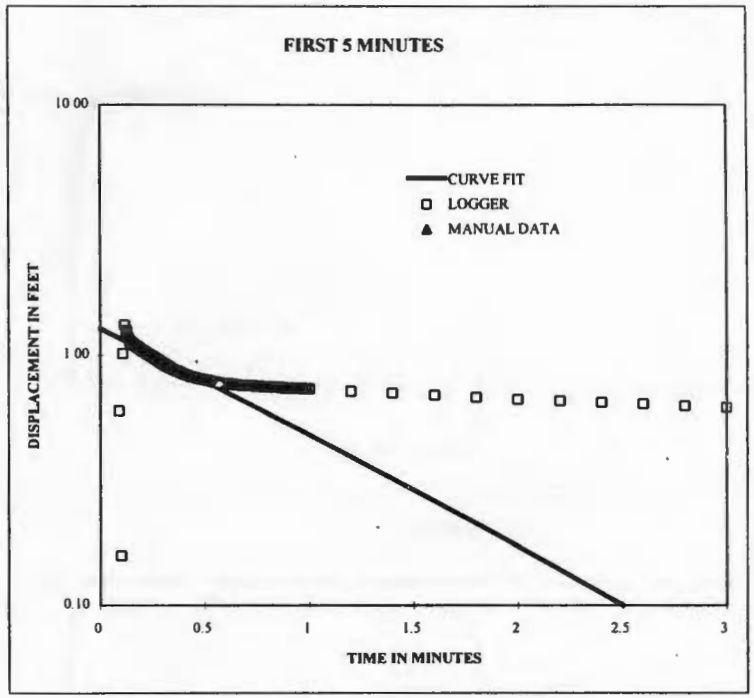
Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **R**

Hydraulic conductivity

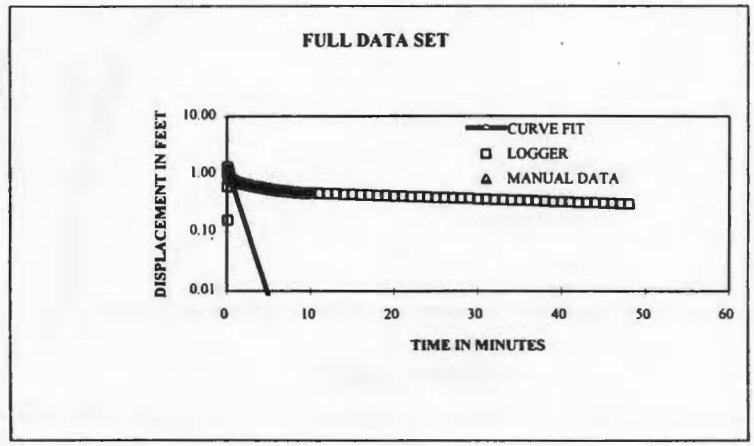
1.18E-03	cm/sec
2.33E-03	ft/min
3.35	ft/day

Casing stickup	0.05	feet
Static water level (from top of casing)	4.55	feet
Depth to bottom of screen (from ground level)	10.00	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	4.90	feet
Depth to "impermeable boundary"	10.50	feet
Estimated ratio of Kh/Kv	1.00	
Porosity of filter pack	0.30	
ΔH at time zero (Y_0)	1.28	feet
ΔH at time t (Y_t)	0.10	feet
Time	2.50	minutes



Bouwer-Rice Parameters

feet	cm		cm	
4.5	137.16	*SW*		
5.5	167.64	*H*	58.80	*L/Rw*
5.1	155.45	*Ts*	0.92	*H/D*
0.083	2.54	*Rw*	3.20	*A*
0.083	2.54	*Rc*	0.48	*B*
0.167	5.08	*DS*	2.80	*C*
4.90	149.35	*L*	1.79	*Ln[(D-H)/Rw]'*
6	182.88	*D*	1.79	*Ln[(D-H)/Rw]*
1.28	39.01	Y_o	3.02	equation (8)
0.1	3.05	Y_t	3.22	equation (9)
	150.00	*t (seconds)*	3.22	*Ln(Re/Rw)*
	1.00	*M*	1.2E-03	equation (5)
	0.30	*n*		



Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no. 3, May-June 1989.

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research. vol 12, no. 3, June 1976.

Client: **Seneca Army Depot Activity**

Project: **SEAD-12 RI/FS**

Project No.: **730047-01001**

Well No.: **MW12-39**

Test Date: **May 10, 1999**

Formation Tested: **Till**

Rising (R) or Falling (F) Head Test: **rising**

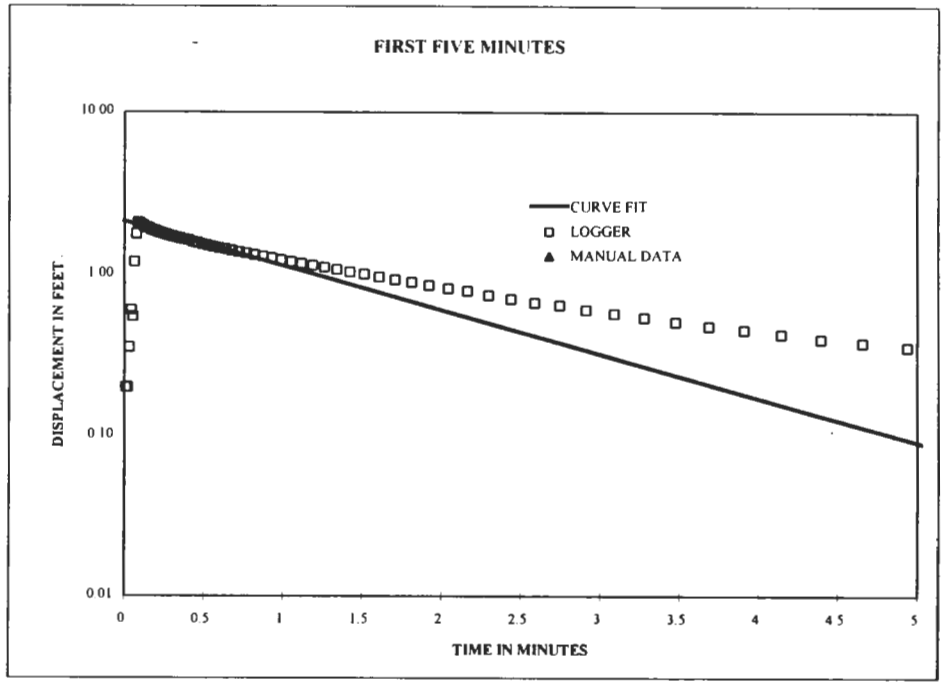
Logger Data File:

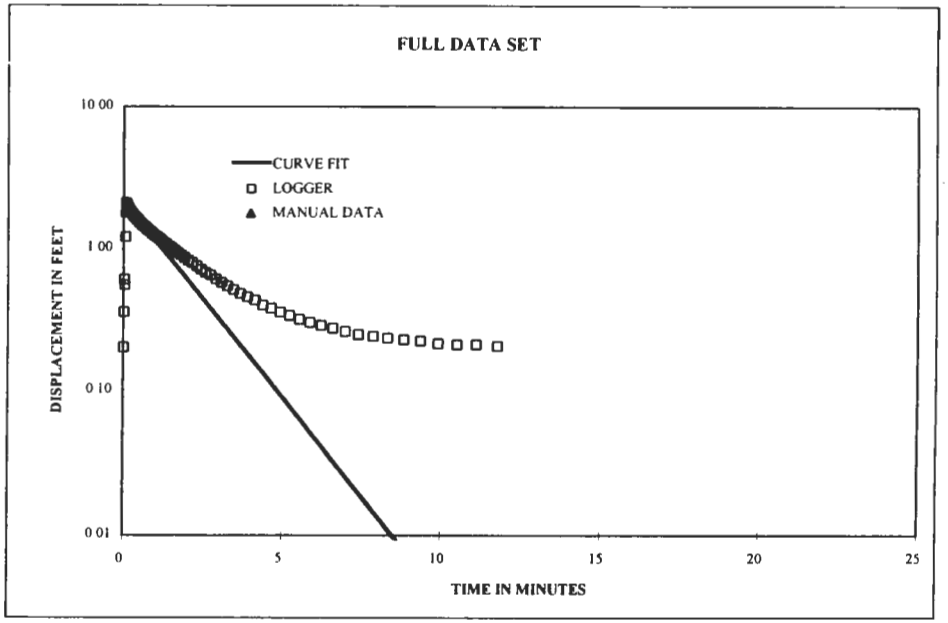
Hydraulic conductivity **7.76E-04** cm/sec
1.53E-03 ft/min
2.20 ft/day

Casing stickup	-0.22	feet
Static water level (from top of casing)	2.50	feet
Depth to bottom of screen (from ground level)	10.00	feet
Boring diameter	8.00	inches
Casing diameter	2.00	inches
Screen diameter	2.00	inches
Screen length	4.90	feet
Depth to "impermeable boundary"	10.50	feet
Porosity of filter pack	0.30	
Slug diameter (optional)		inches
Slug length (optional)		feet
Theoretical ΔH at time zero (Y_0)	0.00	feet
Actual ΔH at time zero (Y_0)	2.150	feet
ΔH at time t (Y_t)	0.008	feet
Time	8.80	min

Bouwer-Rice Parameters

feet	cm		cm	
2.72	82.91	*SW*		
7.28	221.89	*H*	58.80	*L/Rw*
5.1	155.45	*Ts*	0.94	*H/D*
0.083	2.54	*Rw*	3.20	*A*
0.083	2.54	*Rc*	0.48	*B*
0.167	5.08	*DS*	2.80	*C*
4.90	149.35	*L*	1.79	*Ln[(D-H)/Rw]'*
7.78	237.13	*D*	1.79	*Ln[(D-H)/Rw]*
2.15	65.53	Y_0	3.17	equation (8)
0.0082	0.25	Y_t	3.40	equation (9)
	528.00	*t (seconds)*	3.40	*Ln(Re/Rw)*
	0.30	*n*	7.8E-04	equation (5)





Bouwer, Herman. 1989. "The Bouwer and Rice Slug Test - An Update". Ground Water vol. 27, no 3, May-June 1989

Bouwer, H. and R.C. Rice. 1976. A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers With Completely or Partially Penetrating Wells". Water Resources Research vol 12, no. 3, June 1976.

APPENDIX E

RESRAD MODEL INPUTS AND OUTPUT FOR DCGL DEVELOPMENT

(RESRAD Backup for Risk Assessment is found in Appendix L)

APPENDIX E – RESRAD MODEL INPUTS

RESRAD requires 122 input parameters for the model setup. The input parameters are divided into ten categories:

- Potential exposure pathways;
- Basic Radiation Dose Limit;
- Contaminated soil zone parameters;
- Cover, contaminated, and uncontaminated saturated zone hydrogeologic data;
- Unsaturated zone parameters;
- Occupancy, inhalation, and external gamma data;
- Ingestion dietary and non-dietary data;
- Site specific radiochemistry data;
- Storage and calculation time;
- Bio-accumulation data.

Site specific data were used when it was available. In cases where site specific data were not available, conservative values drawn from literature or RESRAD default values were used. Input parameters are presented in **Table E-1**. References are given for all non-default parameters utilized in the RESRAD modeling runs. Actual model run results are provided at the end of this Appendix.

Justification of Site-Specific Parameters

The following subsections provide justification for the selection of site-specific input parameters used in the RESRAD modeling runs. Because of variability in exposure scenario parameters, sensitivity analyses were performed by running RESRAD for an on-site resident and an on-site worker. The intent is to use the most conservative $DCGL_s$ for SEAD-12 sites that resulted from these two scenarios. DCGLws were established for soils within each of the potential areas of concern.

Transport Factors

The input transport factors, or K_d values, are based on soil conditions at the site. Based on the SEAD-12 soil investigation, the SEAD-12 soil is predominantly clay with a pH of 6 to 6.5 (Parsons Engineering Science, 1996). Uranium K_d factors are based on the DOE, "Data Collection Handbook to support Modeling Impacts of Radioactive Material in Soil (DOE, 1993). The Kd for clay soil was selected from this handbook.

Radiation Dose Limit

The basic radiation dose limit of 10 millirems per year was used based on NYSDEC TAGM 4006

Area of Contaminated Zone. The area of contamination for each of the sites modeled is listed in **Table E-2.** It was assumed for the purposes of modeling that entire potential area of concern was impacted. Because the Class 3 area represents a large portion of SEAD-12 (any area not designated as Class 1 or Class 2), the Class 3 area used in the modeling was a typical residential area of 1/3 acre (1349 m^2).

Thickness of Contaminated Zone and Uncontaminated Unsaturated Zone. The thickness of the contaminated zones and uncontaminated zones are based on site-specific conditions, **Table E-2.**

The thickness of the uncontaminated unsaturated zone is the distance from the bottom of the contaminated zone to the groundwater table. Because the depth to groundwater varies seasonally, the thickness of the uncontaminated unsaturated zone was assumed to be 1 m for all the sites.

Cover Depth. It was conservatively assumed that any impacted area at the site had not been covered. Therefore, a cover depth of 0 m was selected.

Hydrologic Data. The hydrologic data input parameters are based on the soil and condition at the site. The site is primarily clay, while the RESRAD default parameters more closely model sand type conditions. The hydrologic data input parameters such as total porosity, effective porosity, hydraulic conductivity, and the contaminant zone b parameter were taken from the USDOE, "Data Collection Handbook to Support Modeling the Impacts of Radioactive Material in Soil (USDOE, 1993). Hydrologic data including depth to groundwater, hydraulic gradient, and screened interval are site specific and described in Section 3.4 of the RI.

Receptor Selection and Exposure Parameters

Model runs were performed for the on-site residential farmer and the on-site worker scenario to evaluate both the worst case and the more likely exposure scenario given the future use of the land at SEAD-12.

For the residential farmer scenario, exposure pathways evaluated include incidental and direct radiation from soil, inhalation of airborne dust from soil, and ingestion of groundwater used as drinking water. Indirect pathways such as ingestion of meat, produce and milk are also included. It is assumed that the fraction of the ingested produce, meat, and milk is also contaminated from on-site exposure. Justification of the key exposure parameters used to quantify this scenario is provided below. For the worker scenario, exposure pathways evaluated include incidental and direct radiation from soil and inhalation of airborne dust from soil.

Where applicable, EPA Exposure Factors Handbook (EPA, 1997b) was used to develop these parameters because this guidance supercedes all other EPA guidance on exposure parameters published prior to its issue.

Inhalation Rate. An inhalation rate of 11,000 cubic meters per year (m^3/yr) (18 m^3/day) based on an active adult (EPA, 1996) is used. This value is significantly higher then the RESRAD default parameter of 8,400 m^3/yr. The higher inhalation rate was used, increasing the potential risk to the receptor and corresponding to a more conservative $DCGL_W$.

Ingestion Rate. Soil ingestion rate is based on a child receptor per "Superfund Standards Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure" (EPA, 1993). The conservative ingestion rate of 200 milligrams per day (mg/day) (73 grams per year [g/yr]) was utilized to model the worst-case scenario of a child receptor for the on-site resident. An ingestion rate of 100 mg/day was used for the worker scenario. The RESRAD default ingestion rate of 100 mg/day is for an adult receptor.

Dietary ingestion rates used were taken from EPA (1997b). The input parameters for livestock fodder and soil intake are based on the EPA guidance "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities" (EPA, 1998).

Indoor/Outdoor Factors. RESRAD scenarios include inputs to determine risk based on time spent indoors and outdoors. It was assumed that 65-percent of the residential receptors time will be spent indoors and 8-percent will be spent outdoors (EPA, 1997b). The worker is assumed spend 23 percent of their total annual time outdoors (8 hours a day, 250 days a year).

TABLE E-1
INPUT PARAMETERS FOR RESRAD
SEAD-12 Remedial Investigation
Seneca Army Depot Activity

Input Parameter	Default Value	Units	User Inputs (if not default) Residential Scenario	Worker Scenario	Basis/Reference
Pathway					
External gamma	--		active	active	
Inhalation (except radon)	--		active	active	
Plant ingestion	--		active	suppressed	
Meat ingestion	--		active	suppressed	
Milk ingestion	--		active	suppressed	See conceptual site model (figure xx)
Aquatic foods	--		active	suppressed	
Drinking water	--		active	active	
Soil ingestion	--		active	active	
Radon	--		active	suppressed	
Soil Concentrations					
Initial Concentration (pCi/g)					
Ac-227	NA		100.00		
Co-57	NA		101.00		
Co-60	NA		102.00		
Cs-137+D	NA		103.00		
H-3	NA		104.00		
Pa-231	NA		105.00		
Pb-210+D	NA		106.00		
Pm-147	NA		107.00		Arbitrary, DCGL indipendent of initial concentration
Pu-239	NA		108.00		
Ra-226+D	NA		109.00		
Ra-228+D	NA		110.00		
Sm-147	NA		111.00		
Th-228+D	NA		112.00		
Th-230	NA		113.00		
Th-232	NA		114.00		
U-234	NA		115.00		
U-235+D	NA		116.00		
U-238+D	NA		117.00		
Transport Factors					
Distribution coefficients					
Ac-227	20	cc/g	2400		
Co-57	1000	cc/g	550		
Co-60	1000	cc/g	550		
Cs-137+D	1900	cc/g	1000		
H-3	0	cc/g	0		
Pa-231	50	cc/g	2700		
Pb-210+D	100	cc/g	550		
Pm-147	-1	cc/g	-1		
Pu-239	2000	cc/g	5100		(1) for clay soils. Soil type in (2)
Ra-226+D	9100	cc/g	7		
Ra-228+D	9100	cc/g	7		
Sm-147	-1	cc/g	-1		
Th-228+D	60000	cc/g	5800		
Th-230	60000	cc/g	5800		
Th-232	60000	cc/g	5800		
U-234	1600	cc/g	5		
U-235+D	1600	cc/g	5		
U-238+D	1600	cc/g	5		
Number of Unsaturated Zones	1		1		--
Water Concentration					
Time since material placement	0	years	Default used		--
Groundwater Concentration	0	pCi/L	Default used		--
Solubility Limit	0	mol/L	Default used		--
Leach Rate	0	/year	Default used		--
Use Plant Soil ratio	No		Default used		--
Calculation Times					
Basic Radiation Dose Limit	30	mrem/yr	10		NYSDEC TAGM
Calculation Times	1,3,10,30,100, 300, 1000	years	Default used		--
Contaminated Zone					
Thickness of contaminated zone	Site -Specific	m	Site-Specific (Table 1)		
Area of contaminated zone	Site -Specific	m^2	Site-Specific (Table 1)		--
Length parallel to aquifer flow	Site -Specific	m^2	Site-Specific (Table 1)		--
Cover and Contaminated Zone Hydrological Data					

TABLE E-1
INPUT PARAMETERS FOR RESRAD
SEAD-12 Remedial Investigation
Seneca Army Depot Activity

Input Parameter	Default Value	Units	User Inputs (if not default) Residential Scenario	Worker Scenario	Basis/Reference
Cover depth.	0	m	Default used		Contamination begins at surface
Density of cover material	1.5	g/cc	not used		--
Cover erosion rate	0 001	m/yr	not used		--
Density of contaminated zone	1.5	g/cc	1.5		--
Contaminated zone erosion rate	0.001	m/yr	0.00006		(1) Appendix A - Assume 2% slope, farm family
Contaminated zone total porosity	0.4		0.37		(2)
Contaminated zone effective porosity	0.2		0.06		(3)
Contaminated zone hydraulic conductivity	10	m/yr	208		(4) P 3.40
Contaminated zone b parameter	5.3		7.75		(1) App. E, Silty Clay Loam
Humidity in air	8	g/m3	6.6		(1) App. L, Fig. L-1
Evapotranspiration coefficient	0.5		0.7		(3) calcs attached
Wind speed	2	m/s	3		Estimated using wind rose for Syracuse NY (Fig 2-7)
Precipitation	1	m/yr	0.75		(4) p 1-16
Irrigation	0.2	m/yr	0		No irigation on site
Irrigation mode	Overhead		NA		For overhead
Runoff Coefficient	0 2		0.2		--
Watershed area for nearby stream or pond	1000000	m^2	13000000		(4) Fig 1-9 attached
Accuracy for water/soil computation	0.001		NA		--
Saturated zone hydrological data					
Density of saturated zone	1.5	g/cc	1.5		--
Saturated zone total porosity	0.4		0.37		(2)
Saturated zone effective porosity	0.2		0.175		(3)
Saturated zone hydraulic conductivity	100	m/yr	208		(4) p. 3-40
Saturated zone hydraulic gradient	0.02		0.012		(4) p. 3-41
Saturated zone b parameter.	5.3		5.3		
Water table drop rate	0.001	m/yr	0		Assumption
Well pump intake depth (below water table)	10	m	3		(4) p. 1-14
Model: nondispersion (ND) or mass balance (MB)	ND		ND		(1) App. E, p. 207
Well pumping rate	250	m^3/yr	50 (100 ml/min)		(5)
Uncontaminated unsaturated zone parameters					
Number of unsaturated zones	1		Default used		--
Unsaturated zone 1					
Thickness	4	m	1		Site-Specific, see text
Soil density	1.5	g/cc	Default used		--
Total porosity	0.4		0.37		(2)
Effective porosity	0.2		0.175		(3)
Hydraulic conductivity	10	m/yr	208		(1) App. E, silty clay loam
Soil-specific b parameter	5.3		7.75		(4) p. 3-40
Occupancy					
Inhalation rate	8400	m^3/yr	11,000	11,000	(7)
Mass loading for inhalation	0.0001	g/m^3	Default used		(7)
Exposure duration	30	yr	Default Used	1	(7)
Indoor dust filtration factor	0.4		Default Used		
External gamma shielding factor	0.7		0.2		(9)
Indoor time fraction	0.5		0.65	0	See text
Outdoor time fraction	0.25		0.08	0.23	(7)
Shape of the contaminated zone	Square		Default Used		
Ingestion pathway, dietary data					
Fruit, vegetable, and grain consumption	160	kg/yr	301	NA	(7)
Leafy vegetable consumption	14	kg/yr	0	NA	(7) rate for fruits inlcudes leafy vegaetables
Milk consumption	92	L/yr	82	NA	(7)
Meat and poultry consumption	63	kg/yr	45	NA	(7)
Soil ingestion	36.5	g/yr	73	Default used	(7)
Groundwater ingestion	510	L/yr	Default Used		--
Contaminated fractions					
Drinking water	1		1	NA	--
Household water	1		1	NA	--
Livestock water	1		1	NA	--
Irrigation water	1		1	NA	--
Plant food	-1		0.5	NA	Assumed half of plant food is from offsite
Meat	-1		0.5	NA	Assumed half of meat is from offsite
Milk	-1		0.5	NA	Assumed half of milk is from offsite
Ingestion pathway, nondietary data					
Livestock fodder intake for meat	68	kg/d	11 8	NA	(10) Table B-3-10
Livestock fodder intake for milk	55	kg/d	20.3	NA	(10) Table B-3-11
Livestock water intake for meat	50	L/d	50	NA	--

TABLE E-1
INPUT PARAMETERS FOR RESRAD
SEAD-12 Remedial Investigation
Seneca Army Depot Activity

Input Parameter	Default Value	Units	User Inputs (if not default)		
			Residential Scenario	Worker Scenario	Basis/Reference
Livestock water intake for milk	160	L/d	160	NA	--
Livestock soil intake	0.5	kg/d	0.5	NA	--
Mass loading for foliar deposition	0.0001	g/m^3	Deafult Used		--
Depth of soil mixing layer	0.15	m	Deafult Used		--
Depth of roots	0.9	m	Deafult Used		--
Groundwater fractional usage					
Drinking water	1		Deafult Used		--
Household water.	1		Deafult Used		--
Livestock water	1		Deafult Used		--
Irrigation water	1		Deafult Used		--
			Deafult Used		
Radon data			Deafult Used		
Cover total porosity	0.4		Deafult Used		--
Cover volumetric water content	0.05		Deafult Used		--
Cover radon diffusion coefficient	0.000002	m^2/s	Deafult Used		--
Building foundation thickness	0.15	m	Deafult Used		--
Building foundation density	2.4	g/cc	Deafult Used		--
Building foundation total porosity	0.1		Deafult Used		--
Building foundation volumetric water content	0.03		Deafult Used		--
Building foundation radon diffusion coefficient	0.0000003	m^2/s	Deafult Used		--
Contaminated radon diffusion coefficient	0.000002	m^2/s	Deafult Used		--
Radon vertical dimension of mixing	2	m	Deafult Used		--
Building air exchange rate	0.5	/hr	Deafult Used		--
Building room height	2.5	m	Deafult Used		--
Building indoor area factor	0		Deafult Used		--
Foundation depth below ground surface	-1	m	Deafult Used		--
Radon 222 emanation coefficient	0.25		Deafult Used		--
Radon 220 emanation coefficient	0.15		Deafult Used		--
Storage time before use data					
Fruits, nonleafy vegetables, and grain	14	days	--		--
Leafy vegetables	1	days	--		--
Milk	1	days	--		--
Meat	20	days	--		--
Fish	7	days	NA		--
Crustacea and mollusks	7	days	NA		--
Well water	1	days	--		--
Surface Water	1	days	--		--
Livestock fodder	45	days	--		--

Sources:

1 Argonne National Laboratory, Manual for Implementing Residual Radioactive Material Guidelines Using RESRAD including Data Collection Handbook, Version 5.0, September 1993

2 U.S. Army Environmental Hygiene Agency (USAEHA), Phase 4 Evaluation of the Open Burning/Open Detonation Grounds. Investigation of Soil Contamination, Hazardous Waste Study No. 37-26-047

3 Calculation of Evapotranspiration Coefficient, RESRAD Manual, Version 5, page 198, with following parameters from
Parsons Engineering Science, Final Groundwater Modeling Report at the Ash Landfill Site, June 1996
I = Infiltration Rate, m/yr (7 in/year = 0.18 m/yr)
Ce = Evapotranspiration Coefficient
Cr = runoff coefficient (0.2)
Pr = Precipitation rate, annual rainfall, m/yr (0.75 m/yr)
Irr = Irrigation rate (0 m/yr)

4 Parsons Engineering Science, Remedial Investigation Report at the Open Burning Grounds, September 1994

5 Based on field experience that 100 ml/min is a sustainable rate for extraction of groundwater from upper aquifer during well purging in preparation for groundwater sampling.

6 Parsons Engineering Science, Expanded Site Inspection Seven Low Priority AOCs – SEADs 60, 62, 63, 64 (A, B, C, D) 67, 70, and 71, April 1996

7 EPA, 1996, Exposure Factors Handbook Volume I, II, and III, Office of Research and Developement

8 EPA, 1990, Exposure Factors Handbook, Office of Health and Environmental Assessment, Washington, D.C., EPA/600/8-89/043.

9 Shielding factor from Figure xx. Cember, Health Physics and Radiation Protection, assuming 6 inch concrete foundation and gamma of 1.7 MeV

10 EPA, 1998, Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities, Volume 3, Peer Review Draft. EPA530-D-98-001C July.

Table E-2
Potential Areas of Concern Dimensions
SEAD-12 Remedial Investigation
Seneca Army Depot Activity

Site	Area Name	Depth to Bedrock (ft)	Depth to undisturbed till (ft)	Area of contamination (m**2)	Length parallel to flow (m)
A	EM 5	3.5	3.5	6438	50.3
B	EM 6	8	8	1510	49.5
C	Bldg 819/EM 27	8	2.9	6401	103
D	Bldg 815/816	2	2	6837	61.7
E	Disposal Pit A/B	6	6	2195	50.3
F	Disposal Pit C	10	10	13111	96
G	Former Dry Waste Disposal Pit	3.5	2.5	14254	164
H	Class III area	7.5	2	1349	36.7

Representative RESRAD Output from Worker DCGL Determination (Disposal Pit A/B)

Table of Contents

Part I: Mixture Sums and Single Radionuclide Guidelines

Dose Conversion Factor (and Related) Parameter Summary ... 2
Site-Specific Parameter Summary ... 6
Summary of Pathway Selections ... 12
Contaminated Zone and Total Dose Summary ... 13
Total Dose Components
Time = 0.000E+00 ... 14
Time = 1.000E+00 ... 16
Time = 3.000E+00 ... 18
Time = 1.000E+01 ... 20
Time = 3.000E+01 ... 22
Time = 1.000E+02 ... 24
Time = 3.000E+02 ... 26
Time = 1.000E+03 ... 28
Dose/Source Ratios Summed Over All Pathways ... 30
Single Radionuclide Soil Guidelines ... 31
Dose Per Nuclide Summed Over All Pathways ... 33
Soil Concentration Per Nuclide ... 35

Dose Conversion Factor (and Related) Parameter Summary
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.720E+00	6.720E+00	DCF2(1)
B-1	Co-57	9.070E-06	9.070E-06	DCF2(2)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(3)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(4)
B-1	H-3	6.400E-08	6.400E-08	DCF2(5)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(6)
B-1	Pb-210+D	2.320E-02	2.320E-02	DCF2(7)
B-1	Pm-147	3.920E-05	3.920E-05	DCF2(8)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(9)
B-1	Ra-226+D	8.600E-03	8.600E-03	DCF2(10)
B-1	Ra-228+D	5.080E-03	5.080E-03	DCF2(11)
B-1	Sm-147	7.470E-02	7.470E-02	DCF2(12)
B-1	Th-228+D	3.450E-01	3.450E-01	DCF2(13)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(14)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(15)
B-1	U-234	1.320E-01	1.320E-01	DCF2(16)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(17)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(18)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.480E-02	DCF3(1)
D-1	Co-57	1.180E-06	1.180E-06	DCF3(2)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(3)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(4)

D-1	H-3	6.400E-08	6.400E-08	DCF3(5)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(6)
D-1	Pb-210+D	7.270E-03	7.270E-03	DCF3(7)
D-1	Pm-147	1.050E-06	1.050E-06	DCF3(8)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(9)
D-1	Ra-226+D	1.330E-03	1.330E-03	DCF3(10)
D-1	Ra-228+D	1.440E-03	1.440E-03	DCF3(11)
D-1	Sm-147	1.850E-04	1.850E-04	DCF3(12)
D-1	Th-228+D	8.080E-04	8.080E-04	DCF3(13)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(14)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(15)
D-1	U-234	2.830E-04	2.830E-04	DCF3(16)
D-1	U-235+D	2.670E-04	2.670E-04	DCF3(17)
D-1	U-238+D	2.690E-04	2.690E-04	DCF3(18)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34				
D-34	Co-57 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(2,1)
D-34	Co-57 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(2,2)
D-34	Co-57 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,3)
D-34				

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(3,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(3,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(3,3)
D-34				
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(4,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(4,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(4,3)
D-34				
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(5,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(5,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(5,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(6,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(6,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(6,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(7,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(7,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(7,3)
D-34				
D-34	Pm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(8,1)
D-34	Pm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,2)
D-34	Pm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(8,3)
D-34				
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(9,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(9,2)

D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(9,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(10,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(10,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(11,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(11,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(11,3)
D-34				
D-34	Sm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(12,1)
D-34	Sm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(12,2)
D-34	Sm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(12,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(13,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(13,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(13,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(14,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(14,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(14,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(15,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(15,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(16,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(16,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(16,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(17,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(17,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(17,3)
D-34				
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(18,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(18,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(18,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5				
D-5	Co-57 , fish	3.000E+02	3.000E+02	BIOFAC(2,1)
D-5	Co-57 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(2,2)
D-5				
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(3,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(3,2)
D-5				
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(4,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5				

D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(5,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(5,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(6,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(6,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(7,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5				
D-5	Pm-147 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Pm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(8,2)
D-5				
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(9,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(10,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(10,2)
D-5				
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(11,2)
D-5				
D-5	Sm-147 , fish	2.500E+01	2.500E+01	BIOFAC(12,1)
D-5	Sm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(12,2)
D-5				
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(13,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(13,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

Menu	Parameter	Current Value	Default	Parameter Name
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(14,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(14,2)
D-5				
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(15,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(15,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(16,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(16,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(17,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(17,2)
D-5				
D-5	U-238+D , fish	1.000E+01	1.000E+01	BIOFAC(18,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(18,2)

Site-Specific Parameter Summary

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	2.195E+03	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.800E+00	2.000E+00	---	THICK0

R011	Length parallel to aquifer flow (m)	not used	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	1.000E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Ac-227	1.000E+02	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Co-57	1.000E+02	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+02	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+02	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+02	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Pa-231	1.000E+02	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Pb-210	1.000E+02	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Pm-147	1.000E+02	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+02	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Ra-226	1.000E+02	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Ra-228	1.000E+02	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Sm-147	1.000E+02	0.000E+00	---	S1(12)
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+02	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+02	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+02	0.000E+00	---	S1(15)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+02	0.000E+00	---	S1(16)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+02	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+02	0.000E+00	---	S1(18)
R012	Concentration in groundwater (pCi/L): Ac-227	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Co-57	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Pa-231	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Pb-210	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Pm-147	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Ra-226	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Ra-228	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): Sm-147	not used	0.000E+00	---	W1(12)
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(13)
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(14)
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(15)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(16)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(17)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(18)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV

R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	6.000E-05	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	3.700E-01	4.000E-01	---	TPCZ
R013	Contaminated zone effective porosity	1.750E-01	2.000E-01	---	EPCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.080E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.750E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	6.600E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	7.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	7.500E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	not used	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	not used	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.700E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	1.750E-01	2.000E-01	---	EPSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.080E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	1.200E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	3.000E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	5.000E+01	2.500E+02	---	UW
R015	Number of unsaturated zone strata	not used	1	---	NS
R015	Unsat. zone 1, thickness (m)	not used	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	not used	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	not used	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	not used	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	not used	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	not used	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Ac-227				
R016	Contaminated zone (cm**3/g)	2.400E+03	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+01	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	not used	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.778E-05	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for Co-57				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.212E-04	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (if different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCC(3)

R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(3,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.212E-04	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	1.900E+03	1.000E+03	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+03	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+03	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.508E-05	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for H-3				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	not used	0.000E+00	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	not used	0.000E+00	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.957E-01	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Pa-231				
R016	Contaminated zone (cm**3/g)	2.700E+03	5.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.469E-05	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for Pb-210				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+02	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	not used	1.000E+02	---	DCNUCU(7,1)
R016	Saturated zone (cm**3/g)	not used	1.000E+02	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.212E-04	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for Pm-147				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.081E-05	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	5.100E+03	2.000E+03	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	not used	2.000E+03	---	DCNUCU(9,1)
R016	Saturated zone (cm**3/g)	not used	2.000E+03	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.307E-05	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Ra-226				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(10,1)
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.326E-06	ALEACH(10)

R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
R016	Distribution coefficients for Ra-228				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	not used	7.000E+01	---	DCNUCU(11,1)
R016	Saturated zone (cm**3/g)	not used	7.000E+01	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.326E-06	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)
R016	Distribution coefficients for Sm-147				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	not used	-1.000E+00	---	DCNUCU(12,1)
R016	Saturated zone (cm**3/g)	not used	-1.000E+00	---	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	8.081E-05	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
R016	Distribution coefficients for Th-228				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(13,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.149E-05	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
R016	Distribution coefficients for Th-230				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.149E-05	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
R016	Distribution coefficients for Th-232				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	not used	6.000E+04	---	DCNUCU(15,1)
R016	Saturated zone (cm**3/g)	not used	6.000E+04	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.149E-05	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.166E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.166E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
R016	Distribution coefficients for U-238				

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	not used	5.000E+01	---	DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	not used	5.000E+01	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.166E-05	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
R017	Inhalation rate (m**3/yr)	1.100E+04	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-03	1.000E-04	---	MLINH
R017	Exposure duration	1.000E+00	3.000E+01	---	ED
R017	Shielding factor, inhalation	1.000E+00	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	1.000E+00	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	0.000E+00	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	2.300E-01	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	not used	1.600E+02	---	DIET(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Leafy vegetable consumption (kg/yr)	not used	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	not used	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	not used	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	1.752E+02	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	not used	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	not used	1.000E+00	---	FDW

R018	Contamination fraction of household water	not used	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	not used	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	not used	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	not used	-1	---	FPLANT
R018	Contamination fraction of meat	not used	-1	---	FMEAT
R018	Contamination fraction of milk	not used	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	not used	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	not used	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	not used	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	not used	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	not used	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	not used	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	not used	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	not used	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	not used	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	not used	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	not used	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	not used	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	not used	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	not used	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	not used	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	not used	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	not used	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	not used	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	not used	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	not used	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	not used	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	not used	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	not used	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)

STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	not used	1.500E-01	---	FLOOR
R021	Bulk density of building foundation (g/cm**3)	not used	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	not used	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	not used	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	not used	3.000E-07	---	DIFFL
R021	in contaminated zone soil	not used	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	not used	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	not used	5.000E-01	---	REXG
R021	Height of the building (room) (m)	not used	2.500E+00	---	HRM
R021	Building interior area factor	not used	0.000E+00	---	FAI
R021	Building depth below ground surface (m)	not used	-1.000E+00	---	DMFL
R021	Emanating power of Rn-222 gas	not used	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	not used	1.500E-01	---	EMANA(2)

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	suppressed
4 -- meat ingestion	suppressed
5 -- milk ingestion	suppressed
6 -- aquatic foods	suppressed
7 -- drinking water	suppressed
8 -- soil ingestion	active
9 -- radon	suppressed
Find peak pathway doses	suppressed

Contaminated Zone Dimensions

Area:	2195.00 square meters
Thickness:	1.80 meters
Cover Depth:	0.00 meters

Initial Soil Concentrations, pCi/g

Ac-227	1.000E+02
Co-57	1.000E+02
Co-60	1.000E+02
Cs-137	1.000E+02
H-3	1.000E+02
Pa-231	1.000E+02
Pb-210	1.000E+02
Pm-147	1.000E+02
Pu-239	1.000E+02

Ra-226	1.000E+02
Ra-228	1.000E+02
Sm-147	1.000E+02
Th-228	1.000E+02
Th-230	1.000E+02
Th-232	1.000E+02
U-234	1.000E+02
U-235	1.000E+02
U-238	1.000E+02

0

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 10 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years):	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
TDOSE(t):	1.593E+03	1.543E+03	1.468E+03	1.320E+03	1.215E+03	1.178E+03	1.167E+03	1.154E+03
M(t):	1.593E+02	1.543E+02	1.468E+02	1.320E+02	1.215E+02	1.178E+02	1.167E+02	1.154E+02

0Maximum TDOSE(t): 1.593E+03 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years
Water Independent Pathways (Inhalation excludes radon)

0

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	4.232E+01	0.0266	2.139E+02	0.1343	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.964E+01	0.0374
Co-57	1.071E+01	0.0067	2.888E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.755E-03	0.0000
Co-60	3.381E+02	0.2122	6.972E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.084E-01	0.0001
Cs-137	7.061E+01	0.0443	1.016E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.015E-01	0.0001
H-3	0.000E+00	0.0000	3.258E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.579E-04	0.0000
Pa-231	4.049E+00	0.0025	4.075E+01	0.0256	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.271E+01	0.0268
Pb-210	1.324E-01	0.0001	7.386E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.930E+01	0.0184
Pm-147	1.072E-03	0.0000	1.248E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.231E-03	0.0000
Pu-239	6.352E-03	0.0000	1.366E+01	0.0086	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.426E+01	0.0090
Ra-226	2.343E+02	0.1470	2.738E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.359E+00	0.0034
Ra-228	1.249E+02	0.0784	1.617E-01	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.803E+00	0.0036
Sm-147	0.000E+00	0.0000	2.378E+00	0.0015	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.455E-01	0.0005
Th-228	2.138E+02	0.1342	1.098E+01	0.0069	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.256E+00	0.0020
Th-230	2.593E-02	0.0000	1.038E+01	0.0065	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.208E+00	0.0014
Th-232	1.120E-02	0.0000	5.221E+01	0.0328	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.100E+01	0.0069
U-234	8.689E-03	0.0000	4.202E+00	0.0026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.140E+00	0.0007
U-235	1.610E+01	0.0101	3.916E+00	0.0025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.076E+00	0.0007
U-238	2.869E+00	0.0018	3.757E+00	0.0024	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.084E+00	0.0007
Total	1.058E+03	0.6640	3.574E+02	0.2243	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.779E+02	0.1117

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years
Water Dependent Pathways

0

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.

Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.159E+02	0.1983
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.071E+01	0.0067
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.382E+02	0.2123
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.081E+01	0.0444
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.284E-02	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.751E+01	0.0549
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.017E+01	0.0189
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.551E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.793E+01	0.0175
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.399E+02	0.1506
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.304E+02	0.0822
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.134E+00	0.0020
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.281E+02	0.1432
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.261E+01	0.0079
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.322E+01	0.0397
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.351E+00	0.0034
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.109E+01	0.0132
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.710E+00	0.0048
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.593E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

0 Water Independent Pathways (Inhalation excludes radon)

0 Radio-	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	4.099E+01	0.0266	2.072E+02	0.1343	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.777E+01	0.0374
Co-57	4.208E+00	0.0027	1.134E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.867E-03	0.0000
Co-60	2.964E+02	0.1921	6.112E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.503E-02	0.0001
Cs-137	6.899E+01	0.0447	9.423E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.969E-01	0.0001
H-3	0.000E+00	0.0000	8.224E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.509E-05	0.0000
Pa-231	5.375E+00	0.0035	4.745E+01	0.0307	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.458E+01	0.0289
Pb-210	1.283E-01	0.0001	7.159E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.840E+01	0.0184
Pm-147	8.232E-04	0.0000	9.581E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.248E-03	0.0000
Pu-239	6.352E-03	0.0000	1.366E+01	0.0088	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.426E+01	0.0092
Ra-226	2.342E+02	0.1517	2.963E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.253E+00	0.0041
Ra-228	1.717E+02	0.1113	3.277E+00	0.0021	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.072E+00	0.0039
Sm-147	0.000E+00	0.0000	2.378E+00	0.0015	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.454E-01	0.0005
Th-228	1.488E+02	0.0964	7.645E+00	0.0050	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.266E+00	0.0015
Th-230	1.274E-01	0.0001	1.038E+01	0.0067	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.211E+00	0.0014
Th-232	1.819E+01	0.0118	5.243E+01	0.0340	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.172E+01	0.0076
U-234	8.689E-03	0.0000	4.202E+00	0.0027	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.140E+00	0.0007
U-235	1.610E+01	0.0104	3.917E+00	0.0025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.077E+00	0.0007
U-238	2.869E+00	0.0019	3.757E+00	0.0024	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.084E+00	0.0007
Total	1.008E+03	0.6532	3.574E+02	0.2315	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.779E+02	0.1152

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

0 Water Dependent Pathways

0	Water	Fish	Radon	Plant	Meat	Milk	All Pathways*

Radio-Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.060E+02	0.1983
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.207E+00	0.0027
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.965E+02	0.1921
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.919E+01	0.0448
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.289E-03	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.741E+01	0.0631
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.924E+01	0.0189
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.030E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.793E+01	0.0181
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.407E+02	0.1560
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.811E+02	0.1173
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.123E+00	0.0020
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.588E+02	0.1029
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.272E+01	0.0082
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.234E+01	0.0533
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.351E+00	0.0035
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.109E+01	0.0137
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.710E+00	0.0050
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.543E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years
Water Independent Pathways (Inhalation excludes radon)

0
0

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	3.846E+01	0.0262	1.944E+02	0.1324	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.420E+01	0.0369
Co-57	6.486E-01	0.0004	1.749E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.880E-04	0.0000
Co-60	3.278E+02	0.1552	4.698E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.303E-03	0.0000
Cs-137	6.587E+01	0.0449	9.475E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.880E-01	0.0001
H-3	0.000E+00	0.0000	5.239E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.146E-06	0.0000
Pa-231	7.903E+00	0.0054	6.023E+01	0.0410	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.814E+01	0.0328
Pb-210	1.205E-01	0.0001	6.726E-01	0.0005	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.668E+01	0.0182
Pm-147	4.852E-04	0.0000	5.648E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.915E-03	0.0000
Pu-239	6.352E-03	0.0000	1.366E+01	0.0093	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.426E+01	0.0097
Ra-226	2.340E+02	0.1594	3.391E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.958E+00	0.0054
Ra-228	2.022E+02	0.1377	6.026E+00	0.0041	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.795E+00	0.0039
Sm-147	0.000E+00	0.0000	2.378E+00	0.0016	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.453E-01	0.0005
Th-228	7.211E+01	0.0491	3.704E+00	0.0025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.098E+00	0.0007
Th-230	3.302E-01	0.0002	1.038E+01	0.0071	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.217E+00	0.0015
Th-232	6.451E+01	0.0439	5.362E+01	0.0365	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.317E+01	0.0090
U-234	8.692E-03	0.0000	4.202E+00	0.0029	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.140E+00	0.0008
U-235	1.610E+01	0.0110	3.919E+00	0.0027	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.079E+00	0.0007
U-238	2.869E+00	0.0020	3.756E+00	0.0026	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.084E+00	0.0007
Total	9.329E+02	0.6355	3.573E+02	0.2434	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.778E+02	0.1211

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.871E+02	0.1956
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.489E-01	0.0004
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.279E+02	0.1552
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.606E+01	0.0450
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.280E-04	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.163E+02	0.0792
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.747E+01	0.0187
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.965E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.793E+01	0.0190
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.423E+02	0.1650
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.140E+02	0.1458
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.123E+00	0.0021
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.692E+01	0.0524
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.293E+01	0.0088
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.313E+02	0.0894
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.351E+00	0.0036
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.110E+01	0.0144
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.709E+00	0.0053
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.468E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	3.077E+01	0.0233	1.556E+02	0.1178	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.337E+01	0.0328
Co-57	9.344E-04	0.0000	2.520E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.149E-07	0.0000
Co-60	9.067E+01	0.0687	1.870E-03	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.907E-02	0.0000
Cs-137	5.602E+01	0.0424	8.058E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.599E-01	0.0001
H-3	0.000E+00	0.0000	3.410E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.699E-10	0.0000
Pa-231	1.558E+01	0.0118	9.904E+01	0.0750	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.895E+01	0.0447
Pb-210	9.688E-02	0.0001	5.406E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.144E+01	0.0162
Pm-147	7.629E-05	0.0000	8.879E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.010E-04	0.0000
Pu-239	6.350E-03	0.0000	1.365E+01	0.0103	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.426E+01	0.0108
Ra-226	2.333E+02	0.1767	4.693E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.314E+01	0.0100
Ra-228	1.249E+02	0.0946	4.539E+00	0.0034	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.069E+00	0.0023
Sm-147	0.000E+00	0.0000	2.376E+00	0.0018	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.449E-01	0.0006
Th-228	5.709E+00	0.0043	2.932E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.692E-02	0.0001
Th-230	1.038E+00	0.0008	1.038E+01	0.0079	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.249E+00	0.0017
Th-232	2.082E+02	0.1577	5.852E+01	0.0443	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.690E+01	0.0128
U-234	8.733E-03	0.0000	4.201E+00	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.140E+00	0.0009
U-235	1.610E+01	0.0122	3.929E+00	0.0030	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.086E+00	0.0008
U-238	2.868E+00	0.0022	3.755E+00	0.0028	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.084E+00	0.0008
Total	7.852E+02	0.5948	3.573E+02	0.2706	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.777E+02	0.1346

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years
Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.297E+02	0.1740
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.349E-04	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.070E+01	0.0687
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.618E+01	0.0426
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.437E-08	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E+02	0.1315
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.208E+01	0.0167
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.661E-04	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.792E+01	0.0211
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.469E+02	0.1870
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.325E+02	0.1003
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.121E+00	0.0024
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.089E+00	0.0046
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.367E+01	0.0104
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.836E+02	0.2148
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.350E+00	0.0041
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.111E+01	0.0160
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.707E+00	0.0058
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.320E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years
Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	1.627E+01	0.0134	8.225E+01	0.0677	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.293E+01	0.0189
Co-57	7.115E-12	0.0000	1.919E-16	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.159E-15	0.0000
Co-60	6.519E+00	0.0054	1.344E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.090E-03	0.0000
Cs-137	3.527E+01	0.0290	5.073E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.006E-01	0.0001
H-3	0.000E+00	0.0000	3.668E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.903E-22	0.0000
Pa-231	3.005E+01	0.0247	1.722E+02	0.1417	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.930E+01	0.0653
Pb-210	5.191E-02	0.0000	2.896E-01	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.149E+01	0.0095
Pm-147	3.862E-07	0.0000	4.495E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.524E-06	0.0000
Pu-239	6.345E-03	0.0000	1.364E+01	0.0112	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.425E+01	0.0117
Ra-226	2.313E+02	0.1904	7.140E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.289E+01	0.0188
Ra-228	1.196E+01	0.0098	4.464E-01	0.0004	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.870E-01	0.0002
Sm-147	0.000E+00	0.0000	2.372E+00	0.0020	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.437E-01	0.0006
Th-228	4.068E-03	0.0000	2.089E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.194E-05	0.0000
Th-230	3.050E+00	0.0025	1.038E+01	0.0085	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.408E+00	0.0020
Th-232	3.267E+02	0.2690	6.289E+01	0.0518	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.977E+01	0.0163
U-234	9.093E-03	0.0000	4.200E+00	0.0035	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.139E+00	0.0009
U-235	1.609E+01	0.0132	3.985E+00	0.0033	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.115E+00	0.0009
U-238	3.866E+00	0.0024	4.752E+00	0.0031	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.083E+00	0.0009

Total	6.801E+02	0.5599	3.571E+02	0.2940	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.775E+02	0.1461

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

0
0 Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.215E+02	0.1000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.119E-12	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.521E+00	0.0054
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.537E+01	0.0291
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.697E-20	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.815E+02	0.2318
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.183E+01	0.0097
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.360E-06	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.789E+01	0.0230
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.549E+02	0.2098
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.270E+01	0.0105
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.116E+00	0.0026
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.339E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.584E+01	0.0130
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.094E+02	0.3370
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.348E+00	0.0044
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.119E+01	0.0174
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.701E+00	0.0063
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.215E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

0
0 Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	1.749E+00	0.0015	8.841E+00	0.0075	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.465E+00	0.0021
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	6.498E-04	0.0000	1.340E-08	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.083E-07	0.0000
Cs-137	6.981E+00	0.0059	1.004E-04	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.992E-02	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.443E+01	0.0377	2.448E+02	0.2077	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.945E+01	0.0844
Pb-210	5.842E-03	0.0000	3.260E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.293E+00	0.0011
Pm-147	3.564E-15	0.0000	5.839E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.832E-11	0.0000
Pu-239	6.327E-03	0.0000	1.360E+01	0.0115	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.421E+01	0.0121
Ra-226	2.243E+02	0.1903	9.432E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.215E+01	0.0273
Ra-228	2.589E-03	0.0000	9.662E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.209E-05	0.0000
Sm-147	0.000E+00	0.0000	2.359E+00	0.0020	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.395E-01	0.0006
Th-228	3.930E-14	0.0000	2.019E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.984E-16	0.0000
Th-230	9.947E+00	0.0084	1.039E+01	0.0088	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.292E+00	0.0028
Th-232	3.384E+02	0.2872	6.328E+01	0.0537	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.004E+01	0.0170

U-234	1.317E-02	0.0000	4.193E+00	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.138E+00	0.0010
U-235	1.611E+01	0.0137	4.301E+00	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.249E+00	0.0011
U-238	2.85HE+00	0.0024	3.742E+00	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.080E+00	0.0009
Total	6.448E+02	0.5472	3.565E+02	0.3025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.771E+02	0.1503

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years
Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.305E+01	0.0111
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.500E-04	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.001E+00	0.0059
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.887E+02	0.3298
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.332E+00	0.0011
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.671E-11	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.781E+01	0.0236
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.574E+02	0.2184
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.748E-03	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.099E+00	0.0026
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.192E-14	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.363E+01	0.0201
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.217E+02	0.3579
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.344E+00	0.0045
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.166E+01	0.0184
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.680E+00	0.0065
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.178E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years
Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	2.986E-03	0.0000	1.510E-02	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.209E-03	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	2.399E-15	0.0000	4.948E-20	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.692E-19	0.0000
Cs-137	6.823E-02	0.0001	9.814E-07	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.947E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.575E+01	0.0392	2.513E+02	0.2153	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.010E+02	0.0865
Pb-210	1.138E-05	0.0000	6.352E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.519E-03	0.0000
Pm-147	0.000E+00	0.0000	5.745E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.801E-11	0.0000
Pu-239	6.278E-03	0.0000	1.349E+01	0.0116	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.409E+01	0.0121
Ra-226	2.054E+02	0.1759	8.937E-01	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.063E+01	0.0262
Ra-228	8.747E-14	0.0000	3.264E-15	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.098E-15	0.0000
Sm-147	0.000E+00	0.0000	3.321E+00	0.0028	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.276E-01	0.0006

Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	2.847E+01	0.0244	1.043E+01	0.0089	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.029E+00	0.0052
Th-232	3.376E+02	0.2892	6.314E+01	0.0541	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.999E+01	0.0171
U-234	4.776E-02	0.0000	4.175E+00	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.136E+00	0.0010
U-235	1.616E+01	0.0138	5.323E+00	0.0046	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.665E+00	0.0014
U-238	2.834E+00	0.0024	3.714E+00	0.0032	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.071E+00	0.0009
Total	6.363E+02	0.5451	3.548E+02	0.3039	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.763E+02	0.1510

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

0
0 Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.229E-02	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.400E-15	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.843E-02	0.0001
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.981E+02	0.3410
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.594E-03	0.0000
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.546E-11	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.758E+01	0.0236
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.369E+02	0.2029
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.283E-14	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.049E+00	0.0026
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.493E+01	0.0385
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.208E+02	0.3604
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.358E+00	0.0046
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.315E+01	0.0198
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.619E+00	0.0065
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.167E+03	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

0
0 Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	6.146E-13	0.0000	3.107E-12	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.662E-13	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	6.299E-09	0.0000	9.060E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.797E-11	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.431E+01	0.0384	2.434E+02	0.2110	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.780E+01	0.0848
Pb-210	3.716E-15	0.0000	2.073E-14	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.224E-13	0.0000
Pm-147	0.000E+00	0.0000	5.429E-11	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.702E-11	0.0000
Pu-239	6.107E-03	0.0000	1.310E+01	0.0114	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.368E+01	0.0119

Ra-226	1.509E+02	0.1308	6.566E-01	0.0006	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.250E+01	0.0195
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sm-147	0.000E+00	0.0000	2.194E+00	0.0019	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.876E-01	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	8.125E+01	0.0704	1.051E+01	0.0091	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.388E+01	0.0120
Th-232	3.349E+02	0.2903	6.263E+01	0.0543	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.983E+01	0.0172
U-234	3.964E-01	0.0003	4.112E+00	0.0036	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.164E+00	0.0010
U-235	1.636E+01	0.0142	8.780E+00	0.0076	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.068E+00	0.0027
U-238	2.753E+00	0.0024	3.615E+00	0.0031	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.043E+00	0.0009
Total	6.309E+02	0.5469	3.490E+02	0.3025	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.736E+02	0.1505

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

0
0 Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.588E-12	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.317E-09	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.855E+02	0.3342
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.468E-13	0.0000
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.131E-11	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.678E+01	0.0232
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.740E+02	0.1509
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.881E+00	0.0025
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.056E+02	0.0916
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.174E+02	0.3618
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.672E+00	0.0049
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.820E+01	0.0245
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.411E+00	0.0064
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.154E+03	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0Parent (i)	Product (j)	Branch Fraction*	DSR(i,t) (mrem/yr)/(pCi/g) t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00	3.159E+00	3.060E+00	2.871E+00	2.297E+00	1.215E+00	1.305E-01	2.229E-04	4.588E-14
0Co-57	Co-57	1.000E+00	1.071E-01	4.207E-02	6.489E-03	9.349E-06	7.119E-14	2.742E-42	0.000E+00	0.000E+00
0Co-60	Co-60	1.000E+00	3.382E+00	2.965E+00	2.279E+00	9.070E-01	6.521E-02	6.500E-06	2.400E-17	0.000E+00
0Cs-137	Cs-137	1.000E+00	7.081E-01	6.919E-01	6.606E-01	5.618E-01	3.537E-01	7.001E-02	6.843E-04	6.317E-11
0H-3	H-3	1.000E+00	3.284E-04	8.289E-05	5.280E-06	3.437E-10	3.697E-22	0.000E+00	0.000E+00	0.000E+00
0Pa-231	Pa-231	1.000E+00	8.751E-01	8.751E-01	8.750E-01	8.747E-01	8.739E-01	8.711E-01	8.643E-01	8.359E-01
Pa-231	Ac-227	1.000E+00	0.000E+00	9.898E-03	2.877E-01	8.610E-01	1.941E+00	3.016E+00	3.117E+00	3.019E+00
Pa-231	ΣDSR(j)		8.751E-01	9.741E-01	1.163E+00	1.736E+00	2.815E+00	3.887E+00	3.981E+00	3.855E+00

0Pb-210	Pb-210	1.000E+00	3.017E-01	2.924E-01	2.747E-01	2.208E-01	1.183E-01	1.332E-02	2.594E-05	8.468E-15
0Pm-147	Pm-147	1.000E+00	6.551E-05	5.030E-05	2.965E-05	4.661E-06	2.360E-08	2.178E-16	2.407E-39	0.000E+00
Pm-147	Sm-147	1.000E+00	0.000E+00	1.795E-13	4.230E-13	7.174E-13	7.709E-13	7.669E-13	7.546E-13	7.131E-13
Pm-147	ΣDSR(j)		6.551E-05	5.030E-05	2.965E-05	4.661E-06	2.360E-08	7.671E-13	7.546E-13	7.131E-13
0Pu-239	Pu-239	1.000E+00	2.793E-01	2.793E-01	2.793E-01	2.792E-01	2.789E-01	2.781E-01	2.758E-01	2.678E-01
Pu-239	U-235	1.000E+00	0.000E+00	2.077E-10	6.232E-10	2.077E-09	6.225E-09	2.069E-08	6.155E-08	1.992E-07
Pu-239	Pa-231	1.000E+00	0.000E+00	9.119E-15	8.205E-14	9.114E-13	8.196E-12	9.079E-11	8.101E-10	8.733E-09
Pu-239	Ac-227	1.000E+00	0.000E+00	3.531E-16	9.213E-15	3.230E-13	7.540E-12	1.839E-10	2.377E-09	2.962E-08
Pu-239	ΣDSR(j)		2.793E-01	2.793E-01	2.793E-01	2.792E-01	2.789E-01	2.781E-01	2.758E-01	2.678E-01
0Ra-226	Ra-226	1.000E+00	2.399E+00	2.398E+00	2.396E+00	2.388E+00	2.367E+00	2.295E+00	2.102E+00	1.544E+00
Ra-226	Pb-210	1.000E+00	0.000E+00	9.230E-03	2.683E-02	8.036E-02	1.813E-01	2.782E-01	2.670E-01	1.962E-01
Ra-226	ΣDSR(j)		2.399E+00	2.407E+00	2.423E+00	2.469E+00	2.549E+00	2.574E+00	2.369E+00	1.740E+00
0Ra-228	Ra-228	1.000E+00	1.309E+00	1.160E+00	9.117E-01	3.921E-01	3.517E-02	7.608E-06	2.571E-16	0.000E+00
Ra-228	Th-228	1.000E+00	0.000E+00	6.507E-01	1.228E+00	9.325E-01	9.179E-02	1.987E-05	6.713E-16	0.000E+00
Ra-228	ΣDSR(j)		1.309E+00	1.811E+00	2.140E+00	1.325E+00	1.270E-01	2.748E-05	9.283E-16	0.000E+00
0Sm-147	Sm-147	1.000E+00	3.124E-02	3.123E-02	3.123E-02	3.121E-02	3.116E-02	3.099E-02	3.049E-02	2.881E-02
0Th-228	Th-228	1.000E+00	2.281E+00	1.588E+00	7.692E-01	6.089E-02	4.339E-05	4.192E-16	0.000E+00	0.000E+00
0Th-230	Th-230	1.000E+00	1.261E-01	1.261E-01	1.261E-01	1.261E-01	1.261E-01	1.259E-01	1.254E-01	1.236E-01
Th-230	Ra-226	1.000E+00	0.000E+00	1.039E-03	3.116E-03	1.037E-02	3.096E-02	1.016E-01	2.911E-01	8.313E-01
Th-230	Pb-210	1.000E+00	0.000E+00	2.010E-06	1.771E-05	1.832E-04	1.363E-03	8.865E-03	3.278E-02	1.015E-01
Th-230	ΣDSR(j)		1.261E-01	1.272E-01	1.293E-01	1.367E-01	1.584E-01	2.363E-01	4.493E-01	1.056E+00
0Th-232	Th-232	1.000E+00	6.322E-01	6.322E-01	6.322E-01	6.322E-01	6.320E-01	6.315E-01	6.301E-01	6.250E-01
Th-232	Ra-228	1.000E+00	0.000E+00	1.486E-01	3.972E-01	9.167E-01	1.273E+00	1.307E+00	1.304E+00	1.294E+00
Th-232	Th-228	1.000E+00	0.000E+00	4.252E-02	2.836E-01	1.287E+00	2.188E+00	2.278E+00	2.273E+00	2.255E+00
Th-232	ΣDSR(j)		6.322E-01	8.234E-01	1.313E+00	2.836E+00	4.094E+00	4.217E+00	4.208E+00	4.174E+00

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0Parent (i)	Product (j)	Branch Fraction*	DSR(j,t) (mrem/yr)/(pCi/g) t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	U-234	1.000E+00	5.351E-02	5.351E-02	5.351E-02	5.349E-02	5.344E-02	5.328E-02	5.280E-02	5.119E-02
U-234	Th-230	1.000E+00	0.000E+00	1.135E-06	3.406E-06	1.135E-05	3.403E-05	1.132E-04	3.373E-04	1.099E-03
U-234	Ra-226	1.000E+00	0.000E+00	4.677E-09	4.208E-08	4.670E-07	4.189E-06	4.600E-05	4.004E-04	3.970E-03
U-234	Pb-210	1.000E+00	0.000E+00	6.046E-12	1.607E-10	5.640E-09	1.317E-07	3.209E-06	4.076E-05	4.687E-04
U-234	ΣDSR(j)		5.351E-02	5.351E-02	5.351E-02	5.350E-02	5.348E-02	5.344E-02	5.358E-02	5.672E-02
0U-235	U-235	1.000E+00	2.109E-01	2.109E-01	2.109E-01	2.108E-01	2.107E-01	2.101E-01	2.083E-01	2.023E-01
U-235	Pa-231	1.000E+00	0.000E+00	1.852E-05	5.554E-05	1.851E-04	5.548E-04	1.844E-03	5.482E-03	1.772E-02
U-235	Ac-227	1.000E+00	0.000E+00	1.053E-06	9.276E-06	9.591E-05	7.127E-04	4.652E-03	1.773E-02	6.200E-02
U-235	ΣDSR(j)		2.109E-01	2.109E-01	2.110E-01	2.111E-01	2.119E-01	2.166E-01	2.315E-01	2.820E-01
0U-238	U-238	1.000E+00	7.710E-02	7.710E-02	7.709E-02	7.707E-02	7.701E-02	7.678E-02	7.614E-02	7.396E-02
U-238	U-234	1.000E+00	0.000E+00	1.517E-07	4.551E-07	1.516E-06	4.545E-06	1.511E-05	4.493E-05	1.453E-04
U-238	Th-230	1.000E+00	0.000E+00	1.609E-12	1.448E-11	1.609E-10	1.447E-09	1.604E-08	1.433E-07	1.553E-06
U-238	Ra-226	1.000E+00	0.000E+00	4.453E-15	1.194E-13	4.414E-12	1.189E-10	4.360E-09	1.146E-07	3.867E-06
U-238	Pb-210	1.000E+00	0.000E+00	1.446E-17	3.544E-16	4.059E-14	2.924E-12	2.550E-10	1.066E-08	4.424E-07
U-238	ΣDSR(j)		7.710E-02	7.710E-02	7.709E-02	7.707E-02	7.701E-02	7.680E-02	7.619E-02	7.411E-02

*Branch Fraction is the cumulative factor for the j'th principal radionuclide daughter: CUMBRF(j) = BRF(1)*BRF(2)* ... BRF(j).
The DSR includes contributions from associated (half-life ≤ 0.5 yr) daughters.

0

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 10 mrem/yr

0Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	3.166E+00	3.268E+00	3.483E+00	4.353E+00	8.234E+00	7.660E+01	4.486E+04	*7.230E+13

Co-57	9.334E+01	2.377E+02	1.541E+03	1.070E+06	1.405E+14	*8.464E+15	*8.464E+15	*8.464E+15	
Co-60	2.956E+00	3.372E+00	4.388E+00	1.103E+01	1.533E+02	1.539E+06	*1.131E+15	*1.131E+15	
Cs-137	1.412E+01	1.445E+01	1.514E+01	1.780E+01	2.827E+01	1.428E+02	1.461E+04	1.583E+11	
H-3	3.045E+04	1.206E+05	1.894E+06	2.909E+10	*9.594E+15	*9.594E+15	*9.594E+15	*9.594E+15	
Pa-231	1.143E+01	1.027E+01	8.601E+00	5.761E+00	3.552E+00	2.573E+00	2.512E+00	2.594E+00	
Pb-210	3.315E+01	3.420E+01	3.640E+01	4.529E+01	8.453E+01	7.510E+02	3.855E+05	*7.631E+13	
Pm-147	1.526E+05	1.988E+05	3.373E+05	2.145E+06	4.238E+08	1.304E+13	1.325E+13	1.402E+13	
Pu-239	3.581E+01	3.581E+01	3.581E+01	3.582E+01	3.585E+01	3.596E+01	3.626E+01	3.734E+01	
Ra-226	4.169E+00	4.155E+00	4.128E+00	4.051E+00	3.924E+00	3.886E+00	4.221E+00	5.746E+00	
Ra-228	7.640E+00	5.522E+00	4.674E+00	7.549E+00	7.876E+01	3.640E+05	*2.726E+14	*2.726E+14	
Sm-147	3.201E+02	3.202E+02	3.202E+02	3.204E+02	3.209E+02	3.227E+02	3.280E+02	3.471E+02	
Th-228	4.384E+00	6.299E+00	1.300E+01	1.642E+02	2.305E+05	*8.192E+14	*8.192E+14	*8.192E+14	
Th-230	7.928E+01	7.864E+01	7.737E+01	7.318E+01	6.314E+01	4.232E+01	2.226E+01	9.466E+00	
Th-232	1.582E+01	1.214E+01	7.616E+00	3.526E+00	2.443E+00	2.371E+00	2.377E+00	2.396E+00	
U-234	1.869E+02	1.869E+02	1.869E+02	1.869E+02	1.870E+02	1.871E+02	1.866E+02	1.763E+02	
U-235	4.741E+01	4.741E+01	4.740E+01	4.736E+01	4.718E+01	4.618E+01	4.319E+01	3.545E+01	
U-238	1.297E+02	1.297E+02	1.297E+02	1.298E+02	1.299E+02	1.302E+02	1.313E+02	1.349E+02	

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 0.000E+00 years

ONuclide (i)	Initial pCi/g	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Ac-227	1.000E+02	0.000E+00	3.159E+00	3.166E+00	3.159E+00	3.166E+00
Co-57	1.000E+02	0.000E+00	1.071E-01	9.334E+01	1.071E-01	9.334E+01
Co-60	1.000E+02	0.000E+00	3.382E+00	2.956E+00	3.382E+00	2.956E+00
Cs-137	1.000E+02	0.000E+00	7.081E-01	1.412E+01	7.081E-01	1.412E+01
H-3	1.000E+02	0.000E+00	3.284E-04	3.045E+04	3.284E-04	3.045E+04
Pa-231	1.000E+02	198.1 ± 0.4	3.994E+00	2.504E+00	8.751E-01	1.143E+01
Pb-210	1.000E+02	0.000E+00	3.017E-01	3.315E+01	3.017E-01	3.315E+01
Pm-147	1.000E+02	0.000E+00	6.551E-05	1.526E+05	6.551E-05	1.526E+05
Pu-239	1.000E+02	0.000E+00	2.793E-01	3.581E+01	2.793E-01	3.581E+01
Ra-226	1.000E+02	67.6 ± 0.1	2.587E+00	3.865E+00	2.399E+00	4.169E+00
Ra-228	1.000E+02	3.211 ± 0.006	2.142E+00	4.669E+00	1.309E+00	7.640E+00
Sm-147	1.000E+02	0.000E+00	3.124E-02	3.201E+02	3.124E-02	3.201E+02
Th-228	1.000E+02	0.000E+00	2.281E+00	4.384E+00	2.281E+00	4.384E+00
Th-230	1.000E+02	1.000E+03	1.056E+00	9.466E+00	1.261E-01	7.928E+01
Th-232	1.000E+02	78.1 ± 0.2	4.218E+00	2.371E+00	6.322E-01	1.582E+01
U-234	1.000E+02	1.000E+03	5.672E-02	1.763E+02	5.351E-02	1.869E+02
U-235	1.000E+02	1.000E+03	2.820E-01	3.545E+01	2.109E-01	4.741E+01
U-238	1.000E+02	0.000E+00	7.710E-02	1.297E+02	7.710E-02	1.297E+02

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

ONuclide (j)	Parent (i)	BRF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00	3.159E+02	3.060E+02	2.871E+02	2.297E+02	1.215E+02	1.305E+01	2.329E-02	4.588E-12

Ac-227	Pa-231	1.000E+00	0.000E+00	9.898E+00	2.877E+01	8.610E+01	1.941E+02	3.016E+02	3.117E+02	3.019E+02
Ac-227	Pu-239	1.000E+00	0.000E+00	3.531E-14	9.213E-13	3.230E-11	7.540E-10	1.839E-08	2.377E-07	2.962E-06
Ac-227	U-235	1.000E+00	0.000E+00	1.053E-04	9.276E-04	9.591E-03	7.127E-02	4.652E-01	1.773E+00	6.200E+00
Ac-227	ΣDOSE(j):		3.159E+02	3.159E+02	3.159E+02	3.158E+02	3.156E+02	3.151E+02	3.135E+02	3.081E+02
0Co-57	Co-57	1.000E+00	1.071E+01	4.207E+00	6.489E-01	9.349E-04	7.119E-12	0.000E+00	0.000E+00	0.000E+00
0Co-60	Co-60	1.000E+00	3.382E+02	2.965E+02	2.279E+02	9.070E+01	6.521E+00	6.500E-04	2.400E-15	0.000E+00
0Cs-137	Cs-137	1.000E+00	7.081E+01	6.919E+01	6.606E+01	5.618E+01	3.537E+01	7.001E+00	6.843E-02	6.317E-09
0H-3	H-3	1.000E+00	3.284E-02	8.289E-03	5.280E-04	3.437E-08	3.697E-20	0.000E+00	0.000E+00	0.000E+00
0Pa-231	Pa-231	1.000E+00	8.751E+01	8.751E+01	8.750E+01	8.747E+01	8.739E+01	8.711E+01	8.632E+01	8.359E+01
Pa-231	Pu-239	1.000E+00	0.000E+00	9.119E-13	8.205E-12	9.114E-11	8.196E-10	9.079E-09	8.101E-08	8.733E-07
Pa-231	U-235	1.000E+00	0.000E+00	1.852E-03	5.554E-03	1.851E-02	5.548E-02	1.844E-01	5.482E-01	1.772E+00
Pa-231	ΣDOSE(j):		8.751E+01	8.751E+01	8.751E+01	8.749E+01	8.745E+01	8.730E+01	8.687E+01	8.536E+01
0Pb-210	Pb-210	1.000E+00	3.017E+01	2.924E+01	2.747E+01	2.208E+01	1.183E+01	1.332E+00	2.594E-03	8.468E-13
Pb-210	Ra-226	1.000E+00	0.000E+00	9.230E-01	2.683E+00	8.036E+00	1.813E+01	2.782E+01	2.670E+01	1.962E+01
Pb-210	Th-230	1.000E+00	0.000E+00	2.010E-04	1.771E-03	1.832E-02	1.363E-01	8.865E-01	3.278E+00	1.015E+01
Pb-210	U-234	1.000E+00	0.000E+00	6.046E-10	1.607E-08	5.640E-07	1.317E-05	3.209E-04	4.076E-03	4.687E-02
Pb-210	U-238	1.000E+00	0.000E+00	1.446E-15	3.544E-14	4.059E-12	2.924E-10	2.550E-08	1.066E-06	4.424E-05
Pb-210	ΣDOSE(j):		3.017E+01	3.016E+01	3.016E+01	3.013E+01	3.009E+01	3.004E+01	2.999E+01	2.981E+01
0Pm-147	Pm-147	1.000E+00	6.551E-03	5.030E-03	2.965E-03	4.661E-04	2.360E-06	2.178E-14	0.000E+00	0.000E+00
0Sm-147	Pm-147	1.000E+00	0.000E+00	1.795E-11	4.230E-11	7.174E-11	7.709E-11	7.669E-11	7.546E-11	7.131E-11
Sm-147	Sm-147	1.000E+00	3.124E+00	3.123E+00	3.123E+00	3.121E+00	3.116E+00	3.099E+00	3.049E+00	2.881E+00
Sm-147	ΣDOSE(j):		3.124E+00	3.123E+00	3.123E+00	3.121E+00	3.116E+00	3.099E+00	3.049E+00	2.881E+00
0Pu-239	Pu-239	1.000E+00	2.793E+01	2.793E+01	2.793E+01	2.792E+01	2.789E+01	2.781E+01	2.758E+01	2.678E+01
0U-235	Pu-239	1.000E+00	0.000E+00	2.077E-08	6.232E-08	2.077E-07	6.225E-07	2.069E-06	6.155E-06	1.992E-05
U-235	U-235	1.000E+00	2.109E+01	2.109E+01	2.109E+01	2.108E+01	2.107E+01	2.101E+01	2.083E+01	2.023E+01
U-235	ΣDOSE(j):		2.109E+01	2.109E+01	2.109E+01	2.108E+01	2.107E+01	2.101E+01	2.083E+01	2.023E+01
0Ra-226	Ra-226	1.000E+00	2.399E+02	2.398E+02	2.396E+02	2.388E+02	2.367E+02	2.295E+02	2.102E+02	1.544E+02
Ra-226	Th-230	1.000E+00	0.000E+00	1.039E-01	3.116E-01	1.037E+00	3.096E+00	1.016E+01	2.911E+01	8.313E+01
Ra-226	U-234	1.000E+00	0.000E+00	4.677E-07	4.208E-06	4.670E-05	4.189E-04	4.600E-03	4.004E-02	3.970E-01
Ra-226	U-238	1.000E+00	0.000E+00	4.453E-13	1.194E-11	4.414E-10	1.189E-08	4.360E-07	1.146E-05	3.867E-04
Ra-226	ΣDOSE(j):		2.399E+02	2.399E+02	2.399E+02	2.399E+02	2.398E+02	2.397E+02	2.393E+02	2.379E+02
0Ra-228	Ra-228	1.000E+00	1.309E+02	1.160E+02	9.117E+01	3.921E+01	3.517E+00	7.608E-04	2.571E-14	0.000E+00
Ra-228	Th-232	1.000E+00	0.000E+00	1.486E+01	3.972E+01	9.167E+01	1.273E+02	1.307E+02	1.304E+02	1.294E+02
Ra-228	ΣDOSE(j):		1.309E+02	1.309E+02	1.309E+02	1.309E+02	1.309E+02	1.307E+02	1.304E+02	1.294E+02

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	BRF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-228	Ra-228	1.000E+00	0.000E+00	6.507E+01	1.228E+02	9.325E+01	9.179E+00	1.987E-03	6.713E-14	0.000E+00
Th-228	Th-228	1.000E+00	2.281E+02	1.588E+02	7.692E+01	6.089E+00	4.339E-03	4.192E-14	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00	0.000E+00	4.252E+00	2.836E+01	1.287E+02	2.188E+02	2.278E+02	2.273E+02	2.255E+02
Th-228	ΣDOSE(j):		2.281E+02	2.281E+02	2.281E+02	2.281E+02	2.280E+02	2.278E+02	2.273E+02	2.255E+02
0Th-230	Th-230	1.000E+00	1.261E+01	1.261E+01	1.261E+01	1.261E+01	1.261E+01	1.259E+01	1.254E+01	1.236E+01
Th-230	U-234	1.000E+00	0.000E+00	1.135E-04	3.406E-04	1.135E-03	3.403E-03	1.132E-02	3.373E-02	1.099E-01
Th-230	U-238	1.000E+00	0.000E+00	1.609E-10	1.448E-09	1.609E-08	1.447E-07	1.604E-06	1.433E-05	1.553E-04
Th-230	ΣDOSE(j):		1.261E+01	1.261E+01	1.261E+01	1.261E+01	1.261E+01	1.260E+01	1.257E+01	1.247E+01
0Th-232	Th-232	1.000E+00	6.322E+01	6.322E+01	6.322E+01	6.322E+01	6.320E+01	6.315E+01	6.301E+01	6.250E+01
0U-234	U-234	1.000E+00	5.351E+00	5.351E+00	5.351E+00	5.349E+00	5.344E+00	5.328E+00	5.280E+00	5.119E+00
U-234	U-238	1.000E+00	0.000E+00	1.517E-05	4.551E-05	1.516E-04	4.545E-04	1.511E-03	4.493E-03	1.453E-02
U-234	ΣDOSE(j):		5.351E+00	5.351E+00	5.351E+00	5.349E+00	5.345E+00	5.329E+00	5.285E+00	5.133E+00
0U-238	U-238	1.000E+00	7.710E+00	7.710E+00	7.709E+00	7.707E+00	7.701E+00	7.678E+00	7.614E+00	7.396E+00

BRF(i) is the branch fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide (i)	Parent (i)	BRF(i)		S(j,t), pCi/g							
			t=	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00		1.000E+02	9.686E+01	9.088E+01	7.271E+01	3.845E+01	4.133E+00	7.057E-03	1.452E-12
Ac-227	Pa-231	1.000E+00		0.000E+00	3.133E+00	9.108E+00	2.726E+01	6.145E+01	9.546E+01	9.868E+01	9.957E+01
Ac-227	Pu-239	1.000E+00		0.000E+00	1.118E-14	2.917E-13	1.023E-11	2.387E-10	5.821E-09	7.524E-08	9.376E-07
Ac-227	U-235	1.000E+00		0.000E+00	3.332E-05	2.937E-04	3.036E-03	2.256E-02	1.473E-01	5.611E-01	1.963E+00
Ac-227	ΣS(j):			1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.992E+01	9.974E+01	9.925E+01	9.754E+01
OCo-57	Co-57	1.000E+00		1.000E+02	3.927E+01	6.057E+00	8.726E-03	6.645E-11	2.560E-39	0.000E+00	0.000E+00
OCo-60	Co-60	1.000E+00		1.000E+02	8.767E+01	6.738E+01	2.681E+01	1.928E+00	1.422E-04	7.096E-16	0.000E+00
OCs-137	Cs-137	1.000E+00		1.000E+02	9.771E+01	9.329E+01	7.934E+01	4.995E+01	9.887E+00	9.663E-02	8.921E-09
OH-3	H-3	1.000E+00		1.000E+02	2.524E+01	1.608E+00	1.047E-04	1.126E-16	0.000E+00	0.000E+00	0.000E+00
OPa-231	Pa-231	1.000E+00		1.000E+02	1.000E+02	9.999E+01	9.995E+01	9.986E+01	9.954E+01	9.863E+01	9.552E+01
Pa-231	Pu-239	1.000E+00		0.000E+00	1.042E-12	9.376E-12	1.041E-10	9.365E-10	1.037E-08	9.257E-08	9.979E-07
Pa-231	U-235	1.000E+00		0.000E+00	2.116E-03	6.347E-03	2.115E-02	6.339E-02	2.107E-01	6.265E-01	2.025E+00
Pa-231	ΣS(j):			1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.993E+01	9.975E+01	9.926E+01	9.754E+01
OPb-210	Pb-210	1.000E+00		1.000E+02	9.693E+01	9.106E+01	7.320E+01	3.921E+01	4.414E+00	8.600E-03	2.807E-12
Pb-210	Ra-226	1.000E+00		0.000E+00	3.060E+00	8.896E+00	2.664E+01	6.009E+01	9.322E+01	8.852E+01	6.504E+01
Pb-210	Th-230	1.000E+00		0.000E+00	6.662E-04	5.872E-03	6.074E-02	4.517E-01	2.939E+00	1.087E+01	3.364E+01
Pb-210	U-234	1.000E+00		0.000E+00	2.004E-09	5.327E-08	1.870E-06	4.367E-05	1.064E-03	1.351E-02	1.554E-01
Pb-210	U-238	1.000E+00		0.000E+00	4.795E-15	1.175E-13	1.345E-11	9.692E-10	8.454E-08	3.534E-06	1.466E-04
Pb-210	ΣS(j):			1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.976E+01	9.958E+01	9.941E+01	9.883E+01
OPm-147	Pm-147	1.000E+00		1.000E+02	7.677E+01	4.525E+01	7.115E+00	3.602E-02	3.824E-10	3.673E-33	0.000E+00
OSm-147	Pm-147	1.000E+00		0.000E+00	5.746E-10	1.354E-09	2.297E-09	2.468E-09	2.455E-09	2.416E-09	2.283E-09
Sm-147	Sm-147	1.000E+00		1.000E+02	9.999E+01	9.998E+01	9.992E+01	9.976E+01	9.920E+01	9.760E+01	9.224E+01
Sm-147	ΣS(j):			1.000E+02	9.999E+01	9.998E+01	9.992E+01	9.976E+01	9.920E+01	9.760E+01	9.224E+01
OPu-239	Pu-239	1.000E+00		1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.987E+01	9.958E+01	9.875E+01	9.590E+01
OU-235	Pu-239	1.000E+00		0.000E+00	9.848E-08	2.954E-07	9.845E-07	2.951E-06	9.808E-06	2.918E-05	9.446E-05
U-235	U-235	1.000E+00		1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.958E+01	9.876E+01	9.592E+01
U-235	ΣS(j):			1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.958E+01	9.876E+01	9.592E+01
ORa-226	Ra-226	1.000E+00		1.000E+02	9.996E+01	9.987E+01	9.956E+01	9.869E+01	9.569E+01	8.762E+01	6.437E+01
Ra-226	Th-230	1.000E+00		0.000E+00	4.331E-02	1.299E-01	4.322E-01	1.291E+00	4.034E+00	1.214E+01	3.466E+01
Ra-226	U-234	1.000E+00		0.000E+00	1.950E-07	1.754E-06	1.947E-05	1.746E-04	1.917E-03	1.669E-02	1.655E-01
Ra-226	U-238	1.000E+00		0.000E+00	1.856E-13	4.978E-12	1.840E-10	4.955E-09	1.818E-07	4.776E-06	1.612E-04
Ra-226	ΣS(j):			1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.993E+01	9.977E+01	9.919E+01
ORa-228	Ra-228	1.000E+00		1.000E+02	8.864E+01	6.965E+01	2.995E+01	2.687E+00	5.813E-04	1.964E-14	0.000E+00
Ra-228	Th-232	1.000E+00		0.000E+00	1.136E+01	3.035E+01	7.004E+01	9.728E+01	9.989E+01	9.966E+01	9.886E+01
Ra-228	ΣS(j):			1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.886E+01

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide (i)	Parent (i)	BRF(i)		S(j,t), pCi/g							
			t=	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-228	Ra-228	1.000E+00		0.000E+00	2.853E+01	5.384E+01	4.089E+01	4.024E+00	8.711E-04	2.943E-14	0.000E+00
Th-228	Th-228	1.000E+00		1.000E+02	6.961E+01	3.372E+01	2.670E+00	1.902E-03	1.838E-14	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00		0.000E+00	1.864E+00	1.243E+01	5.643E+01	9.594E+01	9.989E+01	9.966E+01	9.886E+01
Th-228	ΣS(j):			1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.886E+01
OTh-230	Th-230	1.000E+00		1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.994E+01	9.980E+01	9.939E+01	9.797E+01
Th-230	U-234	1.000E+00		0.000E+00	9.002E-04	2.700E-03	8.999E-03	2.698E-02	8.973E-02	2.674E-01	8.714E-01
Th-230	U-238	1.000E+00		0.000E+00	1.276E-09	1.148E-08	1.276E-07	1.147E-06	1.271E-05	1.136E-04	1.231E-03
Th-230	ΣS(j):			1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.988E+01	9.965E+01	9.884E+01

0Th-232	Th-232	1.000E+00	1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.886E+01
0U-234	U-234	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.987E+01	9.956E+01	9.867E+01	9.565E+01
U-234	U-238	1.000E+00	0.000E+00	2.835E-04	8.504E-04	2.834E-03	8.494E-03	2.823E-02	8.396E-02	2.715E-01
U-234	ΣS(j):		1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.958E+01	9.876E+01	9.592E+01
0U-238	U-238	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.958E+01	9.876E+01	9.592E+01

BRF(i) is the branch fraction of the parent nuclide.

Representative RESRAD Output from Residential DCGL Determination (Disposal Pit A/B)

Table of Contents

Part I: Mixture Sums and Single Radionuclide Guidelines

Dose Conversion Factor (and Related) Parameter Summary ... 2
Site-Specific Parameter Summary ... 6
Summary of Pathway Selections ... 12
Contaminated Zone and Total Dose Summary ... 13
Total Dose Components
Time = 0.000E+00 ... 14
Time = 1.000E+00 ... 16
Time = 3.000E+00 ... 18
Time = 1.000E+01 ... 20
Time = 3.000E+01 ... 22
Time = 1.000E+02 ... 24
Time = 3.000E+02 ... 26
Time = 1.000E+03 ... 28
Dose/Source Ratios Summed Over All Pathways ... 30
Single Radionuclide Soil Guidelines ... 31
Dose Per Nuclide Summed Over All Pathways ... 33
Soil Concentration Per Nuclide ... 35

Dose Conversion Factor (and Related) Parameter Summary
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
B-1	Dose conversion factors for inhalation, mrem/pCi:			
B-1	Ac-227+D	6.720E+00	6.720E+00	DCF2(1)
B-1	Co-57	9.070E-06	9.070E-06	DCF2(2)
B-1	Co-60	2.190E-04	2.190E-04	DCF2(3)
B-1	Cs-137+D	3.190E-05	3.190E-05	DCF2(4)
B-1	H-3	6.400E-08	6.400E-08	DCF2(5)
B-1	Pa-231	1.280E+00	1.280E+00	DCF2(6)
B-1	Pb-210+D	2.320E-02	2.320E-02	DCF2(7)
B-1	Pm-147	3.920E-05	3.920E-05	DCF2(8)
B-1	Pu-239	4.290E-01	4.290E-01	DCF2(9)
B-1	Ra-226+D	8.600E-03	8.600E-03	DCF2(10)
B-1	Ra-228+D	5.080E-03	5.080E-03	DCF2(11)
B-1	Sm-147	7.470E-02	7.470E-02	DCF2(12)
B-1	Th-228+D	3.450E-01	3.450E-01	DCF2(13)
B-1	Th-230	3.260E-01	3.260E-01	DCF2(14)
B-1	Th-232	1.640E+00	1.640E+00	DCF2(15)
B-1	U-234	1.320E-01	1.320E-01	DCF2(16)
B-1	U-235+D	1.230E-01	1.230E-01	DCF2(17)
B-1	U-238+D	1.180E-01	1.180E-01	DCF2(18)
D-1	Dose conversion factors for ingestion, mrem/pCi:			
D-1	Ac-227+D	1.480E-02	1.480E-02	DCF3(1)
D-1	Co-57	1.180E-06	1.180E-06	DCF3(2)
D-1	Co-60	2.690E-05	2.690E-05	DCF3(3)
D-1	Cs-137+D	5.000E-05	5.000E-05	DCF3(4)

D-1	H-3	6.400E-08	6.400E-08	DCF3(5)
D-1	Pa-231	1.060E-02	1.060E-02	DCF3(6)
D-1	Pb-210+D	7.270E-03	7.270E-03	DCF3(7)
D-1	Pm-147	1.050E-06	1.050E-06	DCF3(8)
D-1	Pu-239	3.540E-03	3.540E-03	DCF3(9)
D-1	Ra-226+D	1.330E-03	1.330E-03	DCF3(10)
D-1	Ra-228+D	1.440E-03	1.440E-03	DCF3(11)
D-1	Sm-147	1.850E-04	1.850E-04	DCF3(12)
D-1	Th-228+D	8.080E-04	8.080E-04	DCF3(13)
D-1	Th-230	5.480E-04	5.480E-04	DCF3(14)
D-1	Th-232	2.730E-03	2.730E-03	DCF3(15)
D-1	U-234	2.830E-04	2.830E-04	DCF3(16)
D-1	U-235+D	2.670E-04	2.670E-04	DCF3(17)
D-1	U-238+D	2.690E-04	2.690E-04	DCF3(18)
D-34	Food transfer factors:			
D-34	Ac-227+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(1,1)
D-34	Ac-227+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,2)
D-34	Ac-227+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(1,3)
D-34				
D-34	Co-57 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(2,1)
D-34	Co-57 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(2,2)
D-34	Co-57 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(2,3)
D-34				

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
D-34	Co-60 , plant/soil concentration ratio, dimensionless	8.000E-02	8.000E-02	RTF(3,1)
D-34	Co-60 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-02	2.000E-02	RTF(3,2)
D-34	Co-60 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-03	2.000E-03	RTF(3,3)
D-34				
D-34	Cs-137+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(4,1)
D-34	Cs-137+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.000E-02	3.000E-02	RTF(4,2)
D-34	Cs-137+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	8.000E-03	8.000E-03	RTF(4,3)
D-34				
D-34	H-3 , plant/soil concentration ratio, dimensionless	4.800E+00	4.800E+00	RTF(5,1)
D-34	H-3 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.200E-02	1.200E-02	RTF(5,2)
D-34	H-3 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-02	1.000E-02	RTF(5,3)
D-34				
D-34	Pa-231 , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(6,1)
D-34	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	5.000E-03	5.000E-03	RTF(6,2)
D-34	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(6,3)
D-34				
D-34	Pb-210+D , plant/soil concentration ratio, dimensionless	1.000E-02	1.000E-02	RTF(7,1)
D-34	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	8.000E-04	8.000E-04	RTF(7,2)
D-34	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	3.000E-04	3.000E-04	RTF(7,3)
D-34				
D-34	Pm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(8,1)
D-34	Pm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(8,2)
D-34	Pm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(8,3)
D-34				
D-34	Pu-239 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(9,1)
D-34	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(9,2)

D-34	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-06	1.000E-06	RTF(9,3)
D-34				
D-34	Ra-226+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(10,1)
D-34	Ra-226+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(10,2)
D-34	Ra-226+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(10,3)
D-34				
D-34	Ra-228+D , plant/soil concentration ratio, dimensionless	4.000E-02	4.000E-02	RTF(11,1)
D-34	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-03	1.000E-03	RTF(11,2)
D-34	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	1.000E-03	1.000E-03	RTF(11,3)
D-34				
D-34	Sm-147 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(12,1)
D-34	Sm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	2.000E-03	2.000E-03	RTF(12,2)
D-34	Sm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	2.000E-05	2.000E-05	RTF(12,3)
D-34				
D-34	Th-228+D , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(13,1)
D-34	Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(13,2)
D-34	Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(13,3)
D-34				
D-34	Th-230 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(14,1)
D-34	Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(14,2)
D-34	Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(14,3)
D-34				
D-34	Th-232 , plant/soil concentration ratio, dimensionless	1.000E-03	1.000E-03	RTF(15,1)
D-34	Th-232 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	1.000E-04	1.000E-04	RTF(15,2)
D-34	Th-232 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	5.000E-06	5.000E-06	RTF(15,3)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
D-34	U-234 , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(16,1)
D-34	U-234 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(16,2)
D-34	U-234 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(16,3)
D-34				
D-34	U-235+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(17,1)
D-34	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(17,2)
D-34	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(17,3)
D-34				
D-34	U-238+D , plant/soil concentration ratio, dimensionless	2.500E-03	2.500E-03	RTF(18,1)
D-34	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	3.400E-04	3.400E-04	RTF(18,2)
D-34	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	6.000E-04	6.000E-04	RTF(18,3)
D-5	Bioaccumulation factors, fresh water, L/kg:			
D-5	Ac-227+D , fish	1.500E+01	1.500E+01	BIOFAC(1,1)
D-5	Ac-227+D , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(1,2)
D-5				
D-5	Co-57 , fish	3.000E+02	3.000E+02	BIOFAC(2,1)
D-5	Co-57 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(2,2)
D-5				
D-5	Co-60 , fish	3.000E+02	3.000E+02	BIOFAC(3,1)
D-5	Co-60 , crustacea and mollusks	2.000E+02	2.000E+02	BIOFAC(3,2)
D-5				
D-5	Cs-137+D , fish	2.000E+03	2.000E+03	BIOFAC(4,1)
D-5	Cs-137+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(4,2)
D-5				

D-5	H-3 , fish	1.000E+00	1.000E+00	BIOFAC(5,1)
D-5	H-3 , crustacea and mollusks	1.000E+00	1.000E+00	BIOFAC(5,2)
D-5				
D-5	Pa-231 , fish	1.000E+01	1.000E+01	BIOFAC(6,1)
D-5	Pa-231 , crustacea and mollusks	1.100E+02	1.100E+02	BIOFAC(6,2)
D-5				
D-5	Pb-210+D , fish	3.000E+02	3.000E+02	BIOFAC(7,1)
D-5	Pb-210+D , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(7,2)
D-5				
D-5	Pm-147 , fish	3.000E+01	3.000E+01	BIOFAC(8,1)
D-5	Pm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(8,2)
D-5				
D-5	Pu-239 , fish	3.000E+01	3.000E+01	BIOFAC(9,1)
D-5	Pu-239 , crustacea and mollusks	1.000E+02	1.000E+02	BIOFAC(9,2)
D-5				
D-5	Ra-226+D , fish	5.000E+01	5.000E+01	BIOFAC(10,1)
D-5	Ra-226+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(10,2)
D-5				
D-5	Ra-228+D , fish	5.000E+01	5.000E+01	BIOFAC(11,1)
D-5	Ra-228+D , crustacea and mollusks	2.500E+02	2.500E+02	BIOFAC(11,2)
D-5				
D-5	Sm-147 , fish	2.500E+01	2.500E+01	BIOFAC(12,1)
D-5	Sm-147 , crustacea and mollusks	1.000E+03	1.000E+03	BIOFAC(12,2)
D-5				
D-5	Th-228+D , fish	1.000E+02	1.000E+02	BIOFAC(13,1)
D-5	Th-228+D , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(13,2)

Dose Conversion Factor (and Related) Parameter Summary (continued)
File: DOSFAC.BIN

0 Menu	Parameter	Current Value	Default	Parameter Name
D-5	Th-230 , fish	1.000E+02	1.000E+02	BIOFAC(14,1)
D-5	Th-230 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(14,2)
D-5				
D-5	Th-232 , fish	1.000E+02	1.000E+02	BIOFAC(15,1)
D-5	Th-232 , crustacea and mollusks	5.000E+02	5.000E+02	BIOFAC(15,2)
D-5				
D-5	U-234 , fish	1.000E+01	1.000E+01	BIOFAC(16,1)
D-5	U-234 , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(16,2)
D-5				
D-5	U-235+D , fish	1.000E+01	1.000E+01	BIOFAC(17,1)
D-5	U-235+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(17,2)
D-5				
D-5	U-238+D , fish	1.000E+01	1.000E+01	BIOFAC(18,1)
D-5	U-238+D , crustacea and mollusks	6.000E+01	6.000E+01	BIOFAC(18,2)

Site-Specific Parameter Summary

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R011	Area of contaminated zone (m**2)	2.195E+03	1.000E+04	---	AREA
R011	Thickness of contaminated zone (m)	1.830E+00	2.000E+00	---	THICK0

R011	Length parallel to aquifer flow (m)	5.030E+01	1.000E+02	---	LCZPAQ
R011	Basic radiation dose limit (mrem/yr)	1.000E+01	3.000E+01	---	BRDL
R011	Time since placement of material (yr)	0.000E+00	0.000E+00	---	TI
R011	Times for calculations (yr)	1.000E+00	1.000E+00	---	T(2)
R011	Times for calculations (yr)	3.000E+00	3.000E+00	---	T(3)
R011	Times for calculations (yr)	1.000E+01	1.000E+01	---	T(4)
R011	Times for calculations (yr)	3.000E+01	3.000E+01	---	T(5)
R011	Times for calculations (yr)	1.000E+02	1.000E+02	---	T(6)
R011	Times for calculations (yr)	3.000E+02	3.000E+02	---	T(7)
R011	Times for calculations (yr)	1.000E+03	1.000E+03	---	T(8)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(9)
R011	Times for calculations (yr)	not used	0.000E+00	---	T(10)
R012	Initial principal radionuclide (pCi/g): Ac-227	1.000E+02	0.000E+00	---	S1(1)
R012	Initial principal radionuclide (pCi/g): Co-57	1.000E+02	0.000E+00	---	S1(2)
R012	Initial principal radionuclide (pCi/g): Co-60	1.000E+02	0.000E+00	---	S1(3)
R012	Initial principal radionuclide (pCi/g): Cs-137	1.000E+02	0.000E+00	---	S1(4)
R012	Initial principal radionuclide (pCi/g): H-3	1.000E+02	0.000E+00	---	S1(5)
R012	Initial principal radionuclide (pCi/g): Pa-231	1.000E+02	0.000E+00	---	S1(6)
R012	Initial principal radionuclide (pCi/g): Pb-210	1.000E+02	0.000E+00	---	S1(7)
R012	Initial principal radionuclide (pCi/g): Pm-147	1.000E+02	0.000E+00	---	S1(8)
R012	Initial principal radionuclide (pCi/g): Pu-239	1.000E+02	0.000E+00	---	S1(9)
R012	Initial principal radionuclide (pCi/g): Ra-226	1.000E+02	0.000E+00	---	S1(10)
R012	Initial principal radionuclide (pCi/g): Ra-228	1.000E+02	0.000E+00	---	S1(11)
R012	Initial principal radionuclide (pCi/g): Sm-147	1.000E+02	0.000E+00	---	S1(12)
R012	Initial principal radionuclide (pCi/g): Th-228	1.000E+02	0.000E+00	---	S1(13)
R012	Initial principal radionuclide (pCi/g): Th-230	1.000E+02	0.000E+00	---	S1(14)
R012	Initial principal radionuclide (pCi/g): Th-232	1.000E+02	0.000E+00	---	S1(15)
R012	Initial principal radionuclide (pCi/g): U-234	1.000E+02	0.000E+00	---	S1(16)
R012	Initial principal radionuclide (pCi/g): U-235	1.000E+02	0.000E+00	---	S1(17)
R012	Initial principal radionuclide (pCi/g): U-238	1.000E+02	0.000E+00	---	S1(18)
R012	Concentration in groundwater (pCi/L): Ac-227	not used	0.000E+00	---	W1(1)
R012	Concentration in groundwater (pCi/L): Co-57	not used	0.000E+00	---	W1(2)
R012	Concentration in groundwater (pCi/L): Co-60	not used	0.000E+00	---	W1(3)
R012	Concentration in groundwater (pCi/L): Cs-137	not used	0.000E+00	---	W1(4)
R012	Concentration in groundwater (pCi/L): H-3	not used	0.000E+00	---	W1(5)
R012	Concentration in groundwater (pCi/L): Pa-231	not used	0.000E+00	---	W1(6)
R012	Concentration in groundwater (pCi/L): Pb-210	not used	0.000E+00	---	W1(7)
R012	Concentration in groundwater (pCi/L): Pm-147	not used	0.000E+00	---	W1(8)
R012	Concentration in groundwater (pCi/L): Pu-239	not used	0.000E+00	---	W1(9)
R012	Concentration in groundwater (pCi/L): Ra-226	not used	0.000E+00	---	W1(10)
R012	Concentration in groundwater (pCi/L): Ra-228	not used	0.000E+00	---	W1(11)
R012	Concentration in groundwater (pCi/L): Sm-147	not used	0.000E+00	---	W1(12)
R012	Concentration in groundwater (pCi/L): Th-228	not used	0.000E+00	---	W1(13)
R012	Concentration in groundwater (pCi/L): Th-230	not used	0.000E+00	---	W1(14)
R012	Concentration in groundwater (pCi/L): Th-232	not used	0.000E+00	---	W1(15)
R012	Concentration in groundwater (pCi/L): U-234	not used	0.000E+00	---	W1(16)
R012	Concentration in groundwater (pCi/L): U-235	not used	0.000E+00	---	W1(17)
R012	Concentration in groundwater (pCi/L): U-238	not used	0.000E+00	---	W1(18)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R013	Cover depth (m)	0.000E+00	0.000E+00	---	COVER0
R013	Density of cover material (g/cm**3)	not used	1.500E+00	---	DENSCV

R013	Cover depth erosion rate (m/yr)	not used	1.000E-03	---	VCV
R013	Density of contaminated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSCZ
R013	Contaminated zone erosion rate (m/yr)	6.000E-05	1.000E-03	---	VCZ
R013	Contaminated zone total porosity	3.700E-01	4.000E-01	---	TPCZ
R013	Contaminated zone effective porosity	1.750E-01	2.000E-01	---	EPCZ
R013	Contaminated zone hydraulic conductivity (m/yr)	2.080E+02	1.000E+01	---	HCCZ
R013	Contaminated zone b parameter	7.750E+00	5.300E+00	---	BCZ
R013	Average annual wind speed (m/sec)	3.000E+00	2.000E+00	---	WIND
R013	Humidity in air (g/m**3)	6.600E+00	8.000E+00	---	HUMID
R013	Evapotranspiration coefficient	7.000E-01	5.000E-01	---	EVAPTR
R013	Precipitation (m/yr)	7.500E-01	1.000E+00	---	PRECIP
R013	Irrigation (m/yr)	0.000E+00	2.000E-01	---	RI
R013	Irrigation mode	overhead	overhead	---	IDITCH
R013	Runoff coefficient	2.000E-01	2.000E-01	---	RUNOFF
R013	Watershed area for nearby stream or pond (m**2)	1.000E+06	1.000E+06	---	WAREA
R013	Accuracy for water/soil computations	1.000E-03	1.000E-03	---	EPS
R014	Density of saturated zone (g/cm**3)	1.500E+00	1.500E+00	---	DENSAQ
R014	Saturated zone total porosity	3.700E-01	4.000E-01	---	TPSZ
R014	Saturated zone effective porosity	1.750E-01	2.000E-01	---	EPSZ
R014	Saturated zone hydraulic conductivity (m/yr)	2.080E+02	1.000E+02	---	HCSZ
R014	Saturated zone hydraulic gradient	1.200E-02	2.000E-02	---	HGWT
R014	Saturated zone b parameter	5.300E+00	5.300E+00	---	BSZ
R014	Water table drop rate (m/yr)	0.000E+00	1.000E-03	---	VWT
R014	Well pump intake depth (m below water table)	3.000E+00	1.000E+01	---	DWIBWT
R014	Model: Nondispersion (ND) or Mass-Balance (MB)	ND	ND	---	MODEL
R014	Well pumping rate (m**3/yr)	5.000E+01	2.500E+02	---	UW
R015	Number of unsaturated zone strata	1	1	---	NS
R015	Unsat. zone 1, thickness (m)	1.000E+00	4.000E+00	---	H(1)
R015	Unsat. zone 1, soil density (g/cm**3)	1.500E+00	1.500E+00	---	DENSUZ(1)
R015	Unsat. zone 1, total porosity	3.700E-01	4.000E-01	---	TPUZ(1)
R015	Unsat. zone 1, effective porosity	1.750E-01	2.000E-01	---	EPUZ(1)
R015	Unsat. zone 1, soil-specific b parameter	7.750E+00	5.300E+00	---	BUZ(1)
R015	Unsat. zone 1, hydraulic conductivity (m/yr)	2.080E+02	1.000E+01	---	HCUZ(1)
R016	Distribution coefficients for Ac-227				
R016	Contaminated zone (cm**3/g)	2.400E+03	2.000E+01	---	DCNUCC(1)
R016	Unsaturated zone 1 (cm**3/g)	2.400E+03	2.000E+01	---	DCNUCU(1,1)
R016	Saturated zone (cm**3/g)	2.400E+03	2.000E+01	---	DCNUCS(1)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.732E-05	ALEACH(1)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(1)
R016	Distribution coefficients for Co-57				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCC(2)
R016	Unsaturated zone 1 (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCU(2,1)
R016	Saturated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCS(2)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.192E-04	ALEACH(2)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(2)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (if different from user input)	Parameter Name
R016	Distribution coefficients for Co-60				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCC(3)

R016	Unsaturated zone 1 (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCU(3,1)
R016	Saturated zone (cm**3/g)	5.500E+02	1.000E+03	---	DCNUCS(3)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.192E-04	ALEACH(3)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(3)
R016	Distribution coefficients for Cs-137				
R016	Contaminated zone (cm**3/g)	1.900E+03	1.000E+03	---	DCNUCC(4)
R016	Unsaturated zone 1 (cm**3/g)	1.900E+03	1.000E+03	---	DCNUCU(4,1)
R016	Saturated zone (cm**3/g)	1.900E+03	1.000E+03	---	DCNUCS(4)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.451E-05	ALEACH(4)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(4)
R016	Distribution coefficients for H-3				
R016	Contaminated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCC(5)
R016	Unsaturated zone 1 (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCU(5,1)
R016	Saturated zone (cm**3/g)	0.000E+00	0.000E+00	---	DCNUCS(5)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	3.892E-01	ALEACH(5)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(5)
R016	Distribution coefficients for Pa-231				
R016	Contaminated zone (cm**3/g)	2.700E+03	5.000E+01	---	DCNUCC(6)
R016	Unsaturated zone 1 (cm**3/g)	2.700E+03	5.000E+01	---	DCNUCU(6,1)
R016	Saturated zone (cm**3/g)	2.700E+03	5.000E+01	---	DCNUCS(6)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	2.429E-05	ALEACH(6)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(6)
R016	Distribution coefficients for Pb-210				
R016	Contaminated zone (cm**3/g)	5.500E+02	1.000E+02	---	DCNUCC(7)
R016	Unsaturated zone 1 (cm**3/g)	5.500E+02	1.000E+02	---	DCNUCU(7,1)
R016	Saturated zone (cm**3/g)	5.500E+02	1.000E+02	---	DCNUCS(7)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.192E-04	ALEACH(7)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(7)
R016	Distribution coefficients for Pm-147				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(8)
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(8,1)
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(8)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.948E-05	ALEACH(8)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(8)
R016	Distribution coefficients for Pu-239				
R016	Contaminated zone (cm**3/g)	5.100E+03	2.000E+03	---	DCNUCC(9)
R016	Unsaturated zone 1 (cm**3/g)	5.100E+03	2.000E+03	---	DCNUCU(9,1)
R016	Saturated zone (cm**3/g)	5.100E+03	2.000E+03	---	DCNUCS(9)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.286E-05	ALEACH(9)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(9)

Site-Specific Parameter Summary (continued)

0

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for Ra-226				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(10)
R016	Unsaturated zone 1 (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCU(10,1)
R016	Saturated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCS(10)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.206E-06	ALEACH(10)

R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(10)
R016	Distribution coefficients for Ra-228				
R016	Contaminated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCC(11)
R016	Unsaturated zone 1 (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCU(11,1)
R016	Saturated zone (cm**3/g)	9.100E+03	7.000E+01	---	DCNUCS(11)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.306E-06	ALEACH(11)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(11)
R016	Distribution coefficients for Sm-147				
R016	Contaminated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCC(12)
R016	Unsaturated zone 1 (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCU(12,1)
R016	Saturated zone (cm**3/g)	-1.000E+00	-1.000E+00	8.249E+02	DCNUCS(12)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	7.948E-05	ALEACH(12)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(12)
R016	Distribution coefficients for Th-228				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(13)
R016	Unsaturated zone 1 (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCU(13,1)
R016	Saturated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCS(13)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.131E-05	ALEACH(13)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(13)
R016	Distribution coefficients for Th-230				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(14)
R016	Unsaturated zone 1 (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCU(14,1)
R016	Saturated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCS(14)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.131E-05	ALEACH(14)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(14)
R016	Distribution coefficients for Th-232				
R016	Contaminated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCC(15)
R016	Unsaturated zone 1 (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCU(15,1)
R016	Saturated zone (cm**3/g)	5.800E+03	6.000E+04	---	DCNUCS(15)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	1.131E-05	ALEACH(15)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(15)
R016	Distribution coefficients for U-234				
R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(16)
R016	Unsaturated zone 1 (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCU(16,1)
R016	Saturated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCS(16)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.098E-05	ALEACH(16)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(16)

Site-Specific Parameter Summary (continued)

0 Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R016	Distribution coefficients for U-235				
R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(17)
R016	Unsaturated zone 1 (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCU(17,1)
R016	Saturated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCS(17)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.098E-05	ALEACH(17)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(17)
R016	Distribution coefficients for U-238				

R016	Contaminated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCC(18)
R016	Unsaturated zone 1 (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCU(18,1)
R016	Saturated zone (cm**3/g)	1.600E+03	5.000E+01	---	DCNUCS(18)
R016	Leach rate (/yr)	0.000E+00	0.000E+00	4.098E-05	ALEACH(18)
R016	Solubility constant	0.000E+00	0.000E+00	not used	SOLUBK(18)
R017	Inhalation rate (m**3/yr)	1.100E+04	8.400E+03	---	INHALR
R017	Mass loading for inhalation (g/m**3)	1.000E-03	1.000E-04	---	MLINH
R017	Exposure duration	3.000E+01	3.000E+01	---	ED
R017	Shielding factor, inhalation	4.000E-01	4.000E-01	---	SHF3
R017	Shielding factor, external gamma	2.000E-01	7.000E-01	---	SHF1
R017	Fraction of time spent indoors	6.500E-01	5.000E-01	---	FIND
R017	Fraction of time spent outdoors (on site)	8.000E-02	2.500E-01	---	FOTD
R017	Shape factor flag, external gamma	1.000E+00	1.000E+00	>0 shows circular AREA.	FS
R017	Radii of shape factor array (used if FS = -1):				
R017	Outer annular radius (m), ring 1:	not used	5.000E+01	---	RAD_SHAPE(1)
R017	Outer annular radius (m), ring 2:	not used	7.071E+01	---	RAD_SHAPE(2)
R017	Outer annular radius (m), ring 3:	not used	0.000E+00	---	RAD_SHAPE(3)
R017	Outer annular radius (m), ring 4:	not used	0.000E+00	---	RAD_SHAPE(4)
R017	Outer annular radius (m), ring 5:	not used	0.000E+00	---	RAD_SHAPE(5)
R017	Outer annular radius (m), ring 6:	not used	0.000E+00	---	RAD_SHAPE(6)
R017	Outer annular radius (m), ring 7:	not used	0.000E+00	---	RAD_SHAPE(7)
R017	Outer annular radius (m), ring 8:	not used	0.000E+00	---	RAD_SHAPE(8)
R017	Outer annular radius (m), ring 9:	not used	0.000E+00	---	RAD_SHAPE(9)
R017	Outer annular radius (m), ring 10:	not used	0.000E+00	---	RAD_SHAPE(10)
R017	Outer annular radius (m), ring 11:	not used	0.000E+00	---	RAD_SHAPE(11)
R017	Outer annular radius (m), ring 12:	not used	0.000E+00	---	RAD_SHAPE(12)
R017	Fractions of annular areas within AREA:				
R017	Ring 1	not used	1.000E+00	---	FRACA(1)
R017	Ring 2	not used	2.732E-01	---	FRACA(2)
R017	Ring 3	not used	0.000E+00	---	FRACA(3)
R017	Ring 4	not used	0.000E+00	---	FRACA(4)
R017	Ring 5	not used	0.000E+00	---	FRACA(5)
R017	Ring 6	not used	0.000E+00	---	FRACA(6)
R017	Ring 7	not used	0.000E+00	---	FRACA(7)
R017	Ring 8	not used	0.000E+00	---	FRACA(8)
R017	Ring 9	not used	0.000E+00	---	FRACA(9)
R017	Ring 10	not used	0.000E+00	---	FRACA(10)
R017	Ring 11	not used	0.000E+00	---	FRACA(11)
R017	Ring 12	not used	0.000E+00	---	FRACA(12)
R018	Fruits, vegetables and grain consumption (kg/yr)	4.450E+01	1.600E+02	---	DIET(1)

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (If different from user input)	Parameter Name
R018	Leafy vegetable consumption (kg/yr)	0.000E+00	1.400E+01	---	DIET(2)
R018	Milk consumption (L/yr)	8.200E+01	9.200E+01	---	DIET(3)
R018	Meat and poultry consumption (kg/yr)	4.500E+01	6.300E+01	---	DIET(4)
R018	Fish consumption (kg/yr)	not used	5.400E+00	---	DIET(5)
R018	Other seafood consumption (kg/yr)	not used	9.000E-01	---	DIET(6)
R018	Soil ingestion rate (g/yr)	3.650E+01	3.650E+01	---	SOIL
R018	Drinking water intake (L/yr)	5.100E+02	5.100E+02	---	DWI
R018	Contamination fraction of drinking water	1.000E+00	1.000E+00	---	FDW

R018	Contamination fraction of household water	1.000E+00	1.000E+00	---	FHHW
R018	Contamination fraction of livestock water	1.000E+00	1.000E+00	---	FLW
R018	Contamination fraction of irrigation water	1.000E+00	1.000E+00	---	FIRW
R018	Contamination fraction of aquatic food	not used	5.000E-01	---	FR9
R018	Contamination fraction of plant food	1.000E+00	-1	---	FPLANT
R018	Contamination fraction of meat	5.000E-01	-1	---	FMEAT
R018	Contamination fraction of milk	5.000E-01	-1	---	FMILK
R019	Livestock fodder intake for meat (kg/day)	1.180E+01	6.800E+01	---	LFI5
R019	Livestock fodder intake for milk (kg/day)	2.030E+01	5.500E+01	---	LFI6
R019	Livestock water intake for meat (L/day)	5.000E+01	5.000E+01	---	LWI5
R019	Livestock water intake for milk (L/day)	1.600E+02	1.600E+02	---	LWI6
R019	Livestock soil intake (kg/day)	5.000E-01	5.000E-01	---	LSI
R019	Mass loading for foliar deposition (g/m**3)	1.000E-04	1.000E-04	---	MLFD
R019	Depth of soil mixing layer (m)	1.500E-01	1.500E-01	---	DM
R019	Depth of roots (m)	9.000E-01	9.000E-01	---	DROOT
R019	Drinking water fraction from ground water	1.000E+00	1.000E+00	---	FGWDW
R019	Household water fraction from ground water	1.000E+00	1.000E+00	---	FGWHH
R019	Livestock water fraction from ground water	1.000E+00	1.000E+00	---	FGWLW
R019	Irrigation fraction from ground water	1.000E+00	1.000E+00	---	FGWIR
R19B	Wet weight crop yield for Non-Leafy (kg/m**2)	7.000E-01	7.000E-01	---	YV(1)
R19B	Wet weight crop yield for Leafy (kg/m**2)	1.500E+00	1.500E+00	---	YV(2)
R19B	Wet weight crop yield for Fodder (kg/m**2)	1.100E+00	1.100E+00	---	YV(3)
R19B	Growing Season for Non-Leafy (years)	1.700E-01	1.700E-01	---	TE(1)
R19B	Growing Season for Leafy (years)	2.500E-01	2.500E-01	---	TE(2)
R19B	Growing Season for Fodder (years)	8.000E-02	8.000E-02	---	TE(3)
R19B	Translocation Factor for Non-Leafy	1.000E-01	1.000E-01	---	TIV(1)
R19B	Translocation Factor for Leafy	1.000E+00	1.000E+00	---	TIV(2)
R19B	Translocation Factor for Fodder	1.000E+00	1.000E+00	---	TIV(3)
R19B	Dry Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RDRY(1)
R19B	Dry Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RDRY(2)
R19B	Dry Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RDRY(3)
R19B	Wet Foliar Interception Fraction for Non-Leafy	2.500E-01	2.500E-01	---	RWET(1)
R19B	Wet Foliar Interception Fraction for Leafy	2.500E-01	2.500E-01	---	RWET(2)
R19B	Wet Foliar Interception Fraction for Fodder	2.500E-01	2.500E-01	---	RWET(3)
R19B	Weathering Removal Constant for Vegetation	2.000E+01	2.000E+01	---	WLAM
C14	C-12 concentration in water (g/cm**3)	not used	2.000E-05	---	C12WTR
C14	C-12 concentration in contaminated soil (g/g)	not used	3.000E-02	---	C12CZ
C14	Fraction of vegetation carbon from soil	not used	2.000E-02	---	CSOIL
C14	Fraction of vegetation carbon from air	not used	9.800E-01	---	CAIR
C14	C-14 evasion layer thickness in soil (m)	not used	3.000E-01	---	DMC

Site-Specific Parameter Summary (continued)

Menu	Parameter	User Input	Default	Used by RESRAD (if different from user input)	Parameter Name
C14	C-14 evasion flux rate from soil (1/sec)	not used	7.000E-07	---	EVSN
C14	C-12 evasion flux rate from soil (1/sec)	not used	1.000E-10	---	REVSN
C14	Fraction of grain in beef cattle feed	not used	8.000E-01	---	AVFG4
C14	Fraction of grain in milk cow feed	not used	2.000E-01	---	AVFG5
STOR	Storage times of contaminated foodstuffs (days):				
STOR	Fruits, non-leafy vegetables, and grain	1.400E+01	1.400E+01	---	STOR_T(1)
STOR	Leafy vegetables	1.000E+00	1.000E+00	---	STOR_T(2)

STOR	Milk	1.000E+00	1.000E+00	---	STOR_T(3)
STOR	Meat and poultry	2.000E+01	2.000E+01	---	STOR_T(4)
STOR	Fish	7.000E+00	7.000E+00	---	STOR_T(5)
STOR	Crustacea and mollusks	7.000E+00	7.000E+00	---	STOR_T(6)
STOR	Well water	1.000E+00	1.000E+00	---	STOR_T(7)
STOR	Surface water	1.000E+00	1.000E+00	---	STOR_T(8)
STOR	Livestock fodder	4.500E+01	4.500E+01	---	STOR_T(9)
R021	Thickness of building foundation (m)	1.500E-01	1.500E-01	---	FLOOR
R021	Bulk density of building foundation (g/cm**3)	2.400E+00	2.400E+00	---	DENSFL
R021	Total porosity of the cover material	not used	4.000E-01	---	TPCV
R021	Total porosity of the building foundation	1.000E-01	1.000E-01	---	TPFL
R021	Volumetric water content of the cover material	not used	5.000E-02	---	PH2OCV
R021	Volumetric water content of the foundation	3.000E-02	3.000E-02	---	PH2OFL
R021	Diffusion coefficient for radon gas (m/sec):				
R021	in cover material	not used	2.000E-06	---	DIFCV
R021	in foundation material	3.000E-07	3.000E-07	---	DIFFL
R021	in contaminated zone soil	2.000E-06	2.000E-06	---	DIFCZ
R021	Radon vertical dimension of mixing (m)	2.000E+00	2.000E+00	---	HMIX
R021	Average building air exchange rate (1/hr)	5.000E-01	5.000E-01	---	REXG
R021	Height of the building (room) (m)	2.500E+00	2.500E+00	---	HRM
R021	Building interior area factor	0.000E+00	0.000E+00	code computed (time dependent)	FAI
R021	Building depth below ground surface (m)	-1.000E+00	-1.000E+00	code computed (time dependent)	DMFL
R021	Emanating power of Rn-222 gas	2.500E-01	2.500E-01	---	EMANA(1)
R021	Emanating power of Rn-220 gas	1.500E-01	1.500E-01	---	EMANA(2)

Summary of Pathway Selections

Pathway	User Selection
1 -- external gamma	active
2 -- inhalation (w/o radon)	active
3 -- plant ingestion	active
4 -- meat ingestion	active
5 -- milk ingestion	active
6 -- aquatic foods	suppressed
7 -- drinking water	active
8 -- soil ingestion	active
9 -- radon	active
Find peak pathway doses	suppressed

Contaminated Zone Dimensions

Area:	2195.00 square meters
Thickness:	1.83 meters
Cover Depth:	0.00 meters

Initial Soil Concentrations, pCi/g

Ac-227	1.000E+02
Co-57	1.000E+02
Co-60	1.000E+02
Cs-137	1.000E+02
H-3	1.000E+02
Pa-231	1.000E+02
Pb-210	1.000E+02
Pm-147	1.000E+02
Pu-239	1.000E+02

Ra-226	1.000E+02
Ra-228	1.000E+02
Sm-147	1.000E+02
Th-228	1.000E+02
Th-230	1.000E+02
Th-232	1.000E+02
U-234	1.000E+02
U-235	1.000E+02
U-238	1.000E+02

0

Total Dose TDOSE(t), mrem/yr
Basic Radiation Dose Limit = 10 mrem/yr
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)

t (years):	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
TDOSE(t):	1.082E+04	1.077E+04	1.071E+04	1.056E+04	1.045E+04	1.040E+04	1.037E+04	1.029E+04
M(t):	1.082E+03	1.077E+03	1.071E+03	1.056E+03	1.045E+03	1.040E+03	1.037E+03	1.029E+03

0Maximum TDOSE(t): 1.082E+04 mrem/yr at t = 0.000E+00 years

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years
0 Water Independent Pathways (Inhalation excludes radon)

0 Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	3.864E+01	0.0036	3.163E+02	0.0292	0.000E+00	0.0000	1.647E+02	0.0152	3.527E-01	0.0000	6.685E-01	0.0001	3.943E+01	0.0036
Co-57	9.777E+00	0.0009	4.269E-04	0.0000	0.000E+00	0.0000	4.201E-01	0.0000	7.668E-02	0.0000	2.055E-02	0.0000	3.144E-03	0.0000
Co-60	3.087E+02	0.0285	1.031E-02	0.0000	0.000E+00	0.0000	9.576E+00	0.0009	1.748E+00	0.0002	4.685E-01	0.0000	7.168E-02	0.0000
Cs-137	6.447E+01	0.0060	1.501E-03	0.0000	0.000E+00	0.0000	8.900E+00	0.0008	3.081E+00	0.0003	2.152E+00	0.0002	1.332E-01	0.0000
H-3	0.000E+00	0.0000	3.258E-02	0.0000	0.000E+00	0.0000	1.351E+00	0.0001	8.147E-02	0.0000	1.268E-01	0.0000	1.705E-04	0.0000
Pa-231	3.697E+00	0.0003	6.024E+01	0.0056	0.000E+00	0.0000	4.717E+02	0.0436	7.370E+01	0.0068	1.528E-01	0.0000	2.824E+01	0.0026
Pb-210	1.209E-01	0.0000	1.092E+00	0.0001	0.000E+00	0.0000	3.235E+02	0.0299	8.088E+00	0.0007	6.287E+00	0.0006	1.937E+01	0.0018
Pm-147	9.790E-04	0.0000	1.845E-03	0.0000	0.000E+00	0.0000	1.168E-02	0.0000	2.502E-03	0.0000	4.743E-05	0.0000	2.798E-03	0.0000
Pu-239	5.800E-03	0.0000	2.019E+01	0.0019	0.000E+00	0.0000	1.576E+01	0.0015	4.077E-01	0.0000	7.954E-04	0.0000	9.432E+00	0.0009
Ra-226	2.139E+02	0.0198	4.047E-01	0.0000	7.555E+03	0.6984	2.367E+02	0.0219	2.909E+00	0.0003	7.155E+00	0.0007	3.544E+00	0.0003
Ra-228	1.141E+02	0.0105	2.391E-01	0.0000	0.000E+00	0.0000	2.563E+02	0.0237	3.149E+00	0.0003	7.746E+00	0.0007	3.837E+00	0.0004
Sm-147	0.000E+00	0.0000	3.516E+00	0.0003	0.000E+00	0.0000	2.059E+00	0.0002	4.408E-01	0.0000	8.356E-03	0.0000	4.929E-01	0.0000
Th-228	1.952E+02	0.0180	1.624E+01	0.0015	1.144E+01	0.0011	3.598E+00	0.0003	9.305E-02	0.0000	8.619E-03	0.0000	2.153E+00	0.0002
Th-230	2.368E-02	0.0000	1.534E+01	0.0014	0.000E+00	0.0000	2.440E+00	0.0002	6.311E-02	0.0000	5.846E-03	0.0000	1.460E+00	0.0001
Th-232	1.023E-02	0.0000	7.718E+01	0.0071	0.000E+00	0.0000	1.216E+01	0.0011	3.144E-01	0.0000	2.912E-02	0.0000	7.274E+00	0.0007
U-234	7.933E-03	0.0000	6.212E+00	0.0006	0.000E+00	0.0000	3.149E+00	0.0003	1.146E-01	0.0000	3.835E-01	0.0000	7.541E-01	0.0001
U-235	1.470E+01	0.0014	5.789E+00	0.0005	0.000E+00	0.0000	2.971E+00	0.0003	1.082E-01	0.0000	3.618E-01	0.0000	7.114E-01	0.0001
U-238	2.620E+00	0.0002	5.553E+00	0.0005	0.000E+00	0.0000	2.993E+00	0.0003	1.040E-01	0.0000	3.645E-01	0.0000	7.168E-01	0.0001
Total	9.660E+02	0.0893	5.283E+02	0.0488	7.566E+03	0.6994	1.518E+03	0.1404	9.504E+01	0.0088	2.595E+01	0.0024	1.176E+02	0.0109

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 0.000E+00 years
0 Water Dependent Pathways

0 Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.

Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.600E+02	0.0518
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.030E+01	0.0010
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.206E+02	0.0296
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.893E+01	0.0073
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.592E+00	0.0001
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.378E+02	0.0590
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.585E+02	0.0331
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.986E-02	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.581E+01	0.0042
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.019E+03	0.7413
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.854E+02	0.0356
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.516E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.288E+02	0.0211
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.934E+01	0.0018
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.697E+01	0.0090
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.062E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.464E+01	0.0023
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.236E+01	0.0011
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.082E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

0 Water Independent Pathways (Inhalation excludes radon)

0 Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	3.743E+01	0.0035	3.063E+02	0.0284	0.000E+00	0.0000	1.595E+02	0.0148	3.416E-01	0.0000	6.475E-01	0.0001	3.820E+01	0.0035
Co-57	3.840E+00	0.0004	1.676E-04	0.0000	0.000E+00	0.0000	1.650E-01	0.0000	3.011E-02	0.0000	8.072E-03	0.0000	1.235E-03	0.0000
Co-60	2.706E+02	0.0251	9.036E-03	0.0000	0.000E+00	0.0000	8.396E+00	0.0008	1.532E+00	0.0001	4.108E-01	0.0000	6.284E-02	0.0000
Cs-137	6.299E+01	0.0058	1.467E-03	0.0000	0.000E+00	0.0000	8.697E+00	0.0008	3.206E+00	0.0003	2.103E+00	0.0002	1.302E-01	0.0000
H-3	0.000E+00	0.0000	8.405E-03	0.0000	0.000E+00	0.0000	3.663E-01	0.0000	2.661E-02	0.0000	3.848E-02	0.0000	4.398E-05	0.0000
Pa-231	4.908E+00	0.0005	7.015E+01	0.0065	0.000E+00	0.0000	4.775E+02	0.0443	7.389E+01	0.0069	1.744E-01	0.0000	2.948E+01	0.0027
Pb-210	1.171E-01	0.0000	1.058E+00	0.0001	0.000E+00	0.0000	3.136E+02	0.0291	7.839E+00	0.0007	6.094E+00	0.0006	1.878E+01	0.0017
Pm-147	7.516E-04	0.0000	1.416E-03	0.0000	0.000E+00	0.0000	8.971E-03	0.0000	1.921E-03	0.0000	3.641E-05	0.0000	2.148E-03	0.0000
Pu-239	5.800E-03	0.0000	2.019E+01	0.0019	0.000E+00	0.0000	1.576E+01	0.0015	4.077E-01	0.0000	7.552E-03	0.0000	9.432E+00	0.0009
Ra-226	2.138E+02	0.0198	4.380E-01	0.0000	7.551E+03	0.7009	2.477E+02	0.0230	3.186E+00	0.0003	7.368E+00	0.0007	4.135E+00	0.0004
Ra-228	1.568E+02	0.0146	4.844E+00	0.0004	3.264E+00	0.0003	2.300E+02	0.0213	2.851E+00	0.0003	6.873E+00	0.0006	4.015E+00	0.0004
Sm-147	0.000E+00	0.0000	3.515E+00	0.0003	0.000E+00	0.0000	2.059E+00	0.0002	4.408E-01	0.0000	8.355E-03	0.0000	4.929E-01	0.0000
Th-228	1.359E+02	0.0126	1.130E+01	0.0010	7.964E+00	0.0007	2.504E+00	0.0002	6.477E-02	0.0000	6.000E-03	0.0000	1.499E+00	0.0001
Th-230	1.163E-01	0.0000	1.534E+01	0.0014	3.272E+00	0.0003	2.542E+00	0.0002	6.429E-02	0.0000	8.756E-03	0.0000	1.462E+00	0.0001
Th-232	1.660E+01	0.0015	7.751E+01	0.0072	2.133E-01	0.0000	4.039E+01	0.0037	6.359E-01	0.0001	8.381E-01	0.0001	7.750E+00	0.0007
U-234	7.934E-03	0.0000	6.212E+00	0.0006	1.473E-05	0.0000	3.149E+00	0.0003	1.146E-01	0.0000	3.835E-01	0.0000	7.540E-01	0.0001
U-235	1.470E+01	0.0014	5.790E+00	0.0005	0.000E+00	0.0000	2.981E+00	0.0003	1.096E-01	0.0000	3.618E-01	0.0000	7.120E-01	0.0001
U-238	2.620E+00	0.0002	5.553E+00	0.0005	1.399E-11	0.0000	2.993E+00	0.0003	1.090E-01	0.0000	3.645E-01	0.0000	7.167E-01	0.0001
Total	9.205E+02	0.0854	5.283E+02	0.0490	7.566E+03	0.7023	1.518E+03	0.1409	9.485E+01	0.0088	2.570E+01	0.0024	1.176E+02	0.0109

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+00 years

0 Water Dependent Pathways

0	Water	Fish	Radon	Plant	Meat	Milk	All Pathways*

Radio-Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.425E+02	0.0504
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.044E+00	0.0004
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.811E+02	0.0261
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.713E+01	0.0072
H-3	1.962E+00	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.685E-02	0.0000	1.250E-01	0.0000	2.564E+00	0.0002
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.561E+02	0.0609
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.475E+02	0.0323
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.524E-02	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.581E+01	0.0043
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.028E+03	0.7452
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.086E+02	0.0379
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.516E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.592E+02	0.0148
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.281E+01	0.0021
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.439E+02	0.0134
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.062E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.466E+01	0.0023
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.236E+01	0.0011
Total	1.962E+00	0.0002	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.685E-02	0.0000	1.250E-01	0.0000	1.077E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years
Water Independent Pathways (Inhalation excludes radon)

0

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	3.512E+01	0.0033	2.874E+02	0.0268	0.000E+00	0.0000	1.497E+02	0.0140	3.205E-01	0.0000	6.075E-01	0.0001	3.584E+01	0.0033
Co-57	5.922E-01	0.0001	2.585E-05	0.0000	0.000E+00	0.0000	2.545E-02	0.0000	4.645E-03	0.0000	1.245E-03	0.0000	1.904E-04	0.0000
Co-60	2.080E+02	0.0194	6.944E-03	0.0000	0.000E+00	0.0000	6.452E+00	0.0006	1.178E+00	0.0001	3.157E-01	0.0000	4.829E-02	0.0000
Cs-137	6.014E+01	0.0056	1.401E-03	0.0000	0.000E+00	0.0000	8.303E+00	0.0008	3.061E+00	0.0003	2.007E+00	0.0002	1.243E-01	0.0000
H-3	0.000E+00	0.0000	5.591E-04	0.0000	0.000E+00	0.0000	2.437E-02	0.0000	1.770E-03	0.0000	2.559E-03	0.0000	2.926E-06	0.0000
Pa-231	7.216E+00	0.0007	8.904E+01	0.0083	0.000E+00	0.0000	4.873E+02	0.0454	7.490E+01	0.0069	2.143E-01	0.0000	3.183E+01	0.0030
Pb-210	1.101E-01	0.0000	9.943E-01	0.0001	0.000E+00	0.0000	2.946E+02	0.0275	7.365E+00	0.0007	5.725E+00	0.0005	1.764E+01	0.0016
Pm-147	4.430E-04	0.0000	8.349E-04	0.0000	0.000E+00	0.0000	5.288E-03	0.0000	1.132E-03	0.0000	2.146E-05	0.0000	1.266E-03	0.0000
Pu-239	5.799E-03	0.0000	2.019E+01	0.0019	0.000E+00	0.0000	1.576E+01	0.0015	4.076E-01	0.0000	7.552E-03	0.0000	9.431E+00	0.0009
Ra-226	2.136E+02	0.0199	5.013E-01	0.0000	7.545E+03	0.7046	2.664E+02	0.0249	3.655E+00	0.0003	7.728E+00	0.0007	5.262E+00	0.0005
Ra-228	1.846E+02	0.0172	8.909E+00	0.0008	6.160E+00	0.0006	1.818E+02	0.0170	2.269E+00	0.0002	5.404E+00	0.0005	3.832E+00	0.0004
Sm-147	0.000E+00	0.0000	3.515E+00	0.0003	0.000E+00	0.0000	2.058E+00	0.0002	4.407E-01	0.0000	8.354E-03	0.0000	4.928E-01	0.0000
Th-228	6.584E+01	0.0061	5.475E+00	0.0005	3.859E+00	0.0004	1.213E+00	0.0001	3.138E-02	0.0000	2.907E-03	0.0000	7.260E-01	0.0001
Th-230	3.015E-01	0.0000	1.534E+01	0.0014	9.817E+00	0.0009	2.764E+00	0.0003	6.726E-02	0.0000	1.530E-02	0.0000	1.466E+00	0.0001
Th-232	9.890E+01	0.0055	7.927E+01	0.0074	1.422E+00	0.0001	8.981E+01	0.0084	1.251E+00	0.0001	2.411E+00	0.0002	8.706E+00	0.0008
U-234	7.937E-03	0.0000	6.212E+00	0.0006	1.325E-04	0.0000	3.149E+00	0.0003	1.146E-01	0.0000	3.834E-01	0.0000	7.540E-01	0.0001
U-235	1.470E+01	0.0014	5.793E+00	0.0005	0.000E+00	0.0000	3.001E+00	0.0003	1.127E-01	0.0000	3.618E-01	0.0000	7.132E-01	0.0001
U-238	2.620E+00	0.0002	5.553E+00	0.0005	4.760E-10	0.0000	2.993E+00	0.0003	1.090E-01	0.0000	3.645E-01	0.0000	7.167E-01	0.0001
Total	8.517E+02	0.0795	5.282E+02	0.0493	7.566E+03	0.7066	1.515E+03	0.1415	9.429E+01	0.0088	2.546E+01	0.0024	1.176E+02	0.0110

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 3.000E+00 years

Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.090E+02	0.0475
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.237E-01	0.0001
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.160E+02	0.0202
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.364E+01	0.0069
H-3	8.605E+00	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.886E-01	0.0000	5.520E-01	0.0001	9.375E+00	0.0009
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.895E+02	0.0644
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.265E+02	0.0305
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.985E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.580E+01	0.0043
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.042E+03	0.7510
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.930E+02	0.0367
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.515E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.715E+01	0.0072
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.977E+01	0.0028
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.417E+02	0.0226
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.062E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.468E+01	0.0023
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.236E+01	0.0012
Total	8.605E+00	0.0008	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.886E-01	0.0000	5.520E-01	0.0001	1.071E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)

As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years

Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	2.810E+01	0.0027	2.300E+02	0.0218	0.000E+00	0.0000	1.198E+02	0.0113	2.564E-01	0.0000	4.861E-01	0.0000	2.867E+01	0.0027
Co-57	8.532E-04	0.0000	3.725E-08	0.0000	0.000E+00	0.0000	3.666E-05	0.0000	6.692E-06	0.0000	1.794E-06	0.0000	2.744E-07	0.0000
Co-60	8.278E+01	0.0078	2.764E-03	0.0000	0.000E+00	0.0000	2.568E+00	0.0002	4.687E-01	0.0000	1.256E-01	0.0000	1.922E-02	0.0000
Cs-137	5.115E+01	0.0048	1.191E-03	0.0000	0.000E+00	0.0000	7.062E+00	0.0007	2.603E+00	0.0002	1.707E+00	0.0002	1.057E-01	0.0000
H-3	0.000E+00	0.0000	4.235E-08	0.0000	0.000E+00	0.0000	1.846E-06	0.0000	1.341E-07	0.0000	1.939E-07	0.0000	2.217E-10	0.0000
Pa-231	1.423E+01	0.0013	1.464E+02	0.0139	0.000E+00	0.0000	5.170E+02	0.0490	7.394E+01	0.0070	3.356E-01	0.0000	3.898E+01	0.0037
Pb-210	8.846E-02	0.0000	7.992E-01	0.0001	0.000E+00	0.0000	2.368E+02	0.0224	5.920E+00	0.0006	4.602E+00	0.0004	1.418E+01	0.0013
Pm-147	6.966E-05	0.0000	1.313E-04	0.0000	0.000E+00	0.0000	8.314E-04	0.0000	1.780E-04	0.0000	3.374E-06	0.0000	1.991E-04	0.0000
Pu-239	5.798E-03	0.0000	2.018E+01	0.0019	0.000E+00	0.0000	1.576E+01	0.0015	4.075E-01	0.0000	7.550E-03	0.0000	9.428E+00	0.0009
Ra-226	2.130E+02	0.0202	6.938E-01	0.0001	7.521E+03	0.7125	3.230E+02	0.0306	5.081E+00	0.0005	8.822E+00	0.0008	8.688E+00	0.0008
Ra-228	1.140E+02	0.0108	6.710E+00	0.0006	4.678E+00	0.0004	7.883E+01	0.0075	9.924E-01	0.0001	2.325E+00	0.0002	2.030E+00	0.0002
Sm-147	0.000E+00	0.0000	3.513E+00	0.0003	0.000E+00	0.0000	2.057E+00	0.0002	4.405E-01	0.0000	8.349E-03	0.0000	4.925E-01	0.0000
Th-228	5.212E+00	0.0005	4.334E-01	0.0000	3.054E-01	0.0000	9.605E-02	0.0000	2.484E-03	0.0000	2.301E-04	0.0000	5.747E-02	0.0000
Th-230	9.482E-01	0.0001	1.534E+01	0.0015	3.265E+01	0.0031	3.661E+00	0.0003	8.058E-02	0.0000	4.045E-02	0.0000	1.487E+00	0.0001
Th-232	1.901E+02	0.0180	8.650E+01	0.0082	6.457E+00	0.0006	1.939E+02	0.0184	2.556E+00	0.0002	5.391E+00	0.0005	1.118E+01	0.0011
U-234	7.974E-03	0.0000	6.211E+00	0.0006	1.471E-03	0.0000	3.148E+00	0.0003	1.146E-01	0.0000	3.833E-01	0.0000	7.539E-01	0.0001
U-235	1.470E+01	0.0014	5.809E+00	0.0006	0.000E+00	0.0000	3.075E+00	0.0003	1.236E-01	0.0000	3.617E-01	0.0000	7.183E-01	0.0001
U-238	2.619E+00	0.0002	5.551E+00	0.0005	1.390E-08	0.0000	2.992E+00	0.0003	1.089E-01	0.0000	3.644E-01	0.0000	7.165E-01	0.0001
Total	7.169E+02	0.0679	5.281E+02	0.0500	7.565E+03	0.7167	1.510E+03	0.1430	9.310E+01	0.0088	2.496E+01	0.0024	1.175E+02	0.0111

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+01 years
Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.072E+02	0.0386
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.986E-04	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.547E+01	0.0081
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.263E+01	0.0059
H-3	5.437E-01	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.235E-02	0.0000	3.494E-02	0.0000	5.910E-01	0.0001
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.909E+02	0.0749
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.624E+02	0.0249
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.413E-03	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.579E+01	0.0043
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.081E+03	0.7655
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.096E+02	0.0199
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.511E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.107E+00	0.0006
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.421E+01	0.0051
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.961E+02	0.0470
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.062E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.478E+01	0.0023
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.235E+01	0.0012
Total	5.437E-01	0.0001	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.235E-02	0.0000	3.494E-02	0.0000	1.056E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years
Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	1.486E+01	0.0014	1.216E+02	0.0116	0.000E+00	0.0000	6.332E+01	0.0061	1.356E-01	0.0000	2.570E-01	0.0000	1.516E+01	0.0015
Co-57	6.497E-12	0.0000	2.836E-16	0.0000	0.000E+00	0.0000	2.792E-13	0.0000	5.096E-14	0.0000	1.366E-14	0.0000	2.089E-15	0.0000
Co-60	5.952E+00	0.0006	1.987E-04	0.0000	0.000E+00	0.0000	1.846E-01	0.0000	3.370E-02	0.0000	9.034E-03	0.0000	1.382E-03	0.0000
Cs-137	3.220E+01	0.0031	7.499E-04	0.0000	0.000E+00	0.0000	4.445E+00	0.0004	1.639E+00	0.0002	1.075E+00	0.0001	6.654E-02	0.0000
H-3	0.000E+00	0.0000	7.029E-20	0.0000	0.000E+00	0.0000	3.064E-18	0.0000	2.226E-19	0.0000	3.219E-19	0.0000	3.678E-22	0.0000
Pa-231	2.744E+01	0.0026	2.545E+02	0.0244	0.000E+00	0.0000	5.729E+02	0.0548	7.400E+01	0.0071	5.640E-01	0.0001	5.244E+01	0.0050
Pb-210	4.740E-02	0.0000	4.282E-01	0.0000	0.000E+00	0.0000	1.269E+02	0.0121	3.172E+00	0.0003	2.460E+00	0.0002	7.597E+00	0.0007
Pm-147	3.526E-07	0.0000	6.646E-07	0.0000	0.000E+00	0.0000	4.209E-06	0.0000	9.012E-07	0.0000	1.708E-08	0.0000	1.008E-06	0.0000
Pu-239	5.793E-03	0.0000	2.016E+01	0.0019	0.000E+00	0.0000	1.574E+01	0.0015	4.072E-01	0.0000	7.543E-03	0.0000	9.421E+00	0.0009
Ra-226	2.111E+02	0.0202	1.056E+00	0.0001	7.455E+03	0.7134	4.292E+02	0.0411	7.761E+00	0.0007	1.086E+01	0.0010	1.514E+01	0.0014
Ra-228	1.092E+01	0.0010	6.598E-01	0.0001	4.604E-01	0.0000	7.085E+00	0.0007	8.936E-02	0.0000	2.086E-01	0.0000	1.897E-01	0.0000
Sm-147	0.000E+00	0.0000	3.507E+00	0.0003	0.000E+00	0.0000	2.054E+00	0.0002	4.398E-01	0.0000	8.336E-03	0.0000	4.918E-01	0.0000
Th-228	3.714E-03	0.0000	3.089E-04	0.0000	2.177E-04	0.0000	6.845E-05	0.0000	1.770E-06	0.0000	1.640E-07	0.0000	4.096E-05	0.0000
Th-230	2.785E+00	0.0003	1.534E+01	0.0015	9.750E+01	0.0093	6.967E+00	0.0007	1.374E-01	0.0000	1.267E-01	0.0000	1.593E+00	0.0002
Th-232	2.983E+02	0.0285	9.297E+01	0.0089	1.098E+01	0.0011	2.657E+02	0.0254	3.461E+00	0.0003	7.507E+00	0.0007	1.307E+01	0.0013
U-234	8.303E-03	0.0000	6.208E+00	0.0006	1.319E-02	0.0000	3.146E+00	0.0003	1.145E-01	0.0000	3.830E-01	0.0000	7.535E-01	0.0001
U-235	1.469E+01	0.0014	5.891E+00	0.0006	0.000E+00	0.0000	3.304E+00	0.0003	1.548E-01	0.0000	3.616E-01	0.0000	7.373E-01	0.0001
U-238	2.617E+00	0.0003	5.547E+00	0.0005	3.743E-07	0.0000	2.990E+00	0.0003	1.088E-01	0.0000	3.641E-01	0.0000	7.159E-01	0.0001

Total	6.210E+02	0.0594	5.279E+02	0.0505	7.564E+03	0.7238	1.504E+03	0.1439	9.165E+01	0.0088	2.420E+01	0.0023	1.174E+02	0.0112

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+01 years

0
0 Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.153E+02	0.0206
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.843E-12	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.181E+00	0.0006
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.943E+01	0.0038
H-3	7.362E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.672E-06	0.0000	4.731E-06	0.0000	8.002E-05	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	9.818E+02	0.0940
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.406E+02	0.0135
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.152E-06	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.575E+01	0.0044
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.130E+03	0.7780
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.962E+01	0.0019
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.501E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.352E-03	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.245E+02	0.0119
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.920E+02	0.0662
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.063E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.514E+01	0.0024
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.234E+01	0.0012
Total	7.362E-05	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.672E-06	0.0000	4.731E-06	0.0000	1.045E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

0
0 Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	1.597E+00	0.0002	1.307E+01	0.0013	0.000E+00	0.0000	6.806E+00	0.0007	1.457E-02	0.0000	2.763E-02	0.0000	1.630E+00	0.0002
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	5.934E-04	0.0000	1.981E-08	0.0000	0.000E+00	0.0000	1.841E-05	0.0000	3.360E-06	0.0000	9.005E-07	0.0000	1.378E-07	0.0000
Cs-137	6.374E+00	0.0006	1.484E-04	0.0000	0.000E+00	0.0000	8.800E-01	0.0001	3.244E-01	0.0000	2.128E-01	0.0000	1.317E-02	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.057E+01	0.0039	3.619E+02	0.0348	0.000E+00	0.0000	6.274E+02	0.0603	7.388E+01	0.0071	7.910E-01	0.0001	6.576E+01	0.0063
Pb-210	5.336E-03	0.0000	4.820E-02	0.0000	0.000E+00	0.0000	1.428E+01	0.0014	3.571E-01	0.0000	2.776E-01	0.0000	8.552E-01	0.0001
Pm-147	3.255E-15	0.0000	8.632E-11	0.0000	0.000E+00	0.0000	5.059E-11	0.0000	1.083E-11	0.0000	2.053E-13	0.0000	1.211E-11	0.0000
Pu-239	5.777E-03	0.0000	2.011E+01	0.0019	0.000E+00	0.0000	1.570E+01	0.0015	4.060E-01	0.0000	7.521E-03	0.0000	9.393E+00	0.0009
Ra-226	2.048E+02	0.0197	1.394E+00	0.0001	7.228E+03	0.6948	5.260E+02	0.0506	1.027E+01	0.0010	1.267E+01	0.0012	2.126E+01	0.0020
Ra-228	2.364E-03	0.0000	1.428E-04	0.0000	9.967E-05	0.0000	1.533E-03	0.0000	1.933E-05	0.0000	4.513E-05	0.0000	4.106E-05	0.0000
Sm-147	0.000E+00	0.0000	3.488E+00	0.0003	0.000E+00	0.0000	2.042E+00	0.0002	4.374E-01	0.0000	8.290E-03	0.0000	4.890E-01	0.0000
Th-228	3.588E-14	0.0000	2.984E-15	0.0000	2.103E-15	0.0000	6.613E-16	0.0000	1.710E-17	0.0000	1.584E-18	0.0000	3.957E-16	0.0000
Th-230	9.083E+00	0.0009	1.536E+01	0.0015	3.198E+02	0.0307	2.201E+01	0.0021	4.250E-01	0.0000	4.943E-01	0.0000	2.177E+00	0.0002
Th-232	3.090E+02	0.0297	9.355E+01	0.0090	1.143E+01	0.0011	2.726E+02	0.0262	3.548E+00	0.0003	7.709E+00	0.0007	1.325E+01	0.0013

U-234	1.202E-02	0.0000	6.199E+00	0.0006	1.448E-01	0.0000	3.146E+00	0.0003	1.143E-01	0.0000	3.820E-01	0.0000	7.523E-01	0.0001
U-235	1.471E+01	0.0014	6.358E+00	0.0006	0.000E+00	0.0000	4.196E+00	0.0004	2.638E-01	0.0000	3.616E-01	0.0000	8.261E-01	0.0001
U-238	2.609E+00	0.0003	5.532E+00	0.0005	1.373E-05	0.0000	2.982E+00	0.0003	1.086E-01	0.0000	3.631E-01	0.0000	7.140E-01	0.0001
Total	5.887E+02	0.0566	5.270E+02	0.0507	7.560E+03	0.7266	1.498E+03	0.1440	9.015E+01	0.0087	2.330E+01	0.0022	1.171E+02	0.0113

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+02 years

0 Water Dependent Pathways

0 Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.314E+01	0.0022
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.162E-04	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.804E+00	0.0008
H-3	2.127E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.831E-20	0.0000	1.367E-19	0.0000	2.312E-18	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.170E+03	0.1125
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.583E+01	0.0015
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.601E-10	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.562E+01	0.0044
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.005E+03	0.7694
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.244E-03	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.465E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.205E-14	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.694E+02	0.0355
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.110E+02	0.0683
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.075E+01	0.0010
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.671E+01	0.0026
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.231E+01	0.0012
Total	2.127E-18	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.831E-20	0.0000	1.367E-19	0.0000	1.040E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

0 Water Independent Pathways (Inhalation excludes radon)

0 Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	2.727E-03	0.0000	2.232E-02	0.0000	0.000E+00	0.0000	1.162E-02	0.0000	2.489E-05	0.0000	4.718E-05	0.0000	2.783E-03	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	2.192E-15	0.0000	7.318E-20	0.0000	0.000E+00	0.0000	6.800E-17	0.0000	1.241E-17	0.0000	3.327E-18	0.0000	5.089E-19	0.0000
Cs-137	6.241E-07	0.0000	1.451E-06	0.0000	0.000E+00	0.0000	8.602E-03	0.0000	3.171E-04	0.0000	2.080E-03	0.0000	1.288E-04	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.178E+01	0.0040	3.710E+02	0.0358	0.000E+00	0.0000	6.285E+02	0.0606	7.328E+01	0.0071	8.111E-01	0.0001	6.678E+01	0.0064
Pb-210	1.040E-05	0.0000	9.395E-05	0.0000	0.000E+00	0.0000	2.784E-02	0.0000	6.959E-04	0.0000	5.410E-04	0.0000	1.667E-03	0.0000
Pm-147	0.000E+00	0.0000	8.496E-11	0.0000	0.000E+00	0.0000	4.975E-11	0.0000	1.065E-11	0.0000	2.019E-13	0.0000	1.191E-11	0.0000
Pu-239	5.732E-03	0.0000	1.994E+01	0.0019	0.000E+00	0.0000	1.557E+01	0.0015	4.026E-01	0.0000	7.459E-03	0.0000	9.315E+00	0.0009
Ra-226	1.875E+02	0.0181	1.321E+00	0.0001	6.617E+03	0.6379	4.949E+02	0.0477	9.736E+00	0.0009	1.186E+01	0.0011	2.025E+01	0.0020
Ra-228	7.987E-14	0.0000	4.826E-15	0.0000	3.368E-15	0.0000	5.178E-14	0.0000	6.531E-16	0.0000	1.525E-15	0.0000	1.387E-15	0.0000
Sm-147	0.000E+00	0.0000	3.433E+00	0.0003	0.000E+00	0.0000	2.010E+00	0.0002	4.305E-01	0.0000	8.159E-03	0.0000	4.813E-01	0.0000

Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	2.599E+01	0.0025	1.542E+01	0.0015	9.165E+02	0.0884	6.646E+01	0.0064	1.298E+00	0.0001	1.560E+00	0.0002	3.987E+00	0.0004
Th-232	3.083E+02	0.0297	9.334E+01	0.0090	1.140E+01	0.0011	2.719E+02	0.0262	3.540E+00	0.0003	7.692E+00	0.0007	1.322E+01	0.0013
U-234	4.361E-02	0.0000	6.172E+00	0.0006	1.261E+00	0.0001	3.198E+00	0.0003	1.149E-01	0.0000	3.805E-01	0.0000	7.513E-01	0.0001
U-235	1.476E+01	0.0014	7.870E+00	0.0008	0.000E+00	0.0000	6.818E+00	0.0007	5.716E-01	0.0001	3.621E-01	0.0000	1.101E+00	0.0001
U-238	2.588E+00	0.0002	5.491E+00	0.0005	3.607E-04	0.0000	2.960E+00	0.0003	1.077E-01	0.0000	3.604E-01	0.0000	7.086E-01	0.0001
Total	5.810E+02	0.0560	5.246E+02	0.0506	7.546E+03	0.7275	1.492E+03	0.1439	8.943E+01	0.0086	2.304E+01	0.0022	1.166E+02	0.0112

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 3.000E+02 years

0 Water Dependent Pathways

Radio-Nuclide	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.953E-02	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.276E-15	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.629E-02	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.183E+03	0.1140
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.085E-02	0.0000
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.575E-10	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.524E+01	0.0044
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.343E+03	0.7078
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.434E-13	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.363E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.031E+03	0.0994
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.094E+02	0.0684
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.192E+01	0.0011
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	3.149E+01	0.0030
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.222E+01	0.0012
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.037E+04	1.0000

0*Sum of all water independent and dependent pathways.

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

0 Water Independent Pathways (Inhalation excludes radon)

Radio-Nuclide	Ground		Inhalation		Radon		Plant		Meat		Milk		Soil	
	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	5.614E-13	0.0000	4.596E-12	0.0000	0.000E+00	0.0000	2.393E-12	0.0000	5.125E-15	0.0000	9.714E-15	0.0000	5.730E-13	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	5.755E-09	0.0000	1.340E-13	0.0000	0.000E+00	0.0000	7.945E-10	0.0000	2.928E-10	0.0000	1.921E-10	0.0000	1.189E-11	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	4.048E+01	0.0039	3.599E+02	0.0350	0.000E+00	0.0000	6.088E+02	0.0592	7.094E+01	0.0069	7.858E-01	0.0001	6.469E+01	0.0063
Pb-210	3.399E-15	0.0000	3.071E-14	0.0000	0.000E+00	0.0000	9.100E-12	0.0000	2.275E-13	0.0000	1.768E-13	0.0000	5.449E-13	0.0000
Pm-147	0.000E+00	0.0000	8.036E-11	0.0000	0.000E+00	0.0000	4.706E-11	0.0000	1.008E-11	0.0000	1.910E-13	0.0000	1.127E-11	0.0000
Pu-239	5.578E-03	0.0000	1.937E+01	0.0019	0.000E+00	0.0000	1.512E+01	0.0015	3.910E-01	0.0000	7.245E-03	0.0000	9.047E+00	0.0009

Ra-226	1.378E+02	0.0134	9.708E-01	0.0001	4.857E+03	0.4720	3.636E+02	0.0353	7.154E+00	0.0007	8.711E+00	0.0008	1.488E+01	0.0014
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sm-147	0.000E+00	0.0000	3.247E+00	0.0003	0.000E+00	0.0000	1.901E+00	0.0002	4.072E-01	0.0000	7.718E-03	0.0000	4.553E-01	0.0000
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	7.420E+01	0.0072	1.554E+01	0.0015	2.615E+03	0.2542	1.937E+02	0.0188	3.802E+00	0.0004	4.609E+00	0.0004	9.177E+00	0.0009
Th-232	3.059E+02	0.0297	9.261E+01	0.0090	1.131E+01	0.0011	2.698E+02	0.0262	3.512E+00	0.0003	7.631E+00	0.0007	1.311E+01	0.0013
U-234	3.621E-01	0.0000	6.082E+00	0.0006	1.249E+01	0.0012	3.932E+00	0.0004	1.277E-01	0.0000	3.887E-01	0.0000	7.704E-01	0.0001
U-235	1.495E+01	0.0015	1.299E+01	0.0013	0.000E+00	0.0000	1.566E+01	0.0015	1.608E+00	0.0002	3.639E-01	0.0000	2.030E+00	0.0002
U-238	2.515E+00	0.0002	5.347E+00	0.0005	1.217E-02	0.0000	2.883E+00	0.0003	1.049E-01	0.0000	3.509E-01	0.0000	6.901E-01	0.0001
Total	5.761E+02	0.0560	5.161E+02	0.0502	7.496E+03	0.7285	1.475E+03	0.1434	8.804E+01	0.0086	2.285E+01	0.0022	1.149E+02	0.0112

Total Dose Contributions TDOSE(i,p,t) for Individual Radionuclides (i) and Pathways (p)
As mrem/yr and Fraction of Total Dose At t = 1.000E+03 years

0	Water Dependent Pathways													
0	Water		Fish		Radon		Plant		Meat		Milk		All Pathways*	
Radio-Nuclide	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.	mrem/yr	fract.
Ac-227	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	8.138E-12	0.0000
Co-57	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Co-60	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Cs-137	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.046E-09	0.0000
H-3	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Pa-231	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.146E+03	0.1113
Pb-210	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.008E-11	0.0000
Pm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.490E-10	0.0000
Pu-239	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.394E+01	0.0043
Ra-226	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	5.390E+03	0.5238
Ra-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Sm-147	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	6.019E+00	0.0006
Th-228	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000
Th-230	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.916E+03	0.2834
Th-232	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	7.038E+02	0.0684
U-234	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	2.415E+01	0.0023
U-235	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	4.759E+01	0.0046
U-238	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.190E+01	0.0012
Total	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	0.000E+00	0.0000	1.029E+04	1.0000

0*Sum of all water independent and dependent pathways.

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0Parent (i)	Product (j)	Branch Fraction*	t	DSR(j,t) (mrem/yr)/(pCi/g) 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00		5.600E+00	5.425E+00	5.090E+00	4.072E+00	2.153E+00	2.314E-01	3.953E-04	8.138E-14
0Co-57	Co-57	1.000E+00		1.030E-01	4.044E-02	6.237E-03	8.986E-06	6.843E-14	2.639E-42	0.000E+00	0.000E+00
0Co-60	Co-60	1.000E+00		3.206E+00	2.811E+00	2.160E+00	8.597E-01	6.181E-02	6.162E-06	2.276E-17	0.000E+00
0Cs-137	Cs-137	1.000E+00		7.893E-01	7.713E-01	7.364E-01	6.263E-01	3.943E-01	7.804E-02	7.629E-04	7.046E-11
0H-3	H-3	1.000E+00		1.592E-02	2.564E-02	9.375E-02	5.910E-03	8.002E-07	2.312E-20	0.000E+00	0.000E+00
0Pa-231	Pa-231	1.000E+00		6.378E+00	6.377E+00	6.377E+00	6.375E+00	6.369E+00	6.349E+00	6.291E+00	6.094E+00
Pa-231	Ac-227	1.000E+00		0.000E+00	1.833E-01	5.179E-01	1.534E+00	3.449E+00	5.354E+00	5.535E+00	5.362E+00
Pa-231	SDSR(j)			6.378E+00	6.561E+00	6.895E+00	7.909E+00	9.818E+00	1.170E+01	1.183E+01	1.146E+01

0Pb-210	Pb-210	1.000E+00	3.585E+00	3.475E+00	3.265E+00	2.624E+00	1.406E+00	1.583E-01	3.085E-04	1.008E-13
0Pm-147	Pm-147	1.000E+00	1.986E-04	1.524E-04	8.985E-05	1.413E-05	7.152E-08	6.601E-16	7.297E-39	0.000E+00
Pm-147	Sm-147	1.000E+00	0.000E+00	3.744E-13	8.825E-13	1.497E-12	1.608E-12	1.600E-12	1.575E-12	1.490E-12
Pm-147	ΣDSR(j)		1.986E-04	1.524E-04	8.985E-05	1.413E-05	7.152E-08	1.601E-12	1.575E-12	1.490E-12
0Pu-239	Pu-239	1.000E+00	4.581E-01	4.581E-01	4.580E-01	4.579E-01	4.575E-01	4.562E-01	4.524E-01	4.394E-01
Pu-239	U-235	1.000E+00	0.000E+00	2.419E-10	7.273E-10	2.425E-09	7.271E-09	2.417E-08	7.191E-08	2.329E-07
Pu-239	Pa-231	1.000E+00	0.000E+00	6.267E-14	5.864E-13	6.603E-12	5.961E-11	6.613E-10	5.903E-09	6.367E-08
Pu-239	Ac-227	1.000E+00	0.000E+00	6.873E-16	1.704E-14	5.808E-13	1.344E-11	3.268E-10	4.222E-09	5.261E-08
Pu-239	ΣDSR(j)		4.581E-01	4.581E-01	4.580E-01	4.579E-01	4.575E-01	4.562E-01	4.524E-01	4.394E-01
0Ra-226	Ra-226	1.000E+00	8.019E+01	8.016E+01	8.009E+01	7.984E+01	7.914E+01	7.673E+01	7.024E+01	5.156E+01
Ra-226	Pb-210	1.000E+00	0.000E+00	1.218E-01	3.310E-01	9.671E-01	2.166E+00	3.318E+00	3.184E+00	2.340E+00
Ra-226	ΣDSR(j)		8.019E+01	8.028E+01	8.042E+01	8.081E+01	8.130E+01	8.005E+01	7.343E+01	5.390E+01
0Ra-228	Ra-228	1.000E+00	3.854E+00	3.416E+00	2.684E+00	1.154E+00	1.036E-01	2.240E-05	7.569E-16	0.000E+00
Ra-228	Th-228	1.000E+00	0.000E+00	6.702E-01	1.246E+00	9.413E-01	9.260E-02	2.004E-05	6.772E-16	0.000E+00
Ra-228	ΣDSR(j)		3.854E+00	4.086E+00	3.930E+00	2.096E+00	1.962E-01	4.244E-05	1.434E-15	0.000E+00
0Sm-147	Sm-147	1.000E+00	6.516E-02	6.516E-02	6.515E-02	6.511E-02	6.501E-02	6.465E-02	6.363E-02	6.019E-02
0Th-228	Th-228	1.000E+00	2.288E+00	1.592E+00	7.715E-01	6.107E-02	4.352E-05	4.205E-16	0.000E+00	0.000E+00
0Th-230	Th-230	1.000E+00	1.934E-01	1.933E-01	1.933E-01	1.933E-01	1.932E-01	1.930E-01	1.922E-01	1.895E-01
Th-230	Ra-226	1.000E+00	0.000E+00	3.469E-02	1.041E-01	3.466E-01	1.035E+00	3.395E+00	9.729E+00	2.776E+01
Th-230	Pb-210	1.000E+00	0.000E+00	2.887E-05	2.260E-04	2.230E-03	1.635E-02	1.059E-01	3.911E-01	1.210E+00
Th-230	ΣDSR(j)		1.934E-01	2.281E-01	2.977E-01	5.421E-01	1.245E+00	3.694E+00	1.031E+01	2.916E+01
0Th-232	Th-232	1.000E+00	9.697E-01	9.697E-01	9.696E-01	9.696E-01	9.693E-01	9.686E-01	9.664E-01	9.588E-01
Th-232	Ra-228	1.000E+00	0.000E+00	4.250E-01	1.157E+00	2.686E+00	3.736E+00	3.837E+00	3.828E+00	3.798E+00
Th-232	Th-228	1.000E+00	0.000E+00	4.481E-02	2.903E-01	1.305E+00	2.214E+00	2.305E+00	2.300E+00	2.282E+00
Th-232	ΣDSR(j)		9.697E-01	1.439E+00	2.417E+00	4.961E+00	6.920E+00	7.110E+00	7.094E+00	7.038E+00

Dose/Source Ratios Summed Over All Pathways
Parent and Progeny Principal Radionuclide Contributions Indicated

0Parent (i)	Product (j)	Branch Fraction*	DSR(j,t) (mrem/yr)/(pCi/g) t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
U-234	U-234	1.000E+00	1.062E-01	1.062E-01	1.062E-01	1.062E-01	1.061E-01	1.058E-01	1.048E-01	1.017E-01
U-234	Th-230	1.000E+00	0.000E+00	1.754E-06	5.235E-06	1.741E-05	5.218E-05	1.735E-04	5.172E-04	1.686E-03
U-234	Ra-226	1.000E+00	0.000E+00	1.560E-07	1.405E-06	1.561E-05	1.400E-04	1.537E-03	1.338E-02	1.326E-01
U-234	Pb-210	1.000E+00	0.000E+00	9.322E-11	2.115E-09	6.936E-08	1.587E-06	3.837E-05	4.864E-04	5.592E-03
U-234	ΣDSR(j)		1.062E-01	1.062E-01	1.062E-01	1.062E-01	1.063E-01	1.075E-01	1.192E-01	2.415E-01
0U-235	U-235	1.000E+00	2.464E-01	2.464E-01	2.464E-01	2.463E-01	2.461E-01	2.454E-01	2.434E-01	2.365E-01
U-235	Pa-231	1.000E+00	0.000E+00	1.310E-04	4.008E-04	1.345E-03	4.039E-03	1.343E-02	3.996E-02	1.292E-01
U-235	Ac-227	1.000E+00	0.000E+00	2.024E-06	1.693E-05	1.717E-04	1.268E-03	8.265E-03	3.148E-02	1.101E-01
U-235	ΣDSR(j)		2.464E-01	2.466E-01	2.468E-01	2.478E-01	2.514E-01	2.671E-01	3.149E-01	4.759E-01
0U-238	U-238	1.000E+00	1.236E-01	1.236E-01	1.236E-01	1.235E-01	1.234E-01	1.231E-01	1.221E-01	1.186E-01
U-238	U-234	1.000E+00	0.000E+00	3.011E-07	9.032E-07	3.010E-06	9.022E-06	2.998E-05	8.919E-05	2.886E-04
U-238	Th-230	1.000E+00	0.000E+00	2.505E-12	2.232E-11	2.470E-10	2.219E-09	2.459E-08	2.197E-07	2.382E-06
U-238	Ra-226	1.000E+00	0.000E+00	1.480E-13	3.986E-12	1.475E-10	3.973E-09	1.457E-07	3.829E-06	1.291E-04
U-238	Pb-210	1.000E+00	0.000E+00	1.503E-16	4.798E-15	5.043E-13	3.534E-11	3.053E-09	1.273E-07	5.279E-06
U-238	ΣDSR(j)		1.236E-01	1.236E-01	1.236E-01	1.235E-01	1.234E-01	1.231E-01	1.222E-01	1.190E-01

*Branch Fraction is the cumulative factor for the j'th principal radionuclide daughter: CUMBRF(j) = BRF(1)*BRF(2)* ... BRF(j).
The DSR includes contributions from associated (half-life ≤ 0.5 yr) daughters.
0

Single Radionuclide Soil Guidelines G(i,t) in pCi/g
Basic Radiation Dose Limit = 10 mrem/yr

0Nuclide (i)	t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	1.786E+00	1.843E+00	1.965E+00	2.456E+00	4.644E+00	4.321E+01	2.530E+04	*7.230E+13

Co-57	9.711E+01	2.473E+02	1.603E+03	1.113E+06	1.461E+14	*8.464E+15	*8.464E+15	*8.464E+15
Co-60	3.119E+00	3.558E+00	4.629E+00	1.163E+01	1.618E+02	1.623E+06	*1.131E+15	*1.131E+15
Cs-137	1.267E+01	1.297E+01	1.358E+01	1.597E+01	2.536E+01	1.281E+02	1.311E+04	1.419E+11
H-3	6.280E+02	3.900E+02	1.067E+02	1.692E+03	1.250E+07	*9.594E+15	*9.594E+15	*9.594E+15
Pa-231	1.568E+00	1.524E+00	1.450E+00	1.264E+00	1.019E+00	8.545E-01	8.456E-01	8.729E-01
Pb-210	2.789E+00	2.878E+00	3.063E+00	3.811E+00	7.113E+00	6.318E+01	3.242E+04	*7.631E+13
Pm-147	5.036E+04	6.560E+04	1.113E+05	7.078E+05	1.398E+08	6.248E+12	6.350E+12	6.714E+12
Pu-239	2.183E+01	2.183E+01	2.183E+01	2.184E+01	2.186E+01	2.192E+01	2.211E+01	2.276E+01
Ra-226	1.247E-01	1.246E-01	1.244E-01	1.238E-01	1.230E-01	1.249E-01	1.362E-01	1.855E-01
Ra-228	2.595E+00	2.447E+00	2.545E+00	4.772E+00	5.098E+01	2.356E+05	*2.726E+14	*2.726E+14
Sm-147	1.535E+02	1.535E+02	1.535E+02	1.536E+02	1.538E+02	1.547E+02	1.572E+02	1.662E+02
Th-228	4.371E+00	6.280E+00	1.296E+01	1.637E+02	2.298E+05	*8.192E+14	*8.192E+14	*8.192E+14
Th-230	5.172E+01	4.385E+01	3.359E+01	1.845E+01	8.035E+00	2.707E+00	9.697E-01	3.429E-01
Th-232	1.031E+01	6.947E+00	4.138E+00	2.010E+00	1.445E+00	1.406E+00	1.410E+00	1.421E+00
U-234	9.415E+01	9.415E+01	9.415E+01	9.410E+01	9.410E+01	9.302E+01	8.388E+01	4.140E+01
U-235	4.058E+01	4.056E+01	4.052E+01	4.035E+01	3.977E+01	3.744E+01	3.176E+01	2.101E+01
U-238	8.093E+01	8.093E+01	8.094E+01	8.096E+01	8.102E+01	8.124E+01	8.186E+01	8.401E+01

*At specific activity limit

Summed Dose/Source Ratios DSR(i,t) in (mrem/yr)/(pCi/g)
and Single Radionuclide Soil Guidelines G(i,t) in pCi/g
at tmin = time of minimum single radionuclide soil guideline
and at tmax = time of maximum total dose = 0.000E+00 years

0Nuclide (i)	Initial pCi/g	tmin (years)	DSR(i,tmin)	G(i,tmin) (pCi/g)	DSR(i,tmax)	G(i,tmax) (pCi/g)
Ac-227	1.000E+02	0.000E+00	5.600E+00	1.786E+00	*5.600E+00	1.786E+00
Co-57	1.000E+02	0.000E+00	1.030E-01	9.711E+01	1.030E-01	9.711E+01
Co-60	1.000E+02	0.000E+00	3.206E+00	3.119E+00	3.206E+00	3.119E+00
Cs-137	1.000E+02	0.000E+00	7.893E-01	1.267E+01	7.893E-01	1.267E+01
H-3	1.000E+02	3.579 ± 0.007	1.029E-01	9.713E+01	1.592E-02	6.280E+02
Pa-231	1.000E+02	182.0 ± 0.4	1.187E+01	8.422E-01	6.378E+00	1.568E+00
Pb-210	1.000E+02	0.000E+00	3.585E+00	2.789E+00	3.585E+00	2.789E+00
Pm-147	1.000E+02	0.000E+00	1.986E-04	5.036E+04	1.986E-04	5.036E+04
Pu-239	1.000E+02	0.000E+00	4.581E-01	2.183E+01	4.581E-01	2.183E+01
Ra-226	1.000E+02	36.48 ± 0.07	8.133E+01	1.230E-01	8.019E+01	1.247E-01
Ra-228	1.000E+02	1.424 ± 0.003	4.103E+00	2.437E+00	3.854E+00	2.595E+00
Sm-147	1.000E+02	0.000E+00	6.516E-02	1.535E+02	6.516E-02	1.535E+02
Th-228	1.000E+02	0.000E+00	2.288E+00	4.371E+00	2.288E+00	4.371E+00
Th-230	1.000E+02	1.000E+03	2.916E+01	3.429E-01	1.934E-01	5.172E+01
Th-232	1.000E+02	77.5 ± 0.2	7.111E+00	1.406E+00	9.697E-01	1.031E+01
U-234	1.000E+02	1.000E+03	2.415E-01	4.140E+01	1.062E-01	9.415E+01
U-235	1.000E+02	1.000E+03	4.754E-01	2.101E+01	2.464E-01	4.058E+01
U-238	1.000E+02	0.000E+00	1.236E-01	8.093E+01	1.236E-01	8.093E+01

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

0Nuclide (j)	Parent (i)	BRF(i)	DOSE(i,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00	5.600E+02	5.425E+02	5.090E+02	4.072E+02	2.153E+02	2.314E+01	3.953E-02	8.138E-12

Ac-227	Pa-231	1.000E+00	0.000E+00	1.833E+01	5.179E+01	1.534E+02	3.449E+02	5.354E+02	5.535E+02	5.362E+02
Ac-227	Pu-239	1.000E+00	0.000E+00	6.873E-14	1.704E-12	5.808E-11	1.344E-09	3.268E-08	4.222E-07	5.261E-06
Ac-227	U-235	1.000E+00	0.000E+00	2.024E-04	1.693E-03	1.717E-02	1.268E-01	8.265E-01	3.148E+00	1.101E+01
Ac-227	ΣDOSE(j):		5.600E+02	5.608E+02	5.608E+02	5.607E+02	5.604E+02	5.594E+02	5.567E+02	5.472E+02
0Co-57	Co-57	1.000E+00	1.030E+01	4.044E+00	6.237E-01	8.986E-04	6.843E-12	0.000E+00	0.000E+00	0.000E+00
0Co-60	Co-60	1.000E+00	3.206E+02	2.811E+02	2.160E+02	8.597E+01	6.181E+00	6.162E-04	2.276E-15	0.000E+00
0Cs-137	Cs-137	1.000E+00	7.893E+01	7.713E+01	7.364E+01	6.263E+01	3.943E+01	7.804E+00	7.629E-02	7.046E-09
0H-3	H-3	1.000E+00	1.592E+00	2.564E+00	9.375E+00	5.910E-01	8.002E-05	2.312E-18	0.000E+00	0.000E+00
0Pa-231	Pa-231	1.000E+00	6.378E+02	6.377E+02	6.377E+02	6.375E+02	6.369E+02	6.349E+02	6.291E+02	6.094E+02
Pa-231	Pu-239	1.000E+00	0.000E+00	6.267E-12	5.864E-11	6.603E-10	5.961E-09	6.613E-08	5.903E-07	6.367E-06
Pa-231	U-235	1.000E+00	0.000E+00	1.310E-02	4.008E-02	1.345E-01	4.039E-01	1.343E+00	3.996E+00	1.292E+01
Pa-231	ΣDOSE(j):		6.378E+02	6.378E+02	6.377E+02	6.376E+02	6.373E+02	6.362E+02	6.331E+02	6.224E+02
0Pb-210	Pb-210	1.000E+00	3.585E+02	3.475E+02	3.265E+02	2.624E+02	1.406E+02	1.583E+01	3.085E-02	1.008E-11
Pb-210	Ra-226	1.000E+00	0.000E+00	1.218E+01	3.310E+01	9.671E+01	2.166E+02	3.318E+02	3.184E+02	2.340E+02
Pb-210	Th-230	1.000E+00	0.000E+00	2.887E-03	2.260E-02	2.230E-01	1.635E+00	1.059E+01	3.911E+01	1.210E+02
Pb-210	U-234	1.000E+00	0.000E+00	9.322E-09	2.115E-07	6.936E-06	1.587E-04	3.837E-03	4.864E-02	5.592E-01
Pb-210	U-238	1.000E+00	0.000E+00	1.503E-14	4.798E-13	5.043E-11	3.534E-09	3.053E-07	1.273E-05	5.279E-04
Pb-210	ΣDOSE(j):		3.585E+02	3.597E+02	3.596E+02	3.593E+02	3.588E+02	3.582E+02	3.576E+02	3.556E+02
0Pm-147	Pm-147	1.000E+00	1.986E-02	1.524E-02	8.985E-03	1.413E-03	7.152E-06	6.601E-14	0.000E+00	0.000E+00
0Sm-147	Pm-147	1.000E+00	0.000E+00	3.744E-11	8.825E-11	1.497E-10	1.608E-10	1.600E-10	1.575E-10	1.490E-10
Sm-147	Sm-147	1.000E+00	6.516E+00	6.516E+00	6.515E+00	6.511E+00	6.501E+00	6.465E+00	6.363E+00	6.019E+00
Sm-147	ΣDOSE(j):		6.516E+00	6.516E+00	6.515E+00	6.511E+00	6.501E+00	6.465E+00	6.363E+00	6.019E+00
0Pu-239	Pu-239	1.000E+00	4.581E+01	4.581E+01	4.580E+01	4.579E+01	4.575E+01	4.562E+01	4.524E+01	4.394E+01
0U-235	Pu-239	1.000E+00	0.000E+00	2.419E-08	7.273E-08	2.425E-07	7.271E-07	2.417E-06	7.191E-06	2.329E-05
U-235	U-235	1.000E+00	2.464E+01	2.464E+01	2.464E+01	2.463E+01	2.461E+01	2.454E+01	2.434E+01	2.365E+01
U-235	ΣDOSE(j):		2.464E+01	2.464E+01	2.464E+01	2.463E+01	2.461E+01	2.454E+01	2.434E+01	2.365E+01
0Ra-226	Ra-226	1.000E+00	8.019E+03	8.016E+03	8.009E+03	7.984E+03	7.914E+03	7.673E+03	7.024E+03	5.156E+03
Ra-226	Th-230	1.000E+00	0.000E+00	3.469E+00	1.041E+01	3.466E+01	1.035E+02	3.395E+02	9.729E+02	2.776E+03
Ra-226	U-234	1.000E+00	0.000E+00	1.560E-05	1.405E-04	1.561E-03	1.400E-02	1.537E-01	1.338E+00	1.326E+01
Ra-226	U-238	1.000E+00	0.000E+00	1.480E-11	3.986E-10	1.475E-08	3.973E-07	1.457E-05	3.829E-04	1.291E-02
Ra-226	ΣDOSE(j):		8.019E+03	8.019E+03	8.019E+03	8.019E+03	8.017E+03	8.012E+03	7.998E+03	7.945E+03
0Ra-228	Ra-228	1.000E+00	3.854E+02	3.416E+02	2.684E+02	1.154E+02	1.036E+01	2.240E-03	7.569E-14	0.000E+00
Ra-228	Th-232	1.000E+00	0.000E+00	4.250E+01	1.157E+02	2.686E+02	3.736E+02	3.837E+02	3.828E+02	3.798E+02
Ra-228	ΣDOSE(j):		3.854E+02	3.841E+02	3.841E+02	3.841E+02	3.840E+02	3.837E+02	3.828E+02	3.798E+02

Individual Nuclide Dose Summed Over All Pathways
Parent Nuclide and Branch Fraction Indicated

Nuclide (j)	Parent (i)	BRF(i)	DOSE(j,t), mrem/yr t= 0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-228	Ra-228	1.000E+00	0.000E+00	6.702E+01	1.246E+02	9.413E+01	9.260E+00	2.004E-03	6.772E-14	0.000E+00
Th-228	Th-228	1.000E+00	2.288E+02	1.592E+02	7.715E+01	6.107E+00	4.352E-03	4.205E-14	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00	0.000E+00	4.481E+00	2.903E+01	1.305E+02	2.214E+02	2.305E+02	2.300E+02	2.282E+02
Th-228	ΣDOSE(j):		2.288E+02	2.307E+02	2.307E+02	2.307E+02	2.307E+02	2.305E+02	2.300E+02	2.282E+02
0Th-230	Th-230	1.000E+00	1.934E+01	1.933E+01	1.933E+01	1.933E+01	1.932E+01	1.930E+01	1.922E+01	1.895E+01
Th-230	U-234	1.000E+00	0.000E+00	1.754E-04	5.235E-04	1.741E-03	5.218E-03	1.735E-02	5.172E-02	1.686E-01
Th-230	U-238	1.000E+00	0.000E+00	2.505E-10	2.232E-09	2.470E-08	2.219E-07	2.459E-06	2.197E-05	2.382E-04
Th-230	ΣDOSE(j):		1.934E+01	1.934E+01	1.933E+01	1.933E+01	1.933E+01	1.931E+01	1.927E+01	1.912E+01
0Th-232	Th-232	1.000E+00	9.697E+01	9.697E+01	9.696E+01	9.696E+01	9.693E+01	9.686E+01	9.664E+01	9.588E+01
0U-234	U-234	1.000E+00	1.062E+01	1.062E+01	1.062E+01	1.062E+01	1.061E+01	1.058E+01	1.048E+01	1.017E+01
U-234	U-238	1.000E+00	0.000E+00	3.011E-05	9.032E-05	3.010E-04	9.022E-04	2.998E-03	8.919E-03	2.886E-02
U-234	ΣDOSE(j):		1.062E+01	1.062E+01	1.062E+01	1.062E+01	1.061E+01	1.058E+01	1.049E+01	1.020E+01
0U-238	U-238	1.000E+00	1.236E+01	1.236E+01	1.236E+01	1.235E+01	1.234E+01	1.231E+01	1.221E+01	1.186E+01

BRF(i) is the branch fraction of the parent nuclide.

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide (j)	Parent (i)	BRF(i)	S(j,t), pCi/g							
		t=	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Ac-227	Ac-227	1.000E+00	1.000E+02	9.686E+01	9.088E+01	7.271E+01	3.845E+01	4.133E+00	7.058E-03	1.454E-12
Ac-227	Pa-231	1.000E+00	0.000E+00	3.133E+00	9.108E+00	2.726E+01	6.145E+01	9.547E+01	9.870E+01	9.561E+01
Ac-227	Pu-239	1.000E+00	0.000E+00	1.094E-14	2.915E-13	1.023E-11	2.387E-10	5.821E-09	7.525E-08	9.380E-07
Ac-227	U-235	1.000E+00	0.000E+00	3.332E-05	2.987E-04	3.036E-03	2.256E-02	1.473E-01	5.612E-01	1.964E+00
Ac-227	ΣS(j):		1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.992E+01	9.975E+01	9.926E+01	9.758E+01
0Co-57	Co-57	1.000E+00	1.000E+02	3.927E+01	6.057E+00	8.726E-03	6.645E-11	2.561E-39	0.000E+00	0.000E+00
0Co-60	Co-60	1.000E+00	1.000E+02	8.767E+01	6.738E+01	2.681E+01	1.928E+00	1.922E-04	7.101E-16	0.000E+00
0Cs-137	Cs-137	1.000E+00	1.000E+02	9.771E+01	9.329E+01	7.934E+01	4.995E+01	9.887E+00	9.665E-02	8.926E-09
0H-3	H-3	1.000E+00	1.000E+02	2.579E+01	1.716E+00	1.300E-04	2.157E-16	0.000E+00	0.000E+00	0.000E+00
0Pa-231	Pa-231	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.995E+01	9.986E+01	9.959E+01	9.865E+01	9.556E+01
Pa-231	Pu-239	1.000E+00	0.000E+00	1.042E-12	9.376E-12	1.041E-10	9.365E-10	1.037E-08	9.358E-08	9.984E-07
Pa-231	U-235	1.000E+00	0.000E+00	2.116E-03	6.347E-03	2.115E-02	6.339E-02	2.107E-01	6.266E-01	2.026E+00
Pa-231	ΣS(j):		1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.993E+01	9.976E+01	9.927E+01	9.758E+01
0Pb-210	Pb-210	1.000E+00	1.000E+02	9.693E+01	9.106E+01	7.320E+01	3.922E+01	4.415E+00	8.605E-03	2.813E-12
Pb-210	Ra-226	1.000E+00	0.000E+00	3.060E+00	8.896E+00	2.664E+01	6.009E+01	9.223E+01	8.853E+01	6.505E+01
Pb-210	Th-230	1.000E+00	0.000E+00	6.662E-04	5.872E-03	6.074E-02	4.517E-01	2.939E+00	1.087E+01	3.365E+01
Pb-210	U-234	1.000E+00	0.000E+00	2.004E-09	5.327E-08	1.870E-06	4.367E-05	1.064E-03	1.351E-02	1.554E-01
Pb-210	U-238	1.000E+00	0.000E+00	7.166E-16	1.155E-13	1.345E-11	9.692E-10	8.454E-08	3.536E-06	1.467E-04
Pb-210	ΣS(j):		1.000E+02	9.999E+01	9.997E+01	9.990E+01	9.976E+01	9.958E+01	9.942E+01	9.885E+01
0Pm-147	Pm-147	1.000E+00	1.000E+02	7.677E+01	4.525E+01	7.115E+00	3.602E-02	3.325E-10	3.675E-33	0.000E+00
0Sm-147	Pm-147	1.000E+00	0.000E+00	5.746E-10	1.354E-09	2.297E-09	2.468E-09	2.455E-09	2.417E-09	2.286E-09
Sm-147	Sm-147	1.000E+00	1.000E+02	9.999E+01	9.998E+01	9.992E+01	9.976E+01	9.921E+01	9.764E+01	9.236E+01
Sm-147	ΣS(j):		1.000E+02	9.999E+01	9.998E+01	9.992E+01	9.976E+01	9.921E+01	9.764E+01	9.236E+01
0Pu-239	Pu-239	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.958E+01	9.876E+01	9.592E+01
0U-235	Pu-239	1.000E+00	0.000E+00	9.848E-08	2.954E-07	9.845E-07	2.951E-06	9.808E-06	2.941E-05	9.450E-05
U-235	U-235	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.959E+01	9.878E+01	9.598E+01
U-235	ΣS(j):		1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.959E+01	9.878E+01	9.598E+01
0Ra-226	Ra-226	1.000E+00	1.000E+02	9.996E+01	9.987E+01	9.956E+01	9.869E+01	9.569E+01	8.762E+01	6.438E+01
Ra-226	Th-230	1.000E+00	0.000E+00	4.331E-02	1.299E-01	4.322E-01	1.291E+00	4.234E+00	1.214E+01	3.466E+01
Ra-226	U-234	1.000E+00	0.000E+00	1.950E-07	1.754E-06	1.947E-05	1.746E-04	1.917E-03	1.669E-02	1.656E-01
Ra-226	U-238	1.000E+00	0.000E+00	1.851E-13	4.977E-12	1.840E-10	4.955E-09	1.818E-07	4.777E-06	1.614E-04
Ra-226	ΣS(j):		1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.993E+01	9.978E+01	9.920E+01
0Ra-228	Ra-228	1.000E+00	1.000E+02	8.864E+01	6.965E+01	2.995E+01	2.687E+00	5.813E-04	1.964E-14	0.000E+00
Ra-228	Th-232	1.000E+00	0.000E+00	1.136E+01	3.035E+01	7.004E+01	9.728E+01	9.989E+01	9.966E+01	9.888E+01
Ra-228	ΣS(j):		1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.888E+01

Individual Nuclide Soil Concentration
Parent Nuclide and Branch Fraction Indicated

ONuclide (j)	Parent (i)	BRF(i)	S(j,t), pCi/g							
		t=	0.000E+00	1.000E+00	3.000E+00	1.000E+01	3.000E+01	1.000E+02	3.000E+02	1.000E+03
Th-228	Ra-228	1.000E+00	0.000E+00	2.858E+01	5.384E+01	4.089E+01	4.024E+00	8.711E-04	2.943E-14	0.000E+00
Th-228	Th-228	1.000E+00	1.000E+02	6.961E+01	3.372E+01	2.670E+00	1.902E-03	1.838E-14	0.000E+00	0.000E+00
Th-228	Th-232	1.000E+00	0.000E+00	1.864E+00	1.243E+01	5.643E+01	9.544E+01	9.989E+01	9.966E+01	9.888E+01
Th-228	ΣS(j):		1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.888E+01
0Th-230	Th-230	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.998E+01	9.994E+01	9.980E+01	9.939E+01	9.799E+01
Th-230	U-234	1.000E+00	0.000E+00	9.002E-04	2.700E-03	8.999E-03	2.698E-02	8.973E-02	2.675E-01	8.718E-01
Th-230	U-238	1.000E+00	0.000E+00	1.276E-09	1.148E-08	1.276E-07	1.147E-06	1.272E-05	1.136E-04	1.232E-03
Th-230	ΣS(j):		1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.886E+01

0Th-232	Th-232	1.000E+00	1.000E+02	1.000E+02	1.000E+02	9.999E+01	9.997E+01	9.989E+01	9.966E+01	9.888E+01
0U-234	U-234	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.987E+01	9.956E+01	9.869E+01	9.571E+01
U-234	U-238	1.000E+00	0.000E+00	2.835E-04	8.504E-04	2.834E-03	8.494E-03	2.823E-02	8.397E-02	2.717E-01
U-234	ΣS(j):		1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.959E+01	9.878E+01	9.598E+01
0U-238	U-238	1.000E+00	1.000E+02	1.000E+02	9.999E+01	9.996E+01	9.988E+01	9.959E+01	9.878E+01	9.598E+01

BRF(i) is the branch fraction of the parent nuclide.

APPENDIX F

RADIATION (GAMMA) SCANNING SURVEY

- AREA A - BUILDING 815 /816 (CLASS I)
- AREA B – FORMER DRY WASTE DISPOSAL AREA (CLASS II)
- AREA C - DISPOSAL PIT C (CLASS II)
- AREA D - DISPOSAL PIT A/B (CLASS I)
- AREA E - BUILDING 819 (CLASS I)
- AREA F – EM-6 (CLASS II)
- AREA H – EM-5 (CLASS II)
- AREA I – EM-27 (CLASS II)
- AREA J – DRAINAGE DITCHES (CLASS II)
- CLASS III

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744516.4	1013635	1.33	2.26	-41.15%	0033A	
9/4/1997	Sead-12	A	744519.4	1013635	1.36	2.26	-39.82%	0033A	
9/4/1997	Sead-12	A	744522.4	1013635	1.44	2.26	-36.28%	0033A	
9/4/1997	Sead-12	A	744525.4	1013635	1.52	2.26	-32.74%	0033A	
9/4/1997	Sead-12	A	744528.4	1013635	1.57	2.26	-30.53%	0033A	
9/4/1997	Sead-12	A	744531.4	1013635	1.56	2.26	-30.97%	0033A	
9/4/1997	Sead-12	A	744534.4	1013635	1.59	2.26	-29.65%	0033A	
9/4/1997	Sead-12	A	744537.4	1013636	1.61	2.26	-28.76%	0033A	
9/4/1997	Sead-12	A	744540.3	1013636	1.61	2.26	-28.76%	0033A	
9/4/1997	Sead-12	A	744543.3	1013636	1.63	2.26	-27.88%	0033A	
9/4/1997	Sead-12	A	744546.3	1013636	1.64	2.26	-27.43%	0033A	
9/4/1997	Sead-12	A	744549.3	1013636	1.66	2.26	-26.55%	0033A	
9/4/1997	Sead-12	A	744552.3	1013636	1.65	2.26	-26.99%	0033A	
9/4/1997	Sead-12	A	744555.3	1013636	1.66	2.26	-26.55%	0033A	
9/4/1997	Sead-12	A	744558.3	1013637	1.65	2.26	-26.99%	0033A	
9/4/1997	Sead-12	A	744561.3	1013637	1.69	2.26	-25.22%	0033A	
9/4/1997	Sead-12	A	744564.3	1013637	1.7	2.26	-24.78%	0033A	
9/4/1997	Sead-12	A	744567.3	1013637	1.72	2.26	-23.89%	0033A	
9/4/1997	Sead-12	A	744570.3	1013637	1.73	2.26	-23.45%	0033A	
9/4/1997	Sead-12	A	744573.3	1013637	1.74	2.26	-23.01%	0033A	
9/4/1997	Sead-12	A	744576.3	1013637	1.7	2.26	-24.78%	0033A	
9/4/1997	Sead-12	A	744579.3	1013637	1.7	2.26	-24.78%	0033A	
9/4/1997	Sead-12	A	744582.3	1013638	1.71	2.26	-24.34%	0033A	
9/4/1997	Sead-12	A	744585.3	1013638	1.71	2.26	-24.34%	0033A	
9/4/1997	Sead-12	A	744588.3	1013638	1.71	2.26	-24.34%	0033A	
9/4/1997	Sead-12	A	744591.3	1013638	1.71	2.26	-24.34%	0033A	
9/4/1997	Sead-12	A	744594.3	1013638	1.68	2.26	-25.66%	0033A	
9/4/1997	Sead-12	A	744597.3	1013638	1.72	2.26	-23.89%	0033A	
9/4/1997	Sead-12	A	744600.3	1013638	1.77	2.26	-21.68%	0033A	
9/4/1997	Sead-12	A	744603.3	1013638	1.76	2.26	-22.12%	0033A	
9/4/1997	Sead-12	A	744606.3	1013639	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744609.3	1013639	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744612.3	1013639	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744615.3	1013639	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744618.3	1013639	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744621.3	1013639	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744624.3	1013639	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744627.3	1013640	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744630.3	1013640	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744633.3	1013640	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744636.3	1013640	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744639.3	1013640	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744642.3	1013640	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744645.3	1013640	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744648.3	1013640	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744651.3	1013641	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744654.3	1013641	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744657.3	1013641	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744516.3	1013638	1.59	2.26	-29.65%	0033A	
9/4/1997	Sead-12	A	744519.3	1013638	1.74	2.26	-23.01%	0033A	
9/4/1997	Sead-12	A	744522.3	1013638	1.77	2.26	-21.68%	0033A	
9/4/1997	Sead-12	A	744525.3	1013638	1.79	2.26	-20.80%	0033A	
9/4/1997	Sead-12	A	744528.3	1013638	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744531.3	1013638	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744534.3	1013638	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744537.3	1013638	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744540.2	1013639	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744543.2	1013639	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744546.2	1013639	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744549.2	1013639	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744552.2	1013639	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744555.2	1013639	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744558.2	1013639	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744561.2	1013640	1.79	2.26	-20.80%	0033A	
9/4/1997	Sead-12	A	744564.2	1013640	1.78	2.26	-21.24%	0033A	
9/4/1997	Sead-12	A	744567.2	1013640	1.75	2.26	-22.57%	0033A	
9/4/1997	Sead-12	A	744570.2	1013640	1.76	2.26	-22.12%	0033A	
9/4/1997	Sead-12	A	744573.2	1013640	1.78	2.26	-21.24%	0033A	
9/4/1997	Sead-12	A	744576.2	1013640	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744579.2	1013640	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744582.2	1013640	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744585.2	1013641	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744588.2	1013641	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744591.2	1013641	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744594.2	1013641	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744597.2	1013641	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744600.2	1013641	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744603.1	1013641	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744606.1	1013641	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744609.1	1013642	1.98	2.26	-12.39%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744612.1	1013642	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744615.1	1013642	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744618.1	1013642	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744621.1	1013642	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744624.1	1013642	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744627.1	1013642	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744630.1	1013643	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744633.1	1013643	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744636.1	1013643	1.95	2.26	-13.72%	0033A	SURFACE DRAIN
9/4/1997	Sead-12	A	744639.1	1013643	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744642.1	1013643	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744645.1	1013643	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744648.1	1013643	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744651.1	1013643	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744654.1	1013644	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744657.1	1013644	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744516.1	1013640	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744519.1	1013641	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744522.1	1013641	1.81	2.26	-19.91%	0033A	
9/4/1997	Sead-12	A	744525.1	1013641	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744528.1	1013641	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744531.1	1013641	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744534.1	1013641	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744537.1	1013641	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744540.1	1013641	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744543.1	1013642	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744546.1	1013642	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744549.1	1013642	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744552.1	1013642	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744555.1	1013642	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744558.1	1013642	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744561.1	1013642	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744564.1	1013643	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744567.1	1013643	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744570.1	1013643	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744573.1	1013643	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744576.1	1013643	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744579.1	1013643	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744582.1	1013643	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744585.1	1013643	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744588.1	1013644	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744591.1	1013644	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744594.1	1013644	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744597.1	1013644	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744600.1	1013644	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744603	1013644	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744606	1013644	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744609	1013644	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744612	1013645	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744615	1013645	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744618	1013645	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744621	1013645	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744624	1013645	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744627	1013645	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744630	1013645	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744633	1013646	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744636	1013646	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744639	1013646	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744642	1013646	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744645	1013646	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744648	1013646	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744651	1013646	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744654	1013646	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744657	1013647	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744516	1013643	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744519	1013643	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744522	1013644	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744525	1013644	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744528	1013644	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744531	1013644	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744534	1013644	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744536.9	1013644	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744539.9	1013644	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744542.9	1013644	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744545.9	1013645	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744548.9	1013645	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744551.9	1013645	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744554.9	1013645	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744557.9	1013645	1.81	2.26	-19.91%	0033A	
9/4/1997	Sead-12	A	744560.9	1013645	1.82	2.26	-19.47%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744563.9	1013645	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744566.9	1013646	1.84	2.26	-18.58%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744569.9	1013646	1.81	2.26	-19.91%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744572.9	1013646	1.76	2.26	-22.12%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744575.9	1013646	1.75	2.26	-22.57%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744578.9	1013646	1.72	2.26	-23.89%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744581.9	1013646	1.74	2.26	-23.01%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744584.9	1013646	1.77	2.26	-21.68%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744587.9	1013646	1.79	2.26	-20.80%	0033A	
9/4/1997	Sead-12	A	744590.9	1013647	1.79	2.26	-20.80%	0033A	
9/4/1997	Sead-12	A	744593.9	1013647	1.8	2.26	-20.35%	0033A	
9/4/1997	Sead-12	A	744596.9	1013647	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744599.9	1013647	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744602.9	1013647	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744605.9	1013647	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744608.9	1013647	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744611.9	1013647	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744614.9	1013648	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744617.9	1013648	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744620.9	1013648	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744623.9	1013648	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744626.9	1013648	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744629.9	1013648	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744632.9	1013648	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744635.9	1013649	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744638.9	1013649	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744641.9	1013649	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744644.9	1013649	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744647.9	1013649	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744650.9	1013649	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744653.9	1013649	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744656.9	1013649	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744515.9	1013646	1.7	2.26	-24.78%	0033A	
9/4/1997	Sead-12	A	744518.9	1013646	1.75	2.26	-22.57%	0033A	
9/4/1997	Sead-12	A	744521.9	1013646	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744524.9	1013647	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744527.9	1013647	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744530.9	1013647	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744533.9	1013647	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744536.8	1013647	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744539.8	1013647	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744542.8	1013647	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744545.8	1013647	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744548.8	1013648	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744551.8	1013648	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744554.8	1013648	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744557.8	1013648	1.56	2.26	-30.97%	0033A	
9/4/1997	Sead-12	A	744560.8	1013648	1.6	2.26	-29.20%	0033A	
9/4/1997	Sead-12	A	744563.8	1013648	1.66	2.26	-26.55%	0033A	
9/4/1997	Sead-12	A	744566.8	1013648	1.6	2.26	-29.20%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744569.8	1013649	1.59	2.26	-29.65%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744572.8	1013649	1.52	2.26	-32.74%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744575.8	1013649	1.45	2.26	-35.84%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744578.8	1013649	1.42	2.26	-37.17%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744581.8	1013649	1.44	2.26	-36.28%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744584.8	1013649	1.48	2.26	-34.51%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744587.8	1013649	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744590.8	1013649	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744593.8	1013650	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744596.8	1013650	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744599.8	1013650	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744602.8	1013650	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744605.8	1013650	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744608.8	1013650	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744611.8	1013650	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744614.8	1013650	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744617.8	1013651	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744620.8	1013651	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744623.8	1013651	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744626.8	1013651	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744629.8	1013651	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744632.8	1013651	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744635.8	1013651	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744638.8	1013652	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744641.8	1013652	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744644.8	1013652	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744647.8	1013652	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744650.8	1013652	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744653.8	1013652	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744656.8	1013652	2.12	2.26	-6.19%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744515.8	1013649	1.78	2.26	-21.24%	0033A	
9/4/1997	Sead-12	A	744518.8	1013649	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744521.8	1013649	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744524.8	1013649	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744527.8	1013650	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744530.8	1013650	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744533.8	1013650	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744536.7	1013650	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744539.7	1013650	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744542.7	1013650	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744545.7	1013650	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744548.7	1013650	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744551.7	1013651	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744554.7	1013651	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744557.7	1013651	1.8	2.26	-20.35%	0033A	
9/4/1997	Sead-12	A	744560.7	1013651	1.78	2.26	-21.24%	0033A	
9/4/1997	Sead-12	A	744563.7	1013651	1.74	2.26	-23.01%	0033A	
9/4/1997	Sead-12	A	744566.7	1013651	1.7	2.26	-24.78%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744569.7	1013651	1.63	2.26	-27.88%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744572.7	1013652	1.58	2.26	-30.09%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744575.7	1013652	1.34	2.26	-40.71%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744578.7	1013652	1.22	2.26	-46.02%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744581.7	1013652	1.44	2.26	-36.28%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744584.7	1013652	1.72	2.26	-23.89%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744587.7	1013652	1.5	2.26	-33.63%	0033A	
9/4/1997	Sead-12	A	744590.7	1013652	1.62	2.26	-28.32%	0033A	
9/4/1997	Sead-12	A	744593.7	1013652	1.67	2.26	-26.11%	0033A	
9/4/1997	Sead-12	A	744596.7	1013653	1.78	2.26	-21.24%	0033A	
9/4/1997	Sead-12	A	744599.7	1013653	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744602.6	1013653	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744605.6	1013653	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744608.6	1013653	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744611.6	1013653	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744614.6	1013653	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744617.6	1013653	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744620.6	1013654	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744623.6	1013654	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744626.6	1013654	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744629.6	1013654	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744632.6	1013654	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744635.6	1013654	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744638.6	1013654	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744641.6	1013655	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744644.6	1013655	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744647.6	1013655	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744650.6	1013655	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744653.6	1013655	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744656.6	1013655	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744515.6	1013652	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744518.6	1013652	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744521.6	1013652	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744524.6	1013652	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744527.6	1013652	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744530.6	1013653	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744533.6	1013653	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744536.6	1013653	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744539.6	1013653	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744542.6	1013653	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744545.6	1013653	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744548.6	1013653	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744551.6	1013653	1.89	2.26	-16.37%	0033A	
9/4/1997	Sead-12	A	744554.6	1013654	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744557.6	1013654	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744560.6	1013654	1.85	2.26	-18.14%	0033A	
9/4/1997	Sead-12	A	744563.6	1013654	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744566.6	1013654	1.81	2.26	-19.91%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744569.6	1013654	1.25	2.26	-44.69%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744572.6	1013654	1.3	2.26	-42.48%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744575.6	1013655	1.34	2.26	-40.71%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744578.6	1013655	1.33	2.26	-41.15%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744581.6	1013655	1.47	2.26	-34.96%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744584.6	1013655	1.71	2.26	-24.34%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744587.6	1013655	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744590.6	1013655	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744593.6	1013655	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744596.6	1013655	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744599.6	1013656	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744602.5	1013656	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744605.5	1013656	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744608.5	1013656	2.26	2.26	0.00%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/4/1997	Sead-12	A	744611.5	1013656	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744614.5	1013656	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744617.5	1013656	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744620.5	1013656	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744623.5	1013657	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744626.5	1013657	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744629.5	1013657	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744632.5	1013657	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744635.5	1013657	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744638.5	1013657	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744641.5	1013657	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744644.5	1013658	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744647.5	1013658	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744650.5	1013658	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744653.5	1013658	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744656.5	1013658	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744515.5	1013655	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744518.5	1013655	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744521.5	1013655	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744524.5	1013655	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744527.5	1013655	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744530.5	1013655	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744533.5	1013656	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744536.4	1013656	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744539.4	1013656	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744542.4	1013656	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744545.4	1013656	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744548.4	1013656	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744551.4	1013656	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744554.4	1013656	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744557.4	1013657	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744560.4	1013657	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744563.4	1013657	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744566.4	1013657	1.92	2.26	-15.04%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744569.4	1013657	1.37	2.26	-39.38%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744572.4	1013657	1.38	2.26	-38.94%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744575.4	1013657	1.39	2.26	-38.50%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744578.4	1013658	1.41	2.26	-37.61%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744581.4	1013658	1.49	2.26	-34.07%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744584.4	1013658	1.59	2.26	-29.65%	0033A	BENEATH CHILLER PLATFORM
9/4/1997	Sead-12	A	744587.4	1013658	1.65	2.26	-26.99%	0033A	
9/4/1997	Sead-12	A	744590.4	1013658	1.7	2.26	-24.78%	0033A	
9/4/1997	Sead-12	A	744593.4	1013658	1.73	2.26	-23.45%	0033A	
9/4/1997	Sead-12	A	744596.4	1013658	1.82	2.26	-19.47%	0033A	
9/4/1997	Sead-12	A	744599.4	1013658	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744602.4	1013659	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744605.4	1013659	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744608.4	1013659	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744611.4	1013659	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744614.4	1013659	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744617.4	1013659	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744620.4	1013659	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744623.4	1013659	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744626.4	1013660	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744629.4	1013660	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744632.4	1013660	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744635.4	1013660	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744638.4	1013660	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744641.4	1013660	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744644.4	1013660	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744647.4	1013661	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744650.4	1013661	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744653.4	1013661	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744656.4	1013661	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744515.4	1013658	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744518.4	1013658	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744521.4	1013658	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744524.4	1013658	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744527.4	1013658	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744530.4	1013658	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744533.3	1013658	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744536.3	1013659	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744539.3	1013659	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744542.3	1013659	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744545.3	1013659	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744548.3	1013659	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744551.3	1013659	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744554.3	1013659	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744557.3	1013659	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744560.3	1013660	2.1	2.26	-7.08%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744563.3	1013660	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744566.3	1013660	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744569.3	1013660	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744572.3	1013660	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744575.3	1013660	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744578.3	1013660	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744581.3	1013661	1.84	2.26	-18.58%	0033A	
9/4/1997	Sead-12	A	744584.3	1013661	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744587.3	1013661	1.86	2.26	-17.70%	0033A	
9/4/1997	Sead-12	A	744590.3	1013661	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744593.3	1013661	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744596.3	1013661	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744599.3	1013661	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744602.3	1013661	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744605.3	1013662	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744608.3	1013662	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744611.3	1013662	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744614.3	1013662	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744617.3	1013662	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744620.3	1013662	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744623.3	1013662	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744626.3	1013662	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744629.3	1013663	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744632.3	1013663	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744635.3	1013663	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744638.3	1013663	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744641.3	1013663	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744644.3	1013663	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744647.3	1013663	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744650.3	1013664	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744653.3	1013664	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744656.3	1013664	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744515.3	1013660	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744518.3	1013661	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744521.3	1013661	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744524.3	1013661	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744527.3	1013661	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744530.3	1013661	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744533.2	1013661	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744536.2	1013661	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744539.2	1013662	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744542.2	1013662	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744545.2	1013662	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744548.2	1013662	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744551.2	1013662	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744554.2	1013662	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744557.2	1013662	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744560.2	1013662	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744563.2	1013663	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744566.2	1013663	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744569.2	1013663	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744572.2	1013663	1.76	2.26	-22.12%	0033A	
9/4/1997	Sead-12	A	744575.2	1013663	1.77	2.26	-21.68%	0033A	
9/4/1997	Sead-12	A	744578.2	1013663	1.81	2.26	-19.91%	0033A	
9/4/1997	Sead-12	A	744581.2	1013663	1.83	2.26	-19.03%	0033A	
9/4/1997	Sead-12	A	744584.2	1013664	1.87	2.26	-17.26%	0033A	
9/4/1997	Sead-12	A	744587.2	1013664	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744590.2	1013664	1.9	2.26	-15.93%	0033A	
9/4/1997	Sead-12	A	744593.2	1013664	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744596.2	1013664	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744599.1	1013664	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744602.1	1013664	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744605.1	1013664	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744608.1	1013665	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744611.1	1013665	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744614.1	1013665	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744617.1	1013665	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744620.1	1013665	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744623.1	1013665	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744626.1	1013665	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744629.1	1013665	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744632.1	1013666	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744635.1	1013666	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744638.1	1013666	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744641.1	1013666	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744644.1	1013666	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744647.1	1013666	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744650.1	1013666	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744653.1	1013667	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744656.1	1013667	2.25	2.26	-0.44%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744515.1	1013663	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744518.1	1013663	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744521.1	1013664	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744524.1	1013664	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744527.1	1013664	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744530.1	1013664	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744533.1	1013664	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744536.1	1013664	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744539.1	1013664	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744542.1	1013665	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744545.1	1013665	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744548.1	1013665	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744551.1	1013665	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744554.1	1013665	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744557.1	1013665	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744560.1	1013665	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744563.1	1013665	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744566.1	1013666	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744569.1	1013666	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744572.1	1013666	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744575.1	1013666	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744578.1	1013666	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744581.1	1013666	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744584.1	1013666	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744587.1	1013666	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744590.1	1013667	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744593.1	1013667	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744596.1	1013667	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744599	1013667	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744602	1013667	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744605	1013667	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744608	1013667	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744611	1013668	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744614	1013668	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744617	1013668	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744620	1013668	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744623	1013668	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744626	1013668	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744629	1013668	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744632	1013668	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744635	1013669	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744638	1013669	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744641	1013669	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744644	1013669	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744647	1013669	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744650	1013669	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744653	1013669	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744656	1013670	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744515	1013666	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744518	1013666	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744521	1013666	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744524	1013667	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744527	1013667	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744530	1013667	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744532.9	1013667	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744535.9	1013667	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744538.9	1013667	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744541.9	1013667	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744544.9	1013668	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744547.9	1013668	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744550.9	1013668	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744553.9	1013668	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744556.9	1013668	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744559.9	1013668	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744562.9	1013668	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744565.9	1013668	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744568.9	1013669	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744571.9	1013669	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744574.9	1013669	1.88	2.26	-16.81%	0033A	
9/4/1997	Sead-12	A	744577.9	1013669	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744580.9	1013669	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744583.9	1013669	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744586.9	1013669	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744589.9	1013669	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744592.9	1013670	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744595.9	1013670	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744598.9	1013670	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744601.9	1013670	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744604.9	1013670	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744607.9	1013670	2.19	2.26	-3.10%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744610.9	1013670	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744613.9	1013671	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744616.9	1013671	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744619.9	1013671	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744622.9	1013671	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744625.9	1013671	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744628.9	1013671	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744631.9	1013671	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744634.9	1013671	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744637.9	1013672	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744640.9	1013672	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744643.9	1013672	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744646.9	1013672	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744649.9	1013672	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744652.9	1013672	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744655.9	1013672	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744514.9	1013669	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744517.9	1013669	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744520.9	1013669	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744523.9	1013669	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744526.9	1013670	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744529.9	1013670	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744532.8	1013670	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744535.8	1013670	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744538.8	1013670	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744541.8	1013670	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744544.8	1013670	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744547.8	1013671	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744550.8	1013671	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744553.8	1013671	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744556.8	1013671	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744559.8	1013671	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744562.8	1013671	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744565.8	1013671	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744568.8	1013671	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744571.8	1013672	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744574.8	1013672	1.91	2.26	-15.49%	0033A	
9/4/1997	Sead-12	A	744577.8	1013672	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744580.8	1013672	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744583.8	1013672	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744586.8	1013672	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744589.8	1013672	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744592.8	1013672	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744595.8	1013673	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744598.8	1013673	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744601.8	1013673	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744604.8	1013673	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744607.8	1013673	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744610.8	1013673	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744613.8	1013673	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744616.8	1013674	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744619.8	1013674	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744622.8	1013674	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744625.8	1013674	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744628.8	1013674	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744631.8	1013674	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744634.8	1013674	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744637.8	1013674	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744640.8	1013675	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744643.8	1013675	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744646.8	1013675	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744649.8	1013675	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744652.8	1013675	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744655.8	1013675	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744514.8	1013672	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744517.8	1013672	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744520.8	1013672	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744523.8	1013672	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744526.8	1013672	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744529.7	1013673	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744532.7	1013673	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744535.7	1013673	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744538.7	1013673	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744541.7	1013673	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744544.7	1013673	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744547.7	1013673	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744550.7	1013674	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744553.7	1013674	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744556.7	1013674	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744559.7	1013674	2.18	2.26	-3.54%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744562.7	1013674	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744565.7	1013674	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744568.7	1013674	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744571.7	1013674	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744574.7	1013675	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744577.7	1013675	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744580.7	1013675	1.92	2.26	-15.04%	0033A	
9/4/1997	Sead-12	A	744583.7	1013675	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744586.7	1013675	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744589.7	1013675	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744592.7	1013675	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744595.6	1013675	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744598.6	1013676	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744601.6	1013676	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744604.6	1013676	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744607.6	1013676	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744610.6	1013676	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744613.6	1013676	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744616.6	1013676	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744619.6	1013677	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744622.6	1013677	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744625.6	1013677	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744628.6	1013677	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744631.6	1013677	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744634.6	1013677	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744637.6	1013677	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744640.6	1013677	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744643.6	1013678	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744646.6	1013678	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744649.6	1013678	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744652.6	1013678	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744655.6	1013678	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744514.6	1013675	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744517.6	1013675	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744520.6	1013675	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744523.6	1013675	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744526.6	1013675	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744529.6	1013675	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744532.6	1013676	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744535.6	1013676	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744538.6	1013676	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744541.6	1013676	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744544.6	1013676	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744547.6	1013676	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744550.6	1013676	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744553.6	1013677	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744556.6	1013677	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744559.6	1013677	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744562.6	1013677	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744565.6	1013677	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744568.6	1013677	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744571.6	1013677	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744574.6	1013677	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744577.6	1013678	1.96	2.26	-13.27%	0033A	
9/4/1997	Sead-12	A	744580.6	1013678	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744583.6	1013678	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744586.6	1013678	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744589.6	1013678	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744592.6	1013678	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744595.5	1013678	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744598.5	1013678	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744601.5	1013679	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744604.5	1013679	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744607.5	1013679	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744610.5	1013679	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744613.5	1013679	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744616.5	1013679	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744619.5	1013679	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744622.5	1013680	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744625.5	1013680	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744628.5	1013680	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744631.5	1013680	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744634.5	1013680	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744637.5	1013680	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744640.5	1013680	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744643.5	1013680	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744646.5	1013681	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744649.5	1013681	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744652.5	1013681	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744655.5	1013681	2.36	2.26	4.42%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744514.5	1013678	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744517.5	1013678	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744520.5	1013678	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744523.5	1013678	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744526.5	1013678	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744529.4	1013678	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744532.4	1013678	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744535.4	1013679	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744538.4	1013679	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744541.4	1013679	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744544.4	1013679	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744547.4	1013679	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744550.4	1013679	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744553.4	1013679	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744556.4	1013680	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744559.4	1013680	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744562.4	1013680	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744565.4	1013680	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744568.4	1013680	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744571.4	1013680	1.93	2.26	-14.60%	0033A	
9/4/1997	Sead-12	A	744574.4	1013680	1.95	2.26	-13.72%	0033A	
9/4/1997	Sead-12	A	744577.4	1013680	1.94	2.26	-14.16%	0033A	
9/4/1997	Sead-12	A	744580.4	1013681	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744583.4	1013681	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744586.4	1013681	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744589.4	1013681	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744592.4	1013681	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744595.4	1013681	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744598.4	1013681	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744601.4	1013681	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744604.4	1013682	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744607.4	1013682	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744610.4	1013682	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744613.4	1013682	2.52	2.26	11.50%	0033A	
9/4/1997	Sead-12	A	744616.4	1013682	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744619.4	1013682	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744622.4	1013682	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744625.4	1013683	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744628.4	1013683	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744631.4	1013683	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744634.4	1013683	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744637.4	1013683	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744640.4	1013683	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744643.4	1013683	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744646.4	1013683	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744649.4	1013684	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744652.4	1013684	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744655.4	1013684	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744514.4	1013681	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744517.4	1013681	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744520.4	1013681	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744523.4	1013681	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744526.4	1013681	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744529.3	1013681	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744532.3	1013681	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744535.3	1013681	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744538.3	1013682	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744541.3	1013682	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744544.3	1013682	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744547.3	1013682	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744550.3	1013682	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744553.3	1013682	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744556.3	1013682	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744559.3	1013683	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744562.3	1013683	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744565.3	1013683	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744568.3	1013683	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744571.3	1013683	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744574.3	1013683	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744577.3	1013683	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744580.3	1013683	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744583.3	1013684	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744586.3	1013684	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744589.3	1013684	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744592.3	1013684	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744595.3	1013684	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744598.3	1013684	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744601.3	1013684	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744604.3	1013684	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744607.3	1013685	2.44	2.26	7.96%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744610.3	1013685	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744613.3	1013685	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744616.3	1013685	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744619.3	1013685	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744622.3	1013685	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744625.3	1013685	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744628.3	1013686	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744631.3	1013686	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744634.3	1013686	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744637.3	1013686	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744640.3	1013686	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744643.3	1013686	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744646.3	1013686	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744649.3	1013686	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744652.3	1013687	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744655.3	1013687	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744514.3	1013683	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744517.3	1013684	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744520.3	1013684	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744523.3	1013684	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744526.3	1013684	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744529.2	1013684	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744532.2	1013684	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744535.2	1013684	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744538.2	1013684	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744541.2	1013685	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744544.2	1013685	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744547.2	1013685	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744550.2	1013885	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744553.2	1013685	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744556.2	1013685	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744559.2	1013685	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744562.2	1013686	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744565.2	1013686	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744568.2	1013686	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744571.2	1013686	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744574.2	1013686	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744577.2	1013686	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744580.2	1013686	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744583.2	1013686	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744586.2	1013687	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744589.2	1013687	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744592.1	1013687	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744595.1	1013687	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744598.1	1013687	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744601.1	1013687	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744604.1	1013687	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744607.1	1013687	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744610.1	1013688	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744613.1	1013688	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744616.1	1013688	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744619.1	1013688	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744622.1	1013688	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744625.1	1013688	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744628.1	1013688	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744631.1	1013689	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744634.1	1013689	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744637.1	1013689	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744640.1	1013689	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744643.1	1013689	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744646.1	1013689	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744649.1	1013689	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744652.1	1013689	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744655.1	1013690	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744514.1	1013686	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744517.1	1013686	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744520.1	1013687	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744523.1	1013687	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744526.1	1013687	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744529.1	1013687	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744532.1	1013687	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744535.1	1013687	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744538.1	1013687	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744541.1	1013687	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744544.1	1013688	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744547.1	1013688	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744550.1	1013688	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744553.1	1013688	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744556.1	1013688	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744559.1	1013688	2.08	2.26	-7.96%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744562.1	1013688	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744565.1	1013689	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744568.1	1013689	2.03	2.26	-10.18%	0033A	
9/4/1997	Sead-12	A	744571.1	1013689	1.99	2.26	-11.95%	0033A	
9/4/1997	Sead-12	A	744574.1	1013689	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744577.1	1013689	2.01	2.26	-11.06%	0033A	
9/4/1997	Sead-12	A	744580.1	1013689	2.05	2.26	-9.29%	0033A	
9/4/1997	Sead-12	A	744583.1	1013689	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744586.1	1013689	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744589.1	1013690	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744592	1013690	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744595	1013690	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744598	1013690	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744601	1013690	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744604	1013690	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744607	1013690	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744610	1013690	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744613	1013691	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744616	1013691	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744619	1013691	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744622	1013691	2.52	2.26	11.50%	0033A	
9/4/1997	Sead-12	A	744625	1013691	2.58	2.26	14.16%	0033A	
9/4/1997	Sead-12	A	744628	1013691	2.6	2.26	15.04%	0033A	
9/4/1997	Sead-12	A	744631	1013691	2.6	2.26	15.04%	0033A	
9/4/1997	Sead-12	A	744634	1013692	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744637	1013692	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744640	1013692	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744643	1013692	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744646	1013692	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744649	1013692	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744652	1013692	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744655	1013692	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744514	1013689	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744517	1013689	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744520	1013689	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744523	1013690	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744525.9	1013690	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744528.9	1013690	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744531.9	1013690	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744534.9	1013690	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744537.9	1013690	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744540.9	1013690	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744543.9	1013690	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744546.9	1013691	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744549.9	1013691	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744552.9	1013691	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744555.9	1013691	2.06	2.26	-8.85%	0033A	
9/4/1997	Sead-12	A	744558.9	1013691	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744561.9	1013691	2.02	2.26	-10.62%	0033A	
9/4/1997	Sead-12	A	744564.9	1013691	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744567.9	1013692	2	2.26	-11.50%	0033A	
9/4/1997	Sead-12	A	744570.9	1013692	1.98	2.26	-12.39%	0033A	
9/4/1997	Sead-12	A	744573.9	1013692	1.97	2.26	-12.83%	0033A	
9/4/1997	Sead-12	A	744576.9	1013692	2.04	2.26	-9.73%	0033A	
9/4/1997	Sead-12	A	744579.9	1013692	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744582.9	1013692	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744585.9	1013692	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744588.9	1013692	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744591.9	1013693	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744594.9	1013693	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744597.9	1013693	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744600.9	1013693	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744603.9	1013693	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744606.9	1013693	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744609.9	1013693	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744612.9	1013693	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744615.9	1013694	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744618.9	1013694	2.56	2.26	13.27%	0033A	
9/4/1997	Sead-12	A	744621.9	1013694	2.6	2.26	15.04%	0033A	
9/4/1997	Sead-12	A	744624.9	1013694	2.56	2.26	13.27%	0033A	
9/4/1997	Sead-12	A	744627.9	1013694	2.57	2.26	13.72%	0033A	
9/4/1997	Sead-12	A	744630.9	1013694	2.51	2.26	11.06%	0033A	
9/4/1997	Sead-12	A	744633.9	1013694	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744636.9	1013695	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744639.9	1013695	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744642.9	1013695	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744645.9	1013695	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744648.9	1013695	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744651.9	1013695	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744654.9	1013695	2.29	2.26	1.33%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744513.9	1013692	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744516.9	1013692	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744519.9	1013892	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744522.9	1013692	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744525.8	1013693	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744528.8	1013693	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744531.8	1013693	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744534.8	1013693	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744537.8	1013693	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744540.8	1013693	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744543.8	1013693	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744546.8	1013693	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744549.8	1013694	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744552.8	1013694	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744555.8	1013694	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744558.8	1013694	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744561.8	1013694	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744564.8	1013694	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744567.8	1013694	2.07	2.26	-8.41%	0033A	
9/4/1997	Sead-12	A	744570.8	1013695	2.09	2.26	-7.52%	0033A	
9/4/1997	Sead-12	A	744573.8	1013695	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744576.8	1013695	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744579.8	1013695	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744582.8	1013695	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744585.8	1013695	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744588.8	1013695	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744591.8	1013695	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744594.8	1013696	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744597.8	1013696	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744600.8	1013696	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744603.8	1013696	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744606.8	1013696	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744609.8	1013696	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744612.8	1013696	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744615.8	1013696	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744618.8	1013697	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744621.8	1013697	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744624.8	1013697	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744627.8	1013697	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744630.8	1013697	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744633.8	1013697	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744636.8	1013697	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744639.8	1013698	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744642.8	1013698	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744645.8	1013698	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744648.8	1013698	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744651.8	1013698	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744654.8	1013698	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744513.8	1013695	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744516.8	1013695	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744519.7	1013695	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744522.7	1013695	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744525.7	1013696	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744528.7	1013696	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744531.7	1013696	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744534.7	1013696	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744537.7	1013696	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744540.7	1013696	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744543.7	1013696	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744546.7	1013696	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744549.7	1013697	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744552.7	1013697	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744555.7	1013697	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744558.7	1013697	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744561.7	1013697	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744564.7	1013697	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744567.7	1013697	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744570.7	1013698	2.08	2.26	-7.96%	0033A	
9/4/1997	Sead-12	A	744573.7	1013698	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744576.7	1013698	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744579.7	1013698	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744582.7	1013698	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744585.6	1013698	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744588.6	1013698	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744591.6	1013698	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744594.6	1013699	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744597.6	1013699	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744600.6	1013699	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744603.6	1013699	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744606.6	1013699	2.25	2.26	-0.44%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744609.6	1013699	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744612.6	1013699	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744615.6	1013699	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744618.6	1013700	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744621.6	1013700	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744624.6	1013700	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744627.6	1013700	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744630.6	1013700	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744633.6	1013700	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744636.6	1013700	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744639.6	1013701	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744642.6	1013701	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744645.6	1013701	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744648.6	1013701	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744651.6	1013701	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744654.6	1013701	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744513.6	1013698	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744516.6	1013698	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744519.6	1013698	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744522.6	1013698	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744525.6	1013699	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744528.6	1013699	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744531.6	1013699	2.2	2.26	-2.65%	0033A	
9/4/1997	Sead-12	A	744534.6	1013699	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744537.6	1013699	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744540.6	1013699	2.28	2.26	0.88%	0033A	
9/4/1997	Sead-12	A	744543.6	1013699	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744546.6	1013699	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744549.6	1013700	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744552.6	1013700	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744555.6	1013700	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744558.6	1013700	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744561.6	1013700	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744564.6	1013700	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744567.6	1013700	2.22	2.26	-1.77%	0033A	
9/4/1997	Sead-12	A	744570.6	1013701	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744573.6	1013701	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744576.6	1013701	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744579.5	1013701	2.21	2.26	-2.21%	0033A	
9/4/1997	Sead-12	A	744582.5	1013701	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744585.5	1013701	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744588.5	1013701	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744591.5	1013701	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744594.5	1013702	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744597.5	1013702	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744600.5	1013702	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744603.5	1013702	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744606.5	1013702	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744609.5	1013702	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744612.5	1013702	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744615.5	1013702	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744618.5	1013703	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744621.5	1013703	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744624.5	1013703	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744627.5	1013703	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744630.5	1013703	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744633.5	1013703	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744636.5	1013703	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744639.5	1013704	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744642.4	1013704	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744645.4	1013704	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744648.4	1013704	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744651.4	1013704	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744654.4	1013704	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744513.4	1013701	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744516.4	1013701	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744519.4	1013701	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744522.4	1013701	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744525.4	1013702	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744528.4	1013702	2.18	2.26	-3.54%	0033A	
9/4/1997	Sead-12	A	744531.4	1013702	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744534.4	1013702	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744537.4	1013702	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744540.4	1013702	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744543.4	1013702	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744546.4	1013702	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744549.4	1013703	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744552.4	1013703	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744555.4	1013703	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744558.4	1013703	2.31	2.26	2.21%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744561.4	1013703	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744564.4	1013703	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744567.4	1013703	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744570.4	1013704	2.11	2.26	-6.64%	0033A	
9/4/1997	Sead-12	A	744573.4	1013704	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744576.4	1013704	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744579.4	1013704	2.25	2.26	-0.44%	0033A	
9/4/1997	Sead-12	A	744582.4	1013704	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744585.4	1013704	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744588.4	1013704	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744591.4	1013704	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744594.4	1013705	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744597.4	1013705	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744600.4	1013705	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744603.4	1013705	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744606.4	1013705	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744609.4	1013705	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744612.4	1013705	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744615.4	1013705	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744618.4	1013706	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744621.4	1013706	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744624.4	1013706	2.33	2.26	3.10%	0033A	
9/4/1997	Sead-12	A	744627.4	1013706	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744630.4	1013706	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744633.4	1013706	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744636.3	1013706	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744639.3	1013707	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744642.3	1013707	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744645.3	1013707	2.49	2.26	10.18%	0033A	
9/4/1997	Sead-12	A	744648.3	1013707	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744651.3	1013707	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744654.3	1013707	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744513.3	1013704	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744516.3	1013704	2.14	2.26	-5.31%	0033A	
9/4/1997	Sead-12	A	744519.3	1013704	2.15	2.26	-4.87%	0033A	
9/4/1997	Sead-12	A	744522.3	1013704	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744525.3	1013705	2.16	2.26	-4.42%	0033A	
9/4/1997	Sead-12	A	744528.3	1013705	2.24	2.26	-0.88%	0033A	
9/4/1997	Sead-12	A	744531.3	1013705	2.26	2.26	0.00%	0033A	
9/4/1997	Sead-12	A	744534.3	1013705	2.29	2.26	1.33%	0033A	
9/4/1997	Sead-12	A	744537.3	1013705	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744540.3	1013705	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744543.3	1013705	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744546.3	1013705	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744549.3	1013706	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744552.3	1013706	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744555.3	1013706	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744558.3	1013706	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744561.3	1013706	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744564.3	1013706	2.34	2.26	3.54%	0033A	
9/4/1997	Sead-12	A	744567.3	1013706	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744570.3	1013707	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744573.3	1013707	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744576.3	1013707	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744579.3	1013707	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744582.3	1013707	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744585.3	1013707	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744588.3	1013707	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744591.3	1013707	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744594.3	1013708	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744597.3	1013708	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744600.3	1013708	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744603.3	1013708	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744606.3	1013708	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744609.3	1013708	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744612.3	1013708	2.4	2.26	6.19%	0033A	
9/4/1997	Sead-12	A	744615.3	1013708	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744618.3	1013709	2.37	2.26	4.87%	0033A	
9/4/1997	Sead-12	A	744621.3	1013709	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744624.3	1013709	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744627.3	1013709	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744630.2	1013709	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744633.2	1013709	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744636.2	1013709	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744639.2	1013710	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744642.2	1013710	2.57	2.26	13.72%	0033A	
9/4/1997	Sead-12	A	744645.2	1013710	2.54	2.26	12.39%	0033A	
9/4/1997	Sead-12	A	744648.2	1013710	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744651.2	1013710	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744654.2	1013710	2.41	2.26	6.64%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/4/1997	Sead-12	A	744513.2	1013707	2.1	2.26	-7.08%	0033A	
9/4/1997	Sead-12	A	744516.2	1013707	2.13	2.26	-5.75%	0033A	
9/4/1997	Sead-12	A	744519.2	1013707	2.12	2.26	-6.19%	0033A	
9/4/1997	Sead-12	A	744522.2	1013707	2.17	2.26	-3.98%	0033A	
9/4/1997	Sead-12	A	744525.2	1013708	2.19	2.26	-3.10%	0033A	
9/4/1997	Sead-12	A	744528.2	1013708	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744531.2	1013708	2.23	2.26	-1.33%	0033A	
9/4/1997	Sead-12	A	744534.2	1013708	2.27	2.26	0.44%	0033A	
9/4/1997	Sead-12	A	744537.2	1013708	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744540.2	1013708	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744543.2	1013708	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744546.2	1013708	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744549.2	1013709	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744552.2	1013709	2.31	2.26	2.21%	0033A	
9/4/1997	Sead-12	A	744555.2	1013709	2.3	2.26	1.77%	0033A	
9/4/1997	Sead-12	A	744558.1	1013709	2.32	2.26	2.65%	0033A	
9/4/1997	Sead-12	A	744561.1	1013709	2.38	2.26	5.31%	0033A	
9/4/1997	Sead-12	A	744564.1	1013709	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744567.1	1013709	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744570.1	1013710	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744573.1	1013710	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744576.1	1013710	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744579.1	1013710	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744582.1	1013710	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744585.1	1013710	2.43	2.26	7.52%	0033A	
9/4/1997	Sead-12	A	744588.1	1013710	2.41	2.26	6.64%	0033A	
9/4/1997	Sead-12	A	744591.1	1013710	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744594.1	1013711	2.46	2.26	8.85%	0033A	
9/4/1997	Sead-12	A	744597.1	1013711	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744600.1	1013711	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744603.1	1013711	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744606.1	1013711	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744609.1	1013711	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744612.1	1013711	2.36	2.26	4.42%	0033A	
9/4/1997	Sead-12	A	744615.1	1013711	2.35	2.26	3.98%	0033A	
9/4/1997	Sead-12	A	744618.1	1013712	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744621.1	1013712	2.39	2.26	5.75%	0033A	
9/4/1997	Sead-12	A	744624.1	1013712	2.48	2.26	9.73%	0033A	
9/4/1997	Sead-12	A	744627.1	1013712	2.47	2.26	9.29%	0033A	
9/4/1997	Sead-12	A	744630.1	1013712	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744633.1	1013712	2.44	2.26	7.96%	0033A	
9/4/1997	Sead-12	A	744636.1	1013712	2.5	2.26	10.62%	0033A	
9/4/1997	Sead-12	A	744639.1	1013713	2.54	2.26	12.39%	0033A	
9/4/1997	Sead-12	A	744642.1	1013713	2.57	2.26	13.72%	0033A	
9/4/1997	Sead-12	A	744645.1	1013713	2.51	2.26	11.06%	0033A	
9/4/1997	Sead-12	A	744648.1	1013713	2.42	2.26	7.08%	0033A	
9/4/1997	Sead-12	A	744651.1	1013713	2.45	2.26	8.41%	0033A	
9/4/1997	Sead-12	A	744654.1	1013713	2.38	2.26	5.31%	0033A	
9/5/1997	Sead-12	A	744513.1	1013710	1.6	2.3	-30.43%	0033A	
9/5/1997	Sead-12	A	744516.1	1013710	1.65	2.3	-28.26%	0033A	
9/5/1997	Sead-12	A	744519.1	1013710	1.66	2.3	-27.83%	0033A	
9/5/1997	Sead-12	A	744522.1	1013710	1.7	2.3	-26.09%	0033A	
9/5/1997	Sead-12	A	744525.1	1013711	1.87	2.3	-18.70%	0033A	
9/5/1997	Sead-12	A	744528.1	1013711	1.98	2.3	-13.91%	0033A	
9/5/1997	Sead-12	A	744531.1	1013711	1.93	2.3	-16.09%	0033A	
9/5/1997	Sead-12	A	744534.1	1013711	1.99	2.3	-13.48%	0033A	
9/5/1997	Sead-12	A	744537.1	1013711	2.04	2.3	-11.30%	0033A	
9/5/1997	Sead-12	A	744540.1	1013711	2.02	2.3	-12.17%	0033A	
9/5/1997	Sead-12	A	744543.1	1013711	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744546.1	1013711	2.14	2.3	-6.96%	0033A	
9/5/1997	Sead-12	A	744549.1	1013712	2.15	2.3	-6.52%	0033A	
9/5/1997	Sead-12	A	744552	1013712	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744555	1013712	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744558	1013712	2.1	2.3	-8.70%	0033A	
9/5/1997	Sead-12	A	744561	1013712	2.11	2.3	-8.26%	0033A	
9/5/1997	Sead-12	A	744564	1013712	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744567	1013712	2.17	2.3	-5.65%	0033A	
9/5/1997	Sead-12	A	744570	1013712	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744573	1013713	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744576	1013713	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744579	1013713	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744582	1013713	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744585	1013713	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744588	1013713	2.16	2.3	-6.09%	0033A	
9/5/1997	Sead-12	A	744591	1013713	2.19	2.3	-4.78%	0033A	
9/5/1997	Sead-12	A	744594	1013714	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744597	1013714	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744800	1013714	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744603	1013714	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744606	1013714	2.26	2.3	-1.74%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744609	1013714	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744612	1013714	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744615	1013714	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744617.9	1013715	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744620.9	1013715	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744623.9	1013715	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744626.9	1013715	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744629.9	1013715	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744632.9	1013715	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744635.9	1013715	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744638.9	1013716	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744641.9	1013716	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744644.9	1013716	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744647.9	1013716	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744650.9	1013716	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744653.9	1013716	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744512.9	1013713	1.67	2.3	-27.39%	0033A	
9/5/1997	Sead-12	A	744515.9	1013713	1.72	2.3	-25.22%	0033A	
9/5/1997	Sead-12	A	744518.9	1013713	1.67	2.3	-27.39%	0033A	
9/5/1997	Sead-12	A	744521.9	1013713	1.72	2.3	-25.22%	0033A	
9/5/1997	Sead-12	A	744524.9	1013714	1.89	2.3	-17.83%	0033A	
9/5/1997	Sead-12	A	744527.9	1013714	1.91	2.3	-16.96%	0033A	
9/5/1997	Sead-12	A	744530.9	1013714	1.93	2.3	-16.09%	0033A	
9/5/1997	Sead-12	A	744533.9	1013714	2	2.3	-13.04%	0033A	
9/5/1997	Sead-12	A	744536.9	1013714	2.05	2.3	-10.87%	0033A	
9/5/1997	Sead-12	A	744539.9	1013714	2.03	2.3	-11.74%	0033A	
9/5/1997	Sead-12	A	744542.9	1013714	2.12	2.3	-7.83%	0033A	
9/5/1997	Sead-12	A	744545.9	1013714	2.15	2.3	-6.52%	0033A	
9/5/1997	Sead-12	A	744548.9	1013715	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744551.9	1013715	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744554.9	1013715	2.07	2.3	-10.00%	0033A	
9/5/1997	Sead-12	A	744557.9	1013715	2.07	2.3	-10.00%	0033A	
9/5/1997	Sead-12	A	744560.9	1013715	2.09	2.3	-9.13%	0033A	
9/5/1997	Sead-12	A	744563.9	1013715	2.15	2.3	-6.52%	0033A	
9/5/1997	Sead-12	A	744566.9	1013715	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744569.9	1013715	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744572.9	1013716	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744575.9	1013716	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744578.9	1013716	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744581.9	1013716	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744584.9	1013716	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744587.9	1013716	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744590.9	1013716	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744593.9	1013717	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744596.9	1013717	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744599.9	1013717	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744602.9	1013717	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744605.9	1013717	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744608.8	1013717	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744611.8	1013717	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744614.8	1013717	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744617.8	1013718	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744620.8	1013718	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744623.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744626.8	1013718	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744629.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744632.8	1013718	2.24	2.3	-2.61%	0033A	
9/5/1997	Sead-12	A	744635.8	1013718	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744638.8	1013719	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744641.8	1013719	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744644.8	1013719	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744647.8	1013719	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744650.8	1013719	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744653.8	1013719	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744512.8	1013716	2.15	2.3	-6.52%	0033A	
9/5/1997	Sead-12	A	744515.8	1013716	2.09	2.3	-9.13%	0033A	
9/5/1997	Sead-12	A	744518.8	1013716	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744521.8	1013716	2.14	2.3	-6.96%	0033A	
9/5/1997	Sead-12	A	744524.8	1013717	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744527.8	1013717	2.16	2.3	-6.09%	0033A	
9/5/1997	Sead-12	A	744530.8	1013717	2.17	2.3	-5.65%	0033A	
9/5/1997	Sead-12	A	744533.8	1013717	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744536.8	1013717	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744539.8	1013717	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744542.8	1013717	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744545.8	1013717	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744548.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744551.8	1013718	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744554.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744557.8	1013718	2.24	2.3	-2.61%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744560.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744563.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744566.8	1013718	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744569.8	1013718	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744572.8	1013719	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744575.8	1013719	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744578.8	1013719	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744581.8	1013719	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744584.8	1013719	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744587.8	1013719	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744590.8	1013719	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744593.8	1013720	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744596.8	1013720	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744599.8	1013720	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744602.7	1013720	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744605.7	1013720	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744608.7	1013720	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744611.7	1013720	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744614.7	1013720	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744617.7	1013721	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744620.7	1013721	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744623.7	1013721	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744626.7	1013721	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744629.7	1013721	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744632.7	1013721	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744635.7	1013721	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744638.7	1013722	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744641.7	1013722	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744644.7	1013722	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744647.7	1013722	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744650.7	1013722	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744653.7	1013722	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744512.7	1013719	2.14	2.3	-6.96%	0033A	
9/5/1997	Sead-12	A	744515.7	1013719	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744518.7	1013719	2.17	2.3	-5.65%	0033A	
9/5/1997	Sead-12	A	744521.7	1013719	2.16	2.3	-6.09%	0033A	
9/5/1997	Sead-12	A	744524.7	1013720	2.17	2.3	-5.65%	0033A	
9/5/1997	Sead-12	A	744527.7	1013720	2.17	2.3	-5.65%	0033A	
9/5/1997	Sead-12	A	744530.6	1013720	2.18	2.3	-5.22%	0033A	
9/5/1997	Sead-12	A	744533.6	1013720	2.2	2.3	-4.35%	0033A	
9/5/1997	Sead-12	A	744536.6	1013720	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744539.6	1013720	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744542.6	1013720	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744545.6	1013720	2.23	2.3	-3.04%	0033A	
9/5/1997	Sead-12	A	744548.6	1013721	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744551.6	1013721	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744554.6	1013721	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744557.6	1013721	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744560.6	1013721	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744563.6	1013721	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744566.6	1013721	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744569.6	1013721	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744572.6	1013722	2.25	2.3	-2.17%	0033A	
9/5/1997	Sead-12	A	744575.6	1013722	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744578.6	1013722	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744581.6	1013722	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744584.6	1013722	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744587.6	1013722	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744590.6	1013722	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744593.6	1013723	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744596.6	1013723	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744599.6	1013723	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744602.6	1013723	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744605.6	1013723	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744608.6	1013723	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744611.6	1013723	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744614.6	1013723	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744617.6	1013724	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744620.6	1013724	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744623.6	1013724	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744626.6	1013724	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744629.6	1013724	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744632.6	1013724	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744635.6	1013724	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744638.6	1013725	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744641.6	1013725	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744644.6	1013725	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744647.6	1013725	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744650.6	1013725	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744653.6	1013725	2.28	2.3	-0.87%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744512.6	1013722	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744515.6	1013722	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744518.6	1013722	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744521.6	1013722	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744524.5	1013723	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744527.5	1013723	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744530.5	1013723	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744533.5	1013723	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744536.5	1013723	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744539.5	1013723	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744542.5	1013723	2.434	2.3	5.83%	0033A	
9/5/1997	Sead-12	A	744545.5	1013723	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744548.5	1013724	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744551.5	1013724	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744554.5	1013724	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744557.5	1013724	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744560.5	1013724	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744563.5	1013724	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744566.5	1013724	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744569.5	1013724	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744572.5	1013725	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744575.5	1013725	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744578.5	1013725	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744581.5	1013725	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744584.5	1013725	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744587.5	1013725	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744590.4	1013725	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744593.4	1013726	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744596.4	1013726	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744599.4	1013726	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744602.4	1013726	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744605.4	1013726	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744608.4	1013726	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744611.4	1013726	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744614.4	1013726	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744617.4	1013727	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744620.4	1013727	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744623.4	1013727	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744626.4	1013727	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744629.4	1013727	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744632.4	1013727	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744635.4	1013727	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744638.4	1013728	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744641.4	1013728	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744644.4	1013728	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744647.4	1013728	2.27	2.3	-1.30%	0033A	
9/5/1997	Sead-12	A	744650.4	1013728	2.21	2.3	-3.91%	0033A	
9/5/1997	Sead-12	A	744653.4	1013728	2.13	2.3	-7.39%	0033A	
9/5/1997	Sead-12	A	744512.4	1013725	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744515.4	1013725	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744518.4	1013725	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744521.4	1013725	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744524.4	1013726	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744527.4	1013726	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744530.4	1013726	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744533.4	1013726	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744536.4	1013726	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744539.4	1013726	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744542.4	1013726	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744545.4	1013726	2.48	2.3	7.63%	0033A	
9/5/1997	Sead-12	A	744548.4	1013727	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744551.4	1013727	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744554.4	1013727	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744557.4	1013727	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744560.4	1013727	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744563.4	1013727	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744566.4	1013727	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744569.4	1013727	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744572.4	1013728	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744575.4	1013728	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744578.4	1013728	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744581.4	1013728	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744584.3	1013728	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744587.3	1013728	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744590.3	1013728	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744593.3	1013729	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744596.3	1013729	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744599.3	1013729	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744602.3	1013729	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744605.3	1013729	2.44	2.3	6.09%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744608.3	1013729	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744611.3	1013729	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744614.3	1013729	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744617.3	1013730	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744620.3	1013730	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744623.3	1013730	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744626.3	1013730	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744629.3	1013730	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744632.3	1013730	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744635.3	1013730	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744638.3	1013731	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744641.3	1013731	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744644.3	1013731	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744647.3	1013731	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744650.3	1013731	2.22	2.3	-3.48%	0033A	
9/5/1997	Sead-12	A	744653.3	1013731	2.14	2.3	-6.96%	0033A	
9/5/1997	Sead-12	A	744512.3	1013728	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744515.3	1013728	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744518.3	1013728	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744521.3	1013728	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744524.3	1013729	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744527.3	1013729	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744530.3	1013729	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744533.3	1013729	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744536.3	1013729	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744539.3	1013729	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744542.3	1013729	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744545.3	1013729	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744548.3	1013730	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744551.3	1013730	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744554.3	1013730	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744557.3	1013730	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744560.3	1013730	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744563.3	1013730	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744566.3	1013730	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744569.3	1013730	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744572.3	1013731	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744575.3	1013731	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744578.2	1013731	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744581.2	1013731	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744584.2	1013731	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744587.2	1013731	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744590.2	1013731	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744593.2	1013732	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744596.2	1013732	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744599.2	1013732	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744602.2	1013732	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744605.2	1013732	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744608.2	1013732	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744611.2	1013732	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744614.2	1013732	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744617.2	1013733	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744620.2	1013733	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744623.2	1013733	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744626.2	1013733	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744629.2	1013733	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744632.2	1013733	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744635.2	1013733	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744638.2	1013733	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744641.1	1013734	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744644.1	1013734	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744647.1	1013734	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744650.1	1013734	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744653.1	1013734	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744512.1	1013731	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744515.1	1013731	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744518.1	1013731	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744521.1	1013731	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744524.1	1013732	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744527.1	1013732	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744530.1	1013732	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744533.1	1013732	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744536.1	1013732	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744539.1	1013732	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744542.1	1013732	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744545.1	1013732	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744548.1	1013733	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744551.1	1013733	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744554.1	1013733	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744557.1	1013733	2.38	2.3	3.48%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744560.1	1013733	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744563.1	1013733	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744566.1	1013733	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744569.1	1013733	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744572.1	1013734	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744575.1	1013734	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744578.1	1013734	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744581.1	1013734	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744584.1	1013734	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744587.1	1013734	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744590.1	1013734	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744593.1	1013735	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744596.1	1013735	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744599.1	1013735	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744602.1	1013735	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744605.1	1013735	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744608.1	1013735	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744611.1	1013735	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744614.1	1013735	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744617.1	1013736	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744620.1	1013736	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744623.1	1013736	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744626.1	1013736	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744629.1	1013736	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744632.1	1013736	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744635	1013736	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744638	1013736	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744641	1013737	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744644	1013737	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744647	1013737	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744650	1013737	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744653	1013737	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744512	1013734	2.3	2.3	0.00%	0033A	
9/5/1997	Sead-12	A	744515	1013734	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744518	1013734	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744521	1013734	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744524	1013735	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744527	1013735	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744530	1013735	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744533	1013735	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744536	1013735	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744539	1013735	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744542	1013735	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744545	1013735	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744548	1013736	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744551	1013736	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744554	1013736	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744557	1013736	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744560	1013736	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744562.9	1013736	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744565.9	1013736	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744568.9	1013736	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744571.9	1013737	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744574.9	1013737	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744577.9	1013737	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744580.9	1013737	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744583.9	1013737	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744586.9	1013737	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744589.9	1013737	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744592.9	1013738	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744595.9	1013738	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744598.9	1013738	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744601.9	1013738	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744604.9	1013738	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744607.9	1013738	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744610.9	1013738	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744613.9	1013738	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744616.9	1013739	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744619.9	1013739	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744622.9	1013739	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744625.9	1013739	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744628.9	1013739	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744631.9	1013739	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744634.9	1013739	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744637.9	1013739	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744640.9	1013740	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744643.9	1013740	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744646.9	1013740	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744649.9	1013740	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744652.9	1013740	2.41	2.3	4.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744511.9	1013737	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744514.9	1013737	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744517.9	1013737	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744520.9	1013737	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744523.9	1013738	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744526.9	1013738	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744529.9	1013738	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744532.9	1013738	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744535.9	1013738	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744538.9	1013738	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744541.9	1013738	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744544.9	1013738	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744547.9	1013739	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744550.9	1013739	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744553.9	1013739	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744556.8	1013739	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744559.8	1013739	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744562.8	1013739	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744565.8	1013739	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744568.8	1013739	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744571.8	1013740	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744574.8	1013740	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744577.8	1013740	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744580.8	1013740	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744583.8	1013740	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744586.8	1013740	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744589.8	1013740	2.26	2.3	-1.74%	0033A	
9/5/1997	Sead-12	A	744592.8	1013741	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744595.8	1013741	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744598.8	1013741	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744601.8	1013741	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744604.8	1013741	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744607.8	1013741	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744610.8	1013741	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744613.8	1013741	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744616.8	1013742	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744619.8	1013742	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744622.8	1013742	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744625.8	1013742	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744628.8	1013742	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744631.8	1013742	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744634.8	1013742	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744637.8	1013742	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744640.8	1013743	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744643.8	1013743	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744646.8	1013743	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744649.8	1013743	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744652.8	1013743	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744511.8	1013740	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744514.8	1013740	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744517.8	1013740	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744520.8	1013740	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744523.8	1013741	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744526.8	1013741	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744529.8	1013741	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744532.8	1013741	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744535.8	1013741	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744538.8	1013741	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744541.8	1013741	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744544.8	1013741	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744547.8	1013742	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744550.7	1013742	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744553.7	1013742	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744556.7	1013742	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744559.7	1013742	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744562.7	1013742	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744565.7	1013742	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744568.7	1013742	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744571.7	1013743	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744574.7	1013743	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744577.7	1013743	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744580.7	1013743	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744583.7	1013743	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744586.7	1013743	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744589.7	1013743	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744592.7	1013744	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744595.7	1013744	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744598.7	1013744	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744601.7	1013744	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744604.7	1013744	2.42	2.3	5.22%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744607.7	1013744	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744610.7	1013744	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744613.7	1013744	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744616.6	1013745	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744619.6	1013745	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744622.6	1013745	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744625.6	1013745	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744628.6	1013745	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744631.6	1013745	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744634.6	1013745	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744637.6	1013745	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744640.6	1013746	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744643.6	1013746	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744646.6	1013746	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744649.6	1013746	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744652.6	1013746	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744511.6	1013743	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744514.6	1013743	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744517.6	1013743	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744520.6	1013743	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744523.6	1013743	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744526.6	1013744	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744529.6	1013744	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744532.6	1013744	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744535.6	1013744	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744538.6	1013744	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744541.6	1013744	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744544.6	1013744	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744547.6	1013745	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744550.6	1013745	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744553.6	1013745	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744556.6	1013745	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744559.6	1013745	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744562.6	1013745	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744565.6	1013745	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744568.6	1013745	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744571.6	1013746	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744574.6	1013746	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744577.6	1013746	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744580.6	1013746	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744583.6	1013746	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744586.6	1013746	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744589.6	1013746	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744592.6	1013747	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744595.6	1013747	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744598.6	1013747	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744601.6	1013747	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744604.6	1013747	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744607.6	1013747	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744610.5	1013747	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744613.5	1013747	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744616.5	1013748	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744619.5	1013748	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744622.5	1013748	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744625.5	1013748	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744628.5	1013748	2.36	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744631.5	1013748	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744634.5	1013748	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744637.5	1013748	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744640.5	1013749	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744643.5	1013749	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744646.5	1013749	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744649.5	1013749	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744652.5	1013749	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744511.5	1013746	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744514.5	1013746	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744517.5	1013746	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744520.5	1013746	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744523.5	1013746	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744526.5	1013747	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744529.5	1013747	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744532.5	1013747	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744535.5	1013747	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744538.4	1013747	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744541.4	1013747	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744544.4	1013747	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744547.4	1013748	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744550.4	1013748	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744553.4	1013748	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744556.4	1013748	2.42	2.3	5.22%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744559.4	1013748	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744562.4	1013748	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744565.4	1013748	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744568.4	1013748	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744571.4	1013749	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744574.4	1013749	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744577.4	1013749	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744580.4	1013749	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744583.4	1013749	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744586.4	1013749	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744589.4	1013749	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744592.4	1013750	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744595.4	1013750	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744598.4	1013750	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744601.4	1013750	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744604.4	1013750	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744607.4	1013750	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744610.4	1013750	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744613.4	1013750	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744616.4	1013751	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744619.4	1013751	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744622.4	1013751	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744625.4	1013751	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744628.4	1013751	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744631.4	1013751	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744634.4	1013751	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744637.4	1013751	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744640.4	1013752	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744643.4	1013752	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744646.4	1013752	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744649.4	1013752	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744652.4	1013752	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744511.4	1013749	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744514.4	1013749	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744517.4	1013749	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744520.4	1013749	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744523.4	1013749	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744526.4	1013750	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744529.3	1013750	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744532.3	1013750	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744535.3	1013750	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744538.3	1013750	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744541.3	1013750	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744544.3	1013750	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744547.3	1013751	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744550.3	1013751	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744553.3	1013751	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744556.3	1013751	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744559.3	1013751	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744562.3	1013751	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744565.3	1013751	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744568.3	1013751	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744571.3	1013752	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744574.3	1013752	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744577.3	1013752	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744580.3	1013752	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744583.3	1013752	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744586.3	1013752	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744589.3	1013752	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744592.3	1013753	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744595.3	1013753	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744598.3	1013753	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744601.3	1013753	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744604.3	1013753	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744607.3	1013753	2.28	2.3	-0.87%	0033A	
9/5/1997	Sead-12	A	744610.3	1013753	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744613.3	1013753	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744618.3	1013754	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744619.3	1013754	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744622.3	1013754	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744625.3	1013754	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744628.3	1013754	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744631.3	1013754	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744634.3	1013754	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744637.3	1013754	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744640.3	1013755	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744643.3	1013755	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744646.3	1013755	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744649.3	1013755	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744652.3	1013755	2.38	2.3	3.48%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744511.3	1013752	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744514.3	1013752	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744517.3	1013752	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744520.3	1013752	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744523.2	1013752	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744526.2	1013753	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744529.2	1013753	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744532.2	1013753	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744535.2	1013753	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744538.2	1013753	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744541.2	1013753	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744544.2	1013753	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744547.2	1013754	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744550.2	1013754	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744553.2	1013754	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744556.2	1013754	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744559.2	1013754	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744562.2	1013754	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744565.2	1013754	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744568.2	1013754	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744571.2	1013755	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744574.2	1013755	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744577.2	1013755	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744580.2	1013755	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744583.2	1013755	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744586.2	1013755	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744589.1	1013755	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744592.1	1013756	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744595.1	1013756	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744598.1	1013756	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744601.1	1013756	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744604.1	1013756	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744607.1	1013756	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744610.1	1013756	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744613.1	1013756	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744616.1	1013757	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744619.1	1013757	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744622.1	1013757	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744625.1	1013757	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744628.1	1013757	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744631.1	1013757	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744634.1	1013757	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744637.1	1013757	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744640.1	1013758	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744643.1	1013758	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744646.1	1013758	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744649.1	1013758	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744652.1	1013758	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744511.1	1013755	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744514.1	1013755	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744517.1	1013755	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744520.1	1013755	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744523.1	1013755	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744526.1	1013756	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744529.1	1013756	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744532.1	1013756	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744535.1	1013756	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744538.1	1013756	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744541.1	1013756	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744544.1	1013756	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744547.1	1013757	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744550.1	1013757	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744553.1	1013757	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744556.1	1013757	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744559.1	1013757	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744562.1	1013757	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744565.1	1013757	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744568.1	1013757	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744571.1	1013758	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744574.1	1013758	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744577.1	1013758	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744580.1	1013758	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744583	1013758	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744586	1013758	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744589	1013758	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744592	1013759	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744595	1013759	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744598	1013759	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744601	1013759	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744604	1013759	2.48	2.3	7.83%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744607	1013759	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744610	1013759	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744613	1013759	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744616	1013760	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744619	1013760	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744622	1013760	2.49	2.3	8.28%	0033A	
9/5/1997	Sead-12	A	744625	1013760	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744628	1013760	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744631	1013760	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744634	1013760	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744637	1013760	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744640	1013761	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744643	1013761	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744646	1013761	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744648.9	1013761	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744651.9	1013761	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744510.9	1013758	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744513.9	1013758	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744516.9	1013758	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744519.9	1013758	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744522.9	1013758	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744525.9	1013759	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744528.9	1013759	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744531.9	1013759	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744534.9	1013759	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744537.9	1013759	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744540.9	1013759	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744543.9	1013759	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744546.9	1013760	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744549.9	1013760	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744552.9	1013760	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744555.9	1013760	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744558.9	1013760	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744561.9	1013760	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744564.9	1013760	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744567.9	1013760	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744570.9	1013761	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744573.9	1013761	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744576.9	1013761	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744579.9	1013761	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744582.9	1013761	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744585.9	1013761	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744588.9	1013761	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744591.9	1013762	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744594.9	1013762	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744597.9	1013762	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744600.9	1013762	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744603.9	1013762	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744606.9	1013762	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744609.9	1013762	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744612.9	1013762	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744615.9	1013763	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744618.9	1013763	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744621.9	1013763	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744624.9	1013763	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744627.9	1013763	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744630.9	1013763	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744633.9	1013763	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744636.9	1013763	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744639.9	1013764	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744642.8	1013764	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744645.8	1013764	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744648.8	1013764	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744651.8	1013764	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744510.8	1013761	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744513.8	1013761	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744516.8	1013761	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744519.8	1013761	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744522.8	1013761	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744525.8	1013762	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744528.8	1013762	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744531.8	1013762	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744534.8	1013762	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744537.8	1013762	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744540.8	1013762	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744543.8	1013762	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744546.8	1013763	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744549.8	1013763	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744552.8	1013763	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744555.8	1013763	2.53	2.3	10.00%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744558.8	1013763	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744561.8	1013763	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744564.8	1013763	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744567.8	1013763	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744570.8	1013764	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744573.8	1013764	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744576.8	1013764	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744579.8	1013764	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744582.8	1013764	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744585.8	1013764	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744588.8	1013764	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744591.8	1013764	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744594.8	1013765	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744597.8	1013765	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744600.8	1013765	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744603.8	1013765	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744606.8	1013765	2.484	2.3	8.00%	0033A	
9/5/1997	Sead-12	A	744609.8	1013765	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744612.8	1013765	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744615.8	1013766	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744618.8	1013766	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744621.8	1013766	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744624.8	1013766	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744627.8	1013766	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744630.8	1013766	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744633.7	1013766	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744636.7	1013766	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744639.7	1013767	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744642.7	1013767	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744645.7	1013767	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744648.7	1013767	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744651.7	1013767	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744510.7	1013764	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744513.7	1013764	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744516.7	1013764	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744519.7	1013764	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744522.7	1013764	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744525.7	1013765	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744528.7	1013765	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744531.7	1013765	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744534.7	1013765	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744537.7	1013765	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744540.7	1013765	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744543.7	1013765	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744546.7	1013766	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744549.7	1013766	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744552.7	1013766	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744555.7	1013766	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744558.7	1013766	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744561.6	1013766	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744564.6	1013766	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744567.6	1013766	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744570.6	1013767	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744573.6	1013767	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744576.6	1013767	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744579.6	1013767	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744582.6	1013767	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744585.6	1013767	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744588.6	1013767	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744591.6	1013767	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744594.6	1013768	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744597.6	1013768	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744600.6	1013768	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744603.6	1013768	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744606.6	1013768	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744609.6	1013768	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744612.6	1013768	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744615.6	1013769	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744618.6	1013769	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744621.6	1013769	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744624.6	1013769	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744627.6	1013769	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744630.6	1013769	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744633.6	1013769	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744636.6	1013769	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744639.6	1013770	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744642.6	1013770	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744645.6	1013770	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744648.6	1013770	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744651.6	1013770	2.42	2.3	5.22%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744510.6	1013767	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744513.6	1013767	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744516.6	1013767	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744519.6	1013767	2.32	2.3	0.87%	0033A	
9/5/1997	Sead-12	A	744522.6	1013767	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744525.6	1013768	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744528.6	1013768	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744531.6	1013768	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744534.6	1013768	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744537.6	1013768	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744540.6	1013768	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744543.6	1013768	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744546.6	1013769	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744549.6	1013769	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744552.6	1013769	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744555.5	1013769	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744558.5	1013769	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744561.5	1013769	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744564.5	1013769	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744567.5	1013769	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744570.5	1013770	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744573.5	1013770	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744576.5	1013770	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744579.5	1013770	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744582.5	1013770	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744585.5	1013770	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744588.5	1013770	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744591.5	1013770	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744594.5	1013771	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744597.5	1013771	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744600.5	1013771	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744603.5	1013771	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744606.5	1013771	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744609.5	1013771	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744612.5	1013771	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744615.5	1013772	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744618.5	1013772	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744621.4	1013772	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744624.4	1013772	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744627.4	1013772	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744630.4	1013772	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744633.4	1013772	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744636.4	1013772	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744639.4	1013773	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744642.4	1013773	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744645.4	1013773	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744648.4	1013773	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744651.4	1013773	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744510.4	1013770	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744513.4	1013770	2.36	2.3	2.61%	0033A	
9/5/1997	Sead-12	A	744516.4	1013770	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744519.4	1013770	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744522.4	1013770	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744525.4	1013771	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744528.4	1013771	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744531.4	1013771	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744534.4	1013771	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744537.4	1013771	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744540.4	1013771	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744543.4	1013771	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744546.4	1013772	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744549.4	1013772	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744552.4	1013772	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744555.4	1013772	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744558.4	1013772	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744561.4	1013772	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744564.4	1013772	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744567.4	1013772	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744570.4	1013773	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744573.4	1013773	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744576.4	1013773	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744579.4	1013773	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744582.4	1013773	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744585.4	1013773	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744588.4	1013773	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744591.4	1013773	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744594.4	1013774	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744597.4	1013774	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744600.4	1013774	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744603.4	1013774	2.47	2.3	7.39%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744606.4	1013774	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744609.4	1013774	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744612.4	1013774	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744615.3	1013775	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744618.3	1013775	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744621.3	1013775	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744624.3	1013775	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744627.3	1013775	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744630.3	1013775	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744633.3	1013775	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744636.3	1013775	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744639.3	1013776	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744642.3	1013776	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744645.3	1013776	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744648.3	1013776	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744651.3	1013776	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744510.3	1013773	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744513.3	1013773	2.33	2.3	1.30%	0033A	
9/5/1997	Sead-12	A	744516.3	1013773	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744519.3	1013773	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744522.3	1013773	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744525.3	1013774	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744528.3	1013774	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744531.3	1013774	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744534.3	1013774	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744537.3	1013774	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744540.3	1013774	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744543.3	1013774	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744546.3	1013775	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744549.3	1013775	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744552.3	1013775	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744555.3	1013775	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744558.3	1013775	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744561.3	1013775	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744564.3	1013775	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744567.3	1013775	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744570.3	1013776	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744573.3	1013776	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744576.3	1013776	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744579.3	1013776	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744582.3	1013776	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744585.3	1013776	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744588.3	1013776	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744591.3	1013776	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744594.3	1013777	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744597.3	1013777	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744600.3	1013777	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744603.3	1013777	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744606.3	1013777	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744609.2	1013777	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744612.2	1013777	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744615.2	1013778	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744618.2	1013778	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744621.2	1013778	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744624.2	1013778	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744627.2	1013778	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744630.2	1013778	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744633.2	1013778	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744636.2	1013778	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744639.2	1013779	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744642.2	1013779	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744645.2	1013779	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744648.2	1013779	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744651.2	1013779	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744510.2	1013776	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744513.2	1013776	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744516.2	1013776	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744519.2	1013776	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744522.2	1013776	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744525.2	1013777	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744528.2	1013777	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744531.2	1013777	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744534.2	1013777	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744537.1	1013777	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744540.1	1013777	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744543.1	1013777	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744546.1	1013778	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744549.1	1013778	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744552.1	1013778	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744555.1	1013778	2.59	2.3	12.61%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744558.1	1013778	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744561.1	1013778	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744564.1	1013778	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744567.1	1013778	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744570.1	1013779	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744573.1	1013779	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744576.1	1013779	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744579.1	1013779	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744582.1	1013779	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744585.1	1013779	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744588.1	1013779	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744591.1	1013779	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744594.1	1013780	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744597.1	1013780	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744600.1	1013780	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744603.1	1013780	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744606.1	1013780	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744609.1	1013780	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744612.1	1013780	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744615.1	1013781	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744618.1	1013781	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744621.1	1013781	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744624.1	1013781	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744627.1	1013781	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744630.1	1013781	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744633.1	1013781	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744636.1	1013781	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744639.1	1013782	2.37	2.3	3.04%	0033A	
9/5/1997	Sead-12	A	744642.1	1013782	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744645.1	1013782	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744648.1	1013782	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744651.1	1013782	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744510.1	1013779	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744513.1	1013779	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744516.1	1013779	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744519.1	1013779	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744522.1	1013779	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744525.1	1013779	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744528.1	1013780	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744531.1	1013780	2.35	2.3	2.17%	0033A	
9/5/1997	Sead-12	A	744534.1	1013780	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744537	1013780	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744540	1013780	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744543	1013780	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744546	1013780	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744549	1013781	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744552	1013781	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744555	1013781	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744558	1013781	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744561	1013781	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744564	1013781	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744567	1013781	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744570	1013781	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744573	1013782	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744576	1013782	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744579	1013782	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744582	1013782	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744585	1013782	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744588	1013782	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744591	1013782	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744594	1013782	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744597	1013783	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744599.9	1013783	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744602.9	1013783	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744605.9	1013783	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744608.9	1013783	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744611.9	1013783	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744614.9	1013783	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744617.9	1013784	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744620.9	1013784	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744623.9	1013784	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744626.9	1013784	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744629.9	1013784	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744632.9	1013784	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744635.9	1013784	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744638.9	1013784	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744641.9	1013785	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744644.9	1013785	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744647.9	1013785	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744650.9	1013785	2.42	2.3	5.22%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744509.9	1013782	2.29	2.3	-0.43%	0033A	
9/5/1997	Sead-12	A	744512.9	1013782	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744515.9	1013782	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744518.9	1013782	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744521.9	1013782	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744524.9	1013782	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744527.9	1013782	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744530.9	1013783	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744533.9	1013783	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744536.9	1013783	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744539.9	1013783	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744542.9	1013783	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744545.9	1013783	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744548.9	1013783	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744551.9	1013784	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744554.9	1013784	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744557.9	1013784	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744560.9	1013784	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744563.9	1013784	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744566.9	1013784	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744569.9	1013784	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744572.9	1013784	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744575.9	1013785	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744578.9	1013785	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744581.9	1013785	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744584.9	1013785	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744587.9	1013785	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744590.9	1013785	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744593.9	1013785	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744596.9	1013785	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744599.8	1013786	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744602.8	1013786	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744605.8	1013786	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744608.8	1013786	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744611.8	1013786	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744614.8	1013786	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744617.8	1013786	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744620.8	1013787	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744623.8	1013787	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744626.8	1013787	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744629.8	1013787	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744632.8	1013787	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744635.8	1013787	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744638.8	1013787	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744641.8	1013787	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744644.8	1013788	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744647.8	1013788	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744650.8	1013788	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744509.8	1013785	2.31	2.3	0.43%	0033A	
9/5/1997	Sead-12	A	744512.8	1013785	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744515.8	1013785	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744518.8	1013785	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744521.8	1013785	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744524.8	1013785	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744527.8	1013785	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744530.8	1013785	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744533.8	1013786	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744536.8	1013786	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744539.8	1013786	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744542.8	1013786	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744545.8	1013786	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744548.8	1013786	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744551.8	1013786	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744554.8	1013787	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744557.8	1013787	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744560.8	1013787	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744563.8	1013787	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744566.8	1013787	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744569.8	1013787	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744572.8	1013787	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744575.8	1013787	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744578.8	1013788	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744581.8	1013788	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744584.8	1013788	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744587.8	1013788	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744590.8	1013788	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744593.8	1013788	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744596.8	1013788	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744599.7	1013788	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744602.7	1013789	2.5	2.3	8.70%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744605.7	1013789	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744608.7	1013789	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744611.7	1013789	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744614.7	1013789	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744617.7	1013789	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744620.7	1013789	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744623.7	1013790	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744626.7	1013790	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744629.7	1013790	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744632.7	1013790	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744635.7	1013790	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744638.7	1013790	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744641.7	1013790	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744644.7	1013790	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744647.7	1013791	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744650.7	1013791	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744509.7	1013787	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744512.7	1013788	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744515.7	1013788	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744518.7	1013788	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744521.7	1013788	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744524.7	1013788	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744527.7	1013788	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744530.7	1013788	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744533.6	1013788	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744536.6	1013789	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744539.6	1013789	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744542.6	1013789	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744545.6	1013789	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744548.6	1013789	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744551.6	1013789	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744554.6	1013789	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744557.6	1013790	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744560.6	1013790	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744563.6	1013790	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744566.6	1013790	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744569.6	1013790	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744572.6	1013790	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744575.6	1013790	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744578.6	1013790	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744581.6	1013791	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744584.6	1013791	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744587.6	1013791	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744590.6	1013791	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744593.6	1013791	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744596.6	1013791	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744599.6	1013791	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744602.6	1013791	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744605.6	1013792	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744608.6	1013792	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744611.6	1013792	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744614.6	1013792	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744617.6	1013792	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744620.6	1013792	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744623.6	1013792	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744626.6	1013793	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744629.6	1013793	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744632.6	1013793	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744635.6	1013793	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744638.6	1013793	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744641.6	1013793	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744644.6	1013793	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744647.6	1013793	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744650.6	1013794	2.34	2.3	1.74%	0033A	
9/5/1997	Sead-12	A	744509.6	1013790	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744512.6	1013790	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744515.6	1013791	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744518.6	1013791	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744521.6	1013791	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744524.6	1013791	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744527.6	1013791	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744530.6	1013791	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744533.5	1013791	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744536.5	1013791	2.62	2.3	13.91%	0033A	
9/5/1997	Sead-12	A	744539.5	1013792	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744542.5	1013792	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744545.5	1013792	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744548.5	1013792	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744551.5	1013792	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744554.5	1013792	2.64	2.3	14.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27 Easting	NAD-27 Northing	Value (kcpm)	Background (kcpm)	% +/- BKG	Instrument (s/n)	Comments
9/5/1997	Sead-12	A	744557.5	1013792	2.63	2.3	14.35%	0033A	
9/5/1997	Sead-12	A	744560.5	1013793	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744563.5	1013793	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744566.5	1013793	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744569.5	1013793	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744572.5	1013793	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744575.5	1013793	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744578.5	1013793	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744581.5	1013793	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744584.5	1013794	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744587.5	1013794	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744590.5	1013794	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744593.5	1013794	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744596.5	1013794	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744599.4	1013794	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744602.4	1013794	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744605.4	1013794	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744608.4	1013795	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744611.4	1013795	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744614.4	1013795	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744617.4	1013795	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744620.4	1013795	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744623.4	1013795	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744626.4	1013795	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744629.4	1013796	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744632.4	1013796	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744635.4	1013796	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744638.4	1013796	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744641.4	1013796	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744644.4	1013796	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744647.4	1013796	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744650.4	1013796	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744509.4	1013793	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744512.4	1013793	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744515.4	1013793	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744518.4	1013794	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744521.4	1013794	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744524.4	1013794	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744527.4	1013794	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744530.4	1013794	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744533.4	1013794	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744536.4	1013794	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744539.4	1013794	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744542.4	1013795	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744545.4	1013795	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744548.4	1013795	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744551.4	1013795	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744554.4	1013795	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744557.4	1013795	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744560.4	1013795	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744563.4	1013796	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744566.4	1013796	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744569.4	1013796	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744572.4	1013796	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744575.4	1013796	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744578.4	1013796	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744581.4	1013796	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744584.4	1013796	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744587.4	1013797	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744590.4	1013797	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744593.4	1013797	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744596.3	1013797	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744599.3	1013797	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744602.3	1013797	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744605.3	1013797	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744608.3	1013797	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744611.3	1013798	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744614.3	1013798	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744617.3	1013798	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744620.3	1013798	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744623.3	1013798	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744626.3	1013798	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744629.3	1013798	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744632.3	1013799	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744635.3	1013799	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744638.3	1013799	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744641.3	1013799	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744644.3	1013799	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744647.3	1013799	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744650.3	1013799	2.48	2.3	7.83%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744509.3	1013796	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744512.3	1013796	2.38	2.3	3.48%	0033A	
9/5/1997	Sead-12	A	744515.3	1013796	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744518.3	1013796	2.39	2.3	3.91%	0033A	
9/5/1997	Sead-12	A	744521.3	1013797	2.41	2.3	4.78%	0033A	
9/5/1997	Sead-12	A	744524.3	1013797	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744527.3	1013797	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744530.3	1013797	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744533.3	1013797	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744536.3	1013797	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744539.3	1013797	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744542.3	1013797	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744545.3	1013798	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744548.3	1013798	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744551.3	1013798	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744554.3	1013798	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744557.3	1013798	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744560.3	1013798	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744563.3	1013798	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744566.3	1013799	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744569.3	1013799	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744572.3	1013799	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744575.3	1013799	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744578.3	1013799	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744581.3	1013799	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744584.3	1013799	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744587.3	1013799	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744590.3	1013800	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744593.3	1013800	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744596.2	1013800	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744599.2	1013800	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744602.2	1013800	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744605.2	1013800	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744608.2	1013800	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744611.2	1013800	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744614.2	1013801	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744617.2	1013801	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744620.2	1013801	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744623.2	1013801	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744626.2	1013801	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744629.2	1013801	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744632.2	1013801	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744635.2	1013802	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744638.2	1013802	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744641.2	1013802	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744644.2	1013802	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744647.2	1013802	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744650.2	1013802	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744509.2	1013799	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744512.2	1013799	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744515.2	1013799	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744518.2	1013799	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744521.2	1013799	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744524.2	1013800	2.44	2.3	6.09%	0033A	
9/5/1997	Sead-12	A	744527.2	1013800	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744530.1	1013800	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744533.1	1013800	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744536.1	1013800	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744539.1	1013800	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744542.1	1013800	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744545.1	1013800	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744548.1	1013801	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744551.1	1013801	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744554.1	1013801	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744557.1	1013801	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744560.1	1013801	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744563.1	1013801	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744566.1	1013801	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744569.1	1013802	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744572.1	1013802	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744575.1	1013802	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744578.1	1013802	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744581.1	1013802	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744584.1	1013802	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744587.1	1013802	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744590.1	1013802	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744593.1	1013803	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744596.1	1013803	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744599.1	1013803	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744602.1	1013803	2.6	2.3	13.04%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/5/1997	Sead-12	A	744605.1	1013803	2.59	2.3	12.61%	0033A	
9/5/1997	Sead-12	A	744608.1	1013803	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744611.1	1013803	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744614.1	1013803	2.68	2.3	16.52%	0033A	
9/5/1997	Sead-12	A	744617.1	1013804	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744620.1	1013804	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744623.1	1013804	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744626.1	1013804	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744629.1	1013804	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744632.1	1013804	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744635.1	1013804	2.47	2.3	7.39%	0033A	
9/5/1997	Sead-12	A	744638.1	1013805	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744641.1	1013805	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744644.1	1013805	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744647.1	1013805	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744650.1	1013805	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744509.1	1013802	2.48	2.3	7.83%	0033A	
9/5/1997	Sead-12	A	744512.1	1013802	2.51	2.3	9.13%	0033A	
9/5/1997	Sead-12	A	744515.1	1013802	2.46	2.3	6.96%	0033A	
9/5/1997	Sead-12	A	744518.1	1013802	2.4	2.3	4.35%	0033A	
9/5/1997	Sead-12	A	744521.1	1013802	2.43	2.3	5.65%	0033A	
9/5/1997	Sead-12	A	744524.1	1013802	2.42	2.3	5.22%	0033A	
9/5/1997	Sead-12	A	744527.1	1013803	2.45	2.3	6.52%	0033A	
9/5/1997	Sead-12	A	744530	1013803	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744533	1013803	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744536	1013803	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744539	1013803	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744542	1013803	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744545	1013803	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744548	1013803	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744551	1013804	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744554	1013804	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744557	1013804	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744560	1013804	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744563	1013804	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744566	1013804	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744569	1013804	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744572	1013805	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744575	1013805	2.56	2.3	11.30%	0033A	
9/5/1997	Sead-12	A	744578	1013805	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744581	1013805	2.58	2.3	12.17%	0033A	
9/5/1997	Sead-12	A	744584	1013805	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744587	1013805	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744590	1013805	2.54	2.3	10.43%	0033A	
9/5/1997	Sead-12	A	744593	1013805	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744595.9	1013806	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744598.9	1013806	2.57	2.3	11.74%	0033A	
9/5/1997	Sead-12	A	744601.9	1013806	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744604.9	1013806	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744607.9	1013806	2.64	2.3	14.78%	0033A	
9/5/1997	Sead-12	A	744610.9	1013806	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744613.9	1013806	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744616.9	1013806	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744619.9	1013807	2.65	2.3	15.22%	0033A	
9/5/1997	Sead-12	A	744622.9	1013807	2.61	2.3	13.48%	0033A	
9/5/1997	Sead-12	A	744625.9	1013807	2.6	2.3	13.04%	0033A	
9/5/1997	Sead-12	A	744628.9	1013807	2.52	2.3	9.57%	0033A	
9/5/1997	Sead-12	A	744631.9	1013807	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744634.9	1013807	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744637.9	1013807	2.49	2.3	8.26%	0033A	
9/5/1997	Sead-12	A	744640.9	1013808	2.5	2.3	8.70%	0033A	
9/5/1997	Sead-12	A	744643.9	1013808	2.53	2.3	10.00%	0033A	
9/5/1997	Sead-12	A	744646.9	1013808	2.55	2.3	10.87%	0033A	
9/5/1997	Sead-12	A	744649.9	1013808	2.45	2.3	6.52%	0033A	
9/6/1997	Sead-12	A	744508.9	1013805	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744511.9	1013805	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744514.9	1013805	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744517.9	1013805	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744520.9	1013805	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744523.9	1013805	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744526.9	1013805	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744529.9	1013806	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744532.9	1013806	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744535.9	1013806	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744538.9	1013806	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744541.9	1013806	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744544.9	1013806	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744547.9	1013806	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744550.9	1013806	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744553.9	1013807	2.47	2.58	-4.26%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744556.9	1013807	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744559.9	1013807	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744562.9	1013807	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744565.9	1013807	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744568.9	1013807	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744571.9	1013807	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744574.9	1013808	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744577.9	1013808	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744580.9	1013808	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744583.9	1013808	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744586.9	1013808	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744589.9	1013808	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744592.9	1013808	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744595.8	1013808	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744598.8	1013809	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744601.8	1013809	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744604.8	1013809	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744607.8	1013809	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744610.8	1013809	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744613.8	1013809	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744616.8	1013809	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744619.8	1013809	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744622.8	1013810	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744625.8	1013810	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744628.8	1013810	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744631.8	1013810	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744634.8	1013810	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744637.8	1013810	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744640.8	1013810	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744643.8	1013811	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744646.8	1013811	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744649.8	1013811	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744508.8	1013807	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744511.8	1013808	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744514.8	1013808	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744517.8	1013808	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744520.8	1013808	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744523.8	1013808	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744526.8	1013808	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744529.8	1013808	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744532.8	1013809	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744535.8	1013809	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744538.8	1013809	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744541.8	1013809	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744544.8	1013809	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744547.8	1013809	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744550.8	1013809	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744553.8	1013809	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744556.8	1013810	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744559.8	1013810	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744562.8	1013810	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744565.8	1013810	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744568.8	1013810	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744571.8	1013810	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744574.8	1013810	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744577.8	1013810	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744580.8	1013811	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744583.8	1013811	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744586.8	1013811	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744589.8	1013811	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744592.7	1013811	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744595.7	1013811	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744598.7	1013811	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744601.7	1013812	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744604.7	1013812	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744607.7	1013812	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744610.7	1013812	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744613.7	1013812	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744616.7	1013812	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744619.7	1013812	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744622.7	1013812	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744625.7	1013813	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744628.7	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744631.7	1013813	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744634.7	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744637.7	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744640.7	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744643.7	1013813	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744646.7	1013814	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744649.7	1013814	2.32	2.58	-10.08%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744508.7	1013810	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744511.7	1013810	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744514.7	1013811	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744517.7	1013811	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744520.7	1013811	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744523.7	1013811	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744526.6	1013811	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744529.6	1013811	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744532.6	1013811	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744535.6	1013812	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744538.6	1013812	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744541.6	1013812	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744544.6	1013812	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744547.6	1013812	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744550.6	1013812	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744553.6	1013812	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744556.6	1013812	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744559.6	1013813	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744562.6	1013813	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744565.6	1013813	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744568.6	1013813	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744571.6	1013813	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744574.6	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744577.6	1013813	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744580.6	1013813	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744583.6	1013814	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744586.6	1013814	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744589.6	1013814	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744592.6	1013814	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744595.6	1013814	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744598.6	1013814	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744601.6	1013814	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744604.6	1013815	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744607.6	1013815	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744610.6	1013815	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744613.6	1013815	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744616.6	1013815	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744619.6	1013815	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744622.6	1013815	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744625.6	1013815	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744628.6	1013816	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744631.6	1013816	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744634.6	1013816	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744637.6	1013816	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744640.6	1013816	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744643.6	1013816	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744646.6	1013816	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744649.6	1013817	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744508.6	1013813	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744511.6	1013813	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744514.6	1013813	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744517.6	1013814	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744520.6	1013814	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744523.6	1013814	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744526.5	1013814	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744529.5	1013814	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744532.5	1013814	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744535.5	1013814	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744538.5	1013815	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744541.5	1013815	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744544.5	1013815	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744547.5	1013815	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744550.5	1013815	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744553.5	1013815	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744556.5	1013815	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744559.5	1013815	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744562.5	1013816	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744565.5	1013816	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744568.5	1013816	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744571.5	1013816	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744574.5	1013816	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744577.5	1013816	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744580.5	1013816	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744583.5	1013816	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744586.5	1013817	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744589.5	1013817	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744592.4	1013817	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744595.4	1013817	2.53	2 58	-1.94%	0033A	
9/6/1997	Sead-12	A	744598.4	1013817	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744601.4	1013817	2.53	2.58	-1.94%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744604.4	1013817	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744607.4	1013818	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744610.4	1013818	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744613.4	1013818	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744616.4	1013818	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744619.4	1013818	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744622.4	1013818	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744625.4	1013818	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744628.4	1013818	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744631.4	1013819	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744634.4	1013819	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744637.4	1013819	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744640.4	1013819	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744643.4	1013819	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744646.4	1013819	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744649.4	1013819	2.13	2.58	-17.44%	0033A	
9/6/1997	Sead-12	A	744508.4	1013816	2.29	2.58	-11.24%	0033A	
9/6/1997	Sead-12	A	744511.4	1013816	2.31	2.58	-10.47%	0033A	
9/6/1997	Sead-12	A	744514.4	1013816	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744517.4	1013816	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744520.4	1013817	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744523.4	1013817	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744526.4	1013817	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744529.4	1013817	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744532.4	1013817	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744535.4	1013817	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744538.4	1013817	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744541.4	1013818	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744544.4	1013818	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744547.4	1013818	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744550.4	1013818	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744553.4	1013818	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744556.4	1013818	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744559.4	1013818	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744562.4	1013818	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744565.4	1013819	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744568.4	1013819	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744571.4	1013819	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744574.4	1013819	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744577.4	1013819	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744580.4	1013819	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744583.4	1013819	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744586.4	1013819	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744589.4	1013820	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744592.3	1013820	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744595.3	1013820	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744598.3	1013820	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744601.3	1013820	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744604.3	1013820	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744607.3	1013820	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744610.3	1013821	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744613.3	1013821	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744616.3	1013821	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744619.3	1013821	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744622.3	1013821	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744625.3	1013821	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744628.3	1013821	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744631.3	1013821	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744634.3	1013822	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744637.3	1013822	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744640.3	1013822	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744643.3	1013822	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744646.3	1013822	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744649.3	1013822	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744508.3	1013819	2.29	2.58	-11.24%	0033A	
9/6/1997	Sead-12	A	744511.3	1013819	2.29	2.58	-11.24%	0033A	
9/6/1997	Sead-12	A	744514.3	1013819	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744517.3	1013819	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744520.3	1013819	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744523.3	1013820	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744526.3	1013820	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744529.3	1013820	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744532.3	1013820	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744535.3	1013820	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744538.3	1013820	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744541.3	1013820	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744544.3	1013821	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744547.3	1013821	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744550.3	1013821	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744553.3	1013821	2.55	2.58	-1.16%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744556.3	1013821	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744559.3	1013821	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744562.3	1013821	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744565.3	1013821	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744568.3	1013822	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744571.3	1013822	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744574.3	1013822	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744577.3	1013822	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744580.3	1013822	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744583.3	1013822	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744586.3	1013822	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744589.3	1013822	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744592.2	1013823	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744595.2	1013823	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744598.2	1013823	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744601.2	1013823	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744604.2	1013823	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744607.2	1013823	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744610.2	1013823	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744613.2	1013824	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744616.2	1013824	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744619.2	1013824	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744622.2	1013824	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744625.2	1013824	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744628.2	1013824	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744631.2	1013824	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744634.2	1013824	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744637.2	1013825	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744640.2	1013825	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744643.2	1013825	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744646.2	1013825	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744649.2	1013825	2.12	2.58	-17.83%	0033A	
9/6/1997	Sead-12	A	744475.2	1013820	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744478.2	1013821	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744481.2	1013821	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744484.2	1013821	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744487.2	1013821	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744490.2	1013821	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744493.2	1013821	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744496.2	1013821	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744499.2	1013821	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744502.2	1013822	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744505.2	1013822	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744508.2	1013822	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744511.2	1013822	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744514.2	1013822	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744517.2	1013822	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744520.2	1013822	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744523.2	1013822	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744526.1	1013823	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744529.1	1013823	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744532.1	1013823	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744535.1	1013823	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744538.1	1013823	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744541.1	1013823	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744544.1	1013823	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744547.1	1013824	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744550.1	1013824	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744553.1	1013824	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744556.1	1013824	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744559.1	1013824	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744562.1	1013824	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744565.1	1013824	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744568.1	1013824	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744571.1	1013825	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744574.1	1013825	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744577.1	1013825	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744580.1	1013825	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744583.1	1013825	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744586.1	1013825	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744589.1	1013825	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744592.1	1013825	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744595.1	1013826	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744598.1	1013826	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744601.1	1013826	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744604.1	1013826	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744607.1	1013826	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744610.1	1013826	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744613.1	1013826	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744616.1	1013827	2.46	2.58	-4.65%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744619.1	1013827	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744622.1	1013827	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744625.1	1013827	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744628.1	1013827	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744631.1	1013827	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744634.1	1013827	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744637.1	1013827	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744640.1	1013828	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744643.1	1013828	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744646.1	1013828	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744649.1	1013828	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744472.1	1013823	2.09	2.58	-18.99%	0033A	
9/6/1997	Sead-12	A	744475.1	1013823	2.12	2.58	-17.83%	0033A	
9/6/1997	Sead-12	A	744478.1	1013823	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744481.1	1013824	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744484.1	1013824	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744487.1	1013824	2.31	2.58	-10.47%	0033A	
9/6/1997	Sead-12	A	744490.1	1013824	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744493.1	1013824	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744496.1	1013824	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744499.1	1013824	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744502.1	1013824	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744505.1	1013825	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744508.1	1013825	2.3	2.58	-10.85%	0033A	
9/6/1997	Sead-12	A	744511.1	1013825	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744514.1	1013825	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744517.1	1013825	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744520.1	1013825	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744523.1	1013825	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744526	1013825	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744529	1013826	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744532	1013826	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744535	1013826	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744538	1013826	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744541	1013826	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744544	1013826	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744547	1013826	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744550	1013827	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744553	1013827	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744556	1013827	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744559	1013827	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744562	1013827	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744565	1013827	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744568	1013827	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744571	1013827	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744574	1013828	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744577	1013828	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744580	1013828	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744583	1013828	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744586	1013828	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744588.9	1013828	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744591.9	1013828	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744594.9	1013828	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744597.9	1013829	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744600.9	1013829	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744603.9	1013829	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744606.9	1013829	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744609.9	1013829	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744612.9	1013829	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744615.9	1013829	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744618.9	1013830	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744621.9	1013830	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744624.9	1013830	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744627.9	1013830	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744630.9	1013830	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744633.9	1013830	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744636.9	1013830	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744639.9	1013830	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744642.9	1013831	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744645.9	1013831	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744648.9	1013831	2.27	2.58	-12.02%	0033A	
9/6/1997	Sead-12	A	744465.9	1013826	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744468.9	1013826	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744471.9	1013826	2.31	2.58	-10.47%	0033A	
9/6/1997	Sead-12	A	744474.9	1013826	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744477.9	1013826	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744480.9	1013826	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744483.9	1013827	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744486.9	1013827	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744489.9	1013827	2.41	2.58	-6.59%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744492.9	1013827	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744495.9	1013827	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744498.9	1013827	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744501.9	1013827	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744504.9	1013827	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744507.9	1013828	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744510.9	1013828	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744513.9	1013828	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744516.9	1013828	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744519.9	1013828	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744522.9	1013828	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744525.9	1013828	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744528.9	1013828	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744531.9	1013829	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744534.9	1013829	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744537.9	1013829	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744540.9	1013829	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744543.9	1013829	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744546.9	1013829	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744549.9	1013829	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744552.9	1013830	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744555.9	1013830	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744558.9	1013830	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744561.9	1013830	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744564.9	1013830	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744567.9	1013830	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744570.9	1013830	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744573.9	1013830	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744576.9	1013831	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744579.9	1013831	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744582.9	1013831	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744585.9	1013831	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744588.8	1013831	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744591.8	1013831	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744594.8	1013831	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744597.8	1013831	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744600.8	1013832	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744603.8	1013832	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744606.8	1013832	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744609.8	1013832	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744612.8	1013832	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744615.8	1013832	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744618.8	1013832	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744621.8	1013833	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744624.8	1013833	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744627.8	1013833	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744630.8	1013833	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744633.8	1013833	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744636.8	1013833	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744639.8	1013833	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744642.8	1013833	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744645.8	1013834	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744648.8	1013834	2.27	2.58	-12.02%	0033A	
9/6/1997	Sead-12	A	744651.8	1013834	2.12	2.58	-17.83%	0033A	
9/6/1997	Sead-12	A	744654.8	1013834	2.15	2.58	-16.67%	0033A	
9/6/1997	Sead-12	A	744657.8	1013834	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744660.8	1013834	2.24	2.58	-13.18%	0033A	
9/6/1997	Sead-12	A	744663.8	1013834	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744666.8	1013835	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744669.8	1013835	2.22	2.58	-13.95%	0033A	
9/6/1997	Sead-12	A	744672.8	1013835	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744675.8	1013835	2.16	2.58	-16.28%	0033A	
9/6/1997	Sead-12	A	744678.8	1013835	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744681.8	1013835	2.16	2.58	-16.28%	0033A	
9/6/1997	Sead-12	A	744684.8	1013835	2.15	2.58	-16.67%	0033A	
9/6/1997	Sead-12	A	744687.8	1013835	2.17	2.58	-15.89%	0033A	
9/6/1997	Sead-12	A	744690.8	1013836	2.12	2.58	-17.83%	0033A	
9/6/1997	Sead-12	A	744693.8	1013836	2.08	2.58	-19.38%	0033A	
9/6/1997	Sead-12	A	744696.8	1013836	2.07	2.58	-19.77%	0033A	
9/6/1997	Sead-12	A	744699.8	1013836	2.09	2.58	-18.99%	0033A	
9/6/1997	Sead-12	A	744702.8	1013836	2.06	2.58	-20.16%	0033A	
9/6/1997	Sead-12	A	744462.8	1013828	2.03	2.58	-21.32%	0033A	
9/6/1997	Sead-12	A	744465.8	1013829	2.11	2.58	-18.22%	0033A	
9/6/1997	Sead-12	A	744468.8	1013829	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744471.8	1013829	2.3	2.58	-10.85%	0033A	
9/6/1997	Sead-12	A	744474.8	1013829	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744477.8	1013829	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744480.8	1013829	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744483.8	1013829	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744486.8	1013830	2.41	2.58	-6.59%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744489.8	1013830	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744492.8	1013830	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744495.8	1013830	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744498.8	1013830	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744501.8	1013830	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744504.8	1013830	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744507.8	1013830	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744510.8	1013831	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744513.8	1013831	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744516.8	1013831	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744519.8	1013831	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744522.8	1013831	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744525.8	1013831	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744528.8	1013831	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744531.8	1013831	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744534.8	1013832	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744537.8	1013832	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744540.8	1013832	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744543.8	1013832	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744546.8	1013832	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744549.8	1013832	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744552.8	1013832	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744555.8	1013833	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744558.8	1013833	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744561.8	1013833	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744564.8	1013833	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744567.8	1013833	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744570.8	1013833	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744573.8	1013833	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744576.8	1013833	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744579.8	1013834	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744582.8	1013834	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744585.8	1013834	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744588.7	1013834	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744591.7	1013834	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744594.7	1013834	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744597.7	1013834	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744600.7	1013834	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744603.7	1013835	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744606.7	1013835	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744609.7	1013835	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744612.7	1013835	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744615.7	1013835	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744618.7	1013835	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744621.7	1013835	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744624.7	1013836	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744627.7	1013836	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744630.7	1013836	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744633.7	1013836	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744636.7	1013836	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744639.7	1013836	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744642.7	1013836	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744645.7	1013836	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744648.7	1013837	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744651.7	1013837	2.15	2.58	-16.67%	0033A	
9/6/1997	Sead-12	A	744654.6	1013837	2.18	2.58	-15.50%	0033A	
9/6/1997	Sead-12	A	744657.6	1013837	2.23	2.58	-13.57%	0033A	
9/6/1997	Sead-12	A	744660.6	1013837	2.27	2.58	-12.02%	0033A	
9/6/1997	Sead-12	A	744663.6	1013837	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744666.6	1013837	2.23	2.58	-13.57%	0033A	
9/6/1997	Sead-12	A	744669.6	1013838	2.21	2.58	-14.34%	0033A	
9/6/1997	Sead-12	A	744672.6	1013838	2.21	2.58	-14.34%	0033A	
9/6/1997	Sead-12	A	744675.6	1013838	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744678.6	1013838	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744681.6	1013838	2.16	2.58	-16.28%	0033A	
9/6/1997	Sead-12	A	744684.6	1013838	2.16	2.58	-16.28%	0033A	
9/6/1997	Sead-12	A	744687.6	1013838	2.16	2.58	-16.28%	0033A	
9/6/1997	Sead-12	A	744690.6	1013838	2.08	2.58	-19.38%	0033A	
9/6/1997	Sead-12	A	744693.6	1013839	2.09	2.58	-18.99%	0033A	
9/6/1997	Sead-12	A	744696.6	1013839	2.12	2.58	-17.83%	0033A	
9/6/1997	Sead-12	A	744699.6	1013839	2.13	2.58	-17.44%	0033A	
9/6/1997	Sead-12	A	744702.6	1013839	2.1	2.58	-18.60%	0033A	
9/6/1997	Sead-12	A	744462.7	1013831	2.21	2.58	-14.34%	0033A	
9/6/1997	Sead-12	A	744465.7	1013831	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744468.7	1013832	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744471.7	1013832	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744474.7	1013832	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744477.7	1013832	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744480.7	1013832	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744483.7	1013832	2.57	2.58	-0.39%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744486.7	1013832	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744489.7	1013832	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744492.7	1013833	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744495.7	1013833	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744498.7	1013833	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744501.7	1013833	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744504.7	1013833	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744507.7	1013833	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744510.7	1013833	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744513.7	1013834	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744516.7	1013834	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744519.7	1013834	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744522.6	1013834	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744525.6	1013834	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744528.6	1013834	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744531.6	1013834	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744534.6	1013834	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744537.6	1013835	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744540.6	1013835	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744543.6	1013835	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744546.6	1013835	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744549.6	1013835	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744552.6	1013835	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744555.6	1013835	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744558.6	1013836	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744561.6	1013836	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744564.6	1013836	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744567.6	1013836	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744570.6	1013836	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744573.6	1013836	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744576.6	1013836	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744579.6	1013836	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744582.6	1013837	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744585.6	1013837	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744588.6	1013837	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744591.6	1013837	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744594.6	1013837	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744597.6	1013837	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744600.6	1013837	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744603.6	1013837	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744606.6	1013838	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744609.6	1013838	2.81	2.58	8.91%	0033A	
9/6/1997	Sead-12	A	744612.6	1013838	2.82	2.58	9.30%	0033A	
9/6/1997	Sead-12	A	744615.6	1013838	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744618.6	1013838	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744621.6	1013838	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744624.6	1013838	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744627.6	1013839	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744630.6	1013839	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744633.6	1013839	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744636.6	1013839	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744639.6	1013839	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744642.6	1013839	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744645.6	1013839	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744648.6	1013839	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744651.6	1013840	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744654.5	1013840	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744657.5	1013840	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744660.5	1013840	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744663.5	1013840	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744666.5	1013840	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744669.5	1013840	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744672.5	1013841	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744675.5	1013841	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744678.5	1013841	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744681.5	1013841	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744684.5	1013841	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744687.5	1013841	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744690.5	1013841	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744693.5	1013841	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744696.5	1013842	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744699.5	1013842	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744702.5	1013842	2.27	2.58	-12.02%	0033A	
9/6/1997	Sead-12	A	744705.5	1013842	2.22	2.58	-13.95%	0033A	
9/6/1997	Sead-12	A	744708.5	1013842	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744711.5	1013842	2.15	2.58	-16.67%	0033A	
9/6/1997	Sead-12	A	744462.6	1013834	2.19	2.58	-15.12%	0033A	
9/6/1997	Sead-12	A	744465.6	1013834	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744468.6	1013834	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744471.6	1013835	2.61	2.58	1.16%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744474.6	1013835	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744477.6	1013835	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744480.6	1013835	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744483.6	1013835	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744486.6	1013835	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744489.6	1013835	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744492.6	1013835	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744495.6	1013836	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744498.6	1013836	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744501.6	1013836	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744504.6	1013836	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744507.6	1013836	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744510.6	1013836	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744513.6	1013836	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744516.6	1013837	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744519.6	1013837	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744522.5	1013837	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744525.5	1013837	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744528.5	1013837	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744531.5	1013837	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744534.5	1013837	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744537.5	1013837	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744540.5	1013838	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744543.5	1013838	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744546.5	1013838	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744549.5	1013838	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744552.5	1013838	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744555.5	1013838	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744558.5	1013838	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744561.5	1013839	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744564.5	1013839	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744567.5	1013839	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744570.5	1013839	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744573.5	1013839	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744576.5	1013839	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744579.5	1013839	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744582.5	1013839	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744585.5	1013840	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744588.4	1013840	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744591.4	1013840	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744594.4	1013840	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744597.4	1013840	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744600.4	1013840	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744603.4	1013840	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744606.4	1013840	2.82	2.58	9.30%	0033A	
9/6/1997	Sead-12	A	744609.4	1013841	2.83	2.58	9.69%	0033A	
9/6/1997	Sead-12	A	744612.4	1013841	2.81	2.58	8.91%	0033A	
9/6/1997	Sead-12	A	744615.4	1013841	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744618.4	1013841	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744621.4	1013841	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744624.4	1013841	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744627.4	1013841	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744630.4	1013842	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744633.4	1013842	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744636.4	1013842	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744639.4	1013842	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744642.4	1013842	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744645.4	1013842	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744648.4	1013842	2.27	2.58	-12.02%	0033A	
9/6/1997	Sead-12	A	744651.4	1013842	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744654.4	1013843	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744657.4	1013843	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744660.4	1013843	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744663.4	1013843	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744666.4	1013843	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744669.4	1013843	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744672.4	1013843	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744675.4	1013844	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744678.4	1013844	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744681.4	1013844	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744684.4	1013844	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744687.4	1013844	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744690.4	1013844	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744693.4	1013844	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744696.4	1013844	2.29	2.58	-11.24%	0033A	
9/6/1997	Sead-12	A	744699.4	1013845	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744702.4	1013845	2.24	2.58	-13.18%	0033A	
9/6/1997	Sead-12	A	744705.4	1013845	2.21	2.58	-14.34%	0033A	
9/6/1997	Sead-12	A	744708.4	1013845	2.19	2.58	-15.12%	0033A	
9/6/1997	Sead-12	A	744711.4	1013845	2.07	2.58	-19.77%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744459.4	1013837	2.21	2.58	-14.34%	0033A	
9/6/1997	Sead-12	A	744462.4	1013837	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744465.4	1013837	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744468.4	1013837	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744471.4	1013837	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744474.4	1013838	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744477.4	1013838	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744480.4	1013838	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744483.4	1013838	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744486.4	1013838	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744489.4	1013838	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744492.4	1013838	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744495.4	1013838	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744498.4	1013839	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744501.4	1013839	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744504.4	1013839	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744507.4	1013839	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744510.4	1013839	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744513.4	1013839	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744516.4	1013839	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744519.4	1013840	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744522.4	1013840	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744525.4	1013840	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744528.4	1013840	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744531.4	1013840	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744534.4	1013840	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744537.4	1013840	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744540.4	1013840	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744543.4	1013841	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744546.4	1013841	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744549.4	1013841	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744552.4	1013841	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744555.4	1013841	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744558.4	1013841	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744561.4	1013841	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744564.4	1013842	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744567.4	1013842	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744570.4	1013842	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744573.4	1013842	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744576.4	1013842	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744579.4	1013842	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744582.4	1013842	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744585.3	1013842	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744588.3	1013843	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744591.3	1013843	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744594.3	1013843	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744597.3	1013843	2.8	2.58	8.53%	0033A	
9/6/1997	Sead-12	A	744600.3	1013843	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744603.3	1013843	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744606.3	1013843	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744609.3	1013843	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744612.3	1013844	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744615.3	1013844	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744618.3	1013844	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744621.3	1013844	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744624.3	1013844	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744627.3	1013844	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744630.3	1013844	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744633.3	1013845	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744636.3	1013845	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744639.3	1013845	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744642.3	1013845	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744645.3	1013845	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744648.3	1013845	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744651.3	1013845	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744654.3	1013845	2.26	2.58	-12.40%	0033A	
9/6/1997	Sead-12	A	744657.3	1013846	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744660.3	1013846	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744663.3	1013846	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744666.3	1013846	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744669.3	1013846	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744672.3	1013846	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744675.3	1013846	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744678.3	1013847	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744681.3	1013847	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744684.3	1013847	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744687.3	1013847	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744690.3	1013847	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744693.3	1013847	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744696.3	1013847	2.42	2.58	-6.20%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744699.3	1013847	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744702.3	1013848	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744705.3	1013848	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744708.3	1013848	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744711.3	1013848	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744459.3	1013840	2.17	2.58	-15.89%	0033A	
9/6/1997	Sead-12	A	744462.3	1013840	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744465.3	1013840	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744468.3	1013840	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744471.3	1013840	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744474.3	1013840	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744477.3	1013841	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744480.3	1013841	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744483.3	1013841	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744486.3	1013841	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744489.3	1013841	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744492.3	1013841	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744495.3	1013841	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744498.3	1013841	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744501.3	1013842	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744504.3	1013842	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744507.3	1013842	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744510.3	1013842	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744513.3	1013842	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744516.3	1013842	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744519.3	1013842	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744522.3	1013843	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744525.3	1013843	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744528.3	1013843	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744531.3	1013843	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744534.3	1013843	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744537.3	1013843	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744540.3	1013843	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744543.3	1013843	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744546.3	1013844	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744549.3	1013844	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744552.3	1013844	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744555.3	1013844	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744558.3	1013844	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744561.3	1013844	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744564.3	1013844	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744567.3	1013845	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744570.3	1013845	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744573.3	1013845	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744576.3	1013845	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744579.3	1013845	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744582.3	1013845	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744585.2	1013845	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744588.2	1013845	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744591.2	1013846	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744594.2	1013846	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744597.2	1013846	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744600.2	1013846	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744603.2	1013846	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744606.2	1013846	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744609.2	1013846	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744612.2	1013846	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744615.2	1013847	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744618.2	1013847	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744621.2	1013847	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744624.2	1013847	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744627.2	1013847	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744630.2	1013847	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744633.2	1013847	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744636.2	1013848	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744639.2	1013848	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744642.2	1013848	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744645.2	1013848	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744648.2	1013848	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744651.1	1013848	2.36	2.58	-8.53%	0033A	
9/6/1997	Sead-12	A	744654.1	1013848	2.29	2.58	-11.24%	0033A	
9/6/1997	Sead-12	A	744657.1	1013848	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744660.1	1013849	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744663.1	1013849	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744666.1	1013849	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744669.1	1013849	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744672.1	1013849	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744675.1	1013849	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744678.1	1013849	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744681.1	1013849	2.57	2.58	-0.39%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744684.1	1013850	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744687.1	1013850	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744690.1	1013850	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744693.1	1013850	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744696.1	1013850	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744699.1	1013850	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744702.1	1013850	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744705.1	1013851	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744708.1	1013851	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744711.1	1013851	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744459.2	1013843	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744462.2	1013843	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744465.2	1013843	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744468.2	1013843	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744471.2	1013843	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744474.2	1013843	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744477.2	1013843	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744480.2	1013844	2.2	2.58	-14.73%	0033A	
9/6/1997	Sead-12	A	744483.2	1013844	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744486.2	1013844	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744489.2	1013844	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744492.2	1013844	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744495.2	1013844	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744498.2	1013844	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744501.2	1013844	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744504.2	1013845	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744507.2	1013845	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744510.2	1013845	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744513.2	1013845	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744516.2	1013845	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744519.1	1013845	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744522.1	1013845	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744525.1	1013846	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744528.1	1013846	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744531.1	1013846	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744534.1	1013846	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744537.1	1013846	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744540.1	1013846	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744543.1	1013846	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744546.1	1013846	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744549.1	1013847	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744552.1	1013847	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744555.1	1013847	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744558.1	1013847	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744561.1	1013847	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744564.1	1013847	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744567.1	1013847	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744570.1	1013848	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744573.1	1013848	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744576.1	1013848	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744579.1	1013848	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744582.1	1013848	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744585.1	1013848	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744588.1	1013848	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744591.1	1013848	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744594.1	1013849	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744597.1	1013849	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744600.1	1013849	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744603.1	1013849	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744606.1	1013849	2.8	2.58	8.53%	0033A	
9/6/1997	Sead-12	A	744609.1	1013849	2.79	2.58	8.14%	0033A	
9/6/1997	Sead-12	A	744612.1	1013849	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744615.1	1013849	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744618.1	1013850	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744621.1	1013850	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744624.1	1013850	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744627.1	1013850	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744630.1	1013850	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744633.1	1013850	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744636.1	1013850	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744639.1	1013851	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744642.1	1013851	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744645.1	1013851	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744648.1	1013851	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744651	1013851	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744654	1013851	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744657	1013851	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744660	1013851	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744663	1013852	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744666	1013852	2.6	2.58	0.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744669	1013852	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744672	1013852	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744675	1013852	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744678	1013852	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744681	1013852	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744684	1013852	2.8	2.58	8.53%	0033A	
9/6/1997	Sead-12	A	744687	1013853	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744690	1013853	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744693	1013853	2.655	2.58	2.91%	0033A	
9/6/1997	Sead-12	A	744696	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744699	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744702	1013853	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744705	1013853	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744708	1013854	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744711	1013854	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744459.1	1013846	2.22	2.58	-13.95%	0033A	
9/6/1997	Sead-12	A	744462.1	1013846	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744465.1	1013846	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744468.1	1013846	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744471.1	1013846	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744474.1	1013846	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744477.1	1013846	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744480.1	1013846	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744483.1	1013847	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744486.1	1013847	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744489.1	1013847	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744492.1	1013847	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744495.1	1013847	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744498.1	1013847	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744501.1	1013847	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744504.1	1013847	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744507.1	1013848	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744510.1	1013848	2.48	2.58	-3.88%	0033A	
9/6/1997	Sead-12	A	744513.1	1013848	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744516.1	1013848	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744519	1013848	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744522	1013848	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744525	1013848	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744528	1013849	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744531	1013849	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744534	1013849	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744537	1013849	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744540	1013849	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744543	1013849	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744546	1013849	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744549	1013849	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744552	1013850	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744555	1013850	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744558	1013850	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744561	1013850	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744564	1013850	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744567	1013850	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744570	1013850	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744573	1013851	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744576	1013851	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744579	1013851	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744582	1013851	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744584.9	1013851	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744587.9	1013851	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744590.9	1013851	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744593.9	1013851	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744596.9	1013852	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744599.9	1013852	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744602.9	1013852	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744605.9	1013852	2.81	2.58	8.91%	0033A	
9/6/1997	Sead-12	A	744608.9	1013852	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744611.9	1013852	2.76	2.58	6.98%	0033A	
9/6/1997	Sead-12	A	744614.9	1013852	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744617.9	1013852	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744620.9	1013853	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744623.9	1013853	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744626.9	1013853	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744629.9	1013853	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744632.9	1013853	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744635.9	1013853	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744638.9	1013853	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744641.9	1013854	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744644.9	1013854	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744647.9	1013854	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744650.9	1013854	2.46	2.58	-4.65%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744653.9	1013854	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744656.9	1013854	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744659.9	1013854	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744662.9	1013854	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744665.9	1013855	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744668.9	1013855	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744671.9	1013855	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744674.9	1013855	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744677.9	1013855	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744680.9	1013855	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744683.9	1013855	2.78	2.58	7.75%	0033A	
9/6/1997	Sead-12	A	744686.9	1013855	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744689.9	1013856	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744692.9	1013856	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744695.9	1013856	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744698.9	1013856	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744701.9	1013856	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744704.9	1013856	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744707.9	1013856	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744710.9	1013857	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744458.9	1013848	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744461.9	1013849	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744464.9	1013849	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744467.9	1013849	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744470.9	1013849	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744473.9	1013849	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744476.9	1013849	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744479.9	1013849	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744482.9	1013849	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744485.9	1013850	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744488.9	1013850	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744491.9	1013850	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744494.9	1013850	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744497.9	1013850	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744500.9	1013850	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744503.9	1013850	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744506.9	1013850	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744509.9	1013851	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744512.9	1013851	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744515.9	1013851	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744518.9	1013851	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744521.9	1013851	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744524.9	1013851	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744527.9	1013851	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744530.9	1013852	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744533.9	1013852	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744536.9	1013852	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744539.9	1013852	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744542.9	1013852	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744545.9	1013852	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744548.9	1013852	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744551.9	1013852	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744554.9	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744557.9	1013853	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744560.9	1013853	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744563.9	1013853	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744566.9	1013853	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744569.9	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744572.9	1013853	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744575.9	1013854	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744578.9	1013854	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744581.9	1013854	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744584.8	1013854	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744587.8	1013854	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744590.8	1013854	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744593.8	1013854	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744596.8	1013854	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744599.8	1013855	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744602.8	1013855	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744605.8	1013855	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744608.8	1013855	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744611.8	1013855	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744614.8	1013855	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744617.8	1013855	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744620.8	1013855	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744623.8	1013856	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744626.8	1013856	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744629.8	1013856	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744632.8	1013856	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744635.8	1013856	2.71	2.58	5.04%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744638.8	1013856	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744641.8	1013856	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744644.8	1013857	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744647.8	1013857	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744650.8	1013857	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744653.8	1013857	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744656.8	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744659.8	1013857	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744662.8	1013857	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744665.8	1013857	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744668.8	1013858	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744671.8	1013858	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744674.8	1013858	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744677.8	1013858	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744680.8	1013858	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744683.8	1013858	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744686.8	1013858	2.75	2.58	6.59%	0033A	
9/6/1997	Sead-12	A	744689.8	1013858	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744692.8	1013859	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744695.8	1013859	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744698.8	1013859	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744701.8	1013859	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744704.8	1013859	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744707.8	1013859	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744710.8	1013859	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744458.8	1013851	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744461.8	1013851	2.4	2.58	-6.98%	0033A	
9/6/1997	Sead-12	A	744464.8	1013852	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744467.8	1013852	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744470.8	1013852	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744473.8	1013852	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744476.8	1013852	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744479.8	1013852	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744482.8	1013852	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744485.8	1013852	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744488.8	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744491.8	1013853	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744494.8	1013853	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744497.8	1013853	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744500.8	1013853	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744503.8	1013853	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744506.8	1013853	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744509.8	1013853	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744512.8	1013854	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744515.8	1013854	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744518.8	1013854	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744521.8	1013854	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744524.8	1013854	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744527.8	1013854	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744530.8	1013854	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744533.8	1013855	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744536.8	1013855	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744539.8	1013855	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744542.8	1013855	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744545.8	1013855	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744548.8	1013855	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744551.8	1013855	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744554.8	1013855	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744557.8	1013856	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744560.8	1013856	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744563.8	1013856	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744566.8	1013856	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744569.8	1013856	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744572.8	1013856	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744575.8	1013856	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744578.8	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744581.7	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744584.7	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744587.7	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744590.7	1013857	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744593.7	1013857	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744596.7	1013857	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744599.7	1013857	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744602.7	1013858	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744605.7	1013858	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744608.7	1013858	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744611.7	1013858	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744614.7	1013858	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744617.7	1013858	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744620.7	1013858	2.76	2.58	6.98%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744623.7	1013858	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744626.7	1013859	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744629.7	1013859	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744632.7	1013859	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744635.7	1013859	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744638.7	1013859	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744641.7	1013859	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744644.7	1013859	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744647.6	1013860	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744650.6	1013860	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744653.6	1013860	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744656.6	1013860	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744659.6	1013860	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744662.6	1013860	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744665.6	1013860	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744668.6	1013860	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744671.6	1013861	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744674.6	1013861	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744677.6	1013861	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744680.6	1013861	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744683.6	1013861	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744686.6	1013861	2.77	2.58	7.36%	0033A	
9/6/1997	Sead-12	A	744689.6	1013861	2.72	2.58	5.43%	0033A	
9/6/1997	Sead-12	A	744692.6	1013861	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744695.6	1013862	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744698.6	1013862	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744701.6	1013862	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744704.6	1013862	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744707.6	1013862	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744710.6	1013862	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744458.7	1013854	2.37	2.58	-8.14%	0033A	
9/6/1997	Sead-12	A	744461.7	1013854	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744464.7	1013854	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744467.7	1013855	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744470.7	1013855	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744473.7	1013855	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744476.7	1013855	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744479.7	1013855	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744482.7	1013855	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744485.7	1013855	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744488.7	1013855	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744491.7	1013856	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744494.7	1013856	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744497.7	1013856	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744500.7	1013856	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744503.7	1013856	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744506.7	1013856	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744509.7	1013856	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744512.7	1013856	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744515.6	1013857	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744518.6	1013857	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744521.6	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744524.6	1013857	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744527.6	1013857	2.6	2.58	0.78%	0033A	
9/6/1997	Sead-12	A	744530.6	1013857	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744533.6	1013857	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744536.6	1013858	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744539.6	1013858	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744542.6	1013858	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744545.6	1013858	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744548.6	1013858	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744551.6	1013858	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744554.6	1013858	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744557.6	1013858	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744560.6	1013859	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744563.6	1013859	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744566.6	1013859	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744569.6	1013859	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744572.6	1013859	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744575.6	1013859	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744578.6	1013859	2.74	2.58	6.20%	0033A	
9/6/1997	Sead-12	A	744581.6	1013860	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744584.6	1013860	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744587.6	1013860	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744590.6	1013860	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744593.6	1013860	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744596.6	1013860	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744599.6	1013860	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744602.6	1013860	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744605.6	1013861	2.6	2.58	0.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27 Easting	NAD-27 Northing	Value	Background	% +/- BKG	Instrument	Comments
					(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744608.6	1013861	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744611.6	1013861	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744614.6	1013861	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744617.6	1013861	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744620.6	1013861	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744623.6	1013861	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744626.6	1013861	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744629.6	1013862	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744632.6	1013862	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744635.6	1013862	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744638.6	1013862	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744641.6	1013862	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744644.6	1013862	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744647.5	1013862	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744650.5	1013863	2.43	2.58	-5.81%	0033A	
9/6/1997	Sead-12	A	744653.5	1013863	2.42	2.58	-6.20%	0033A	
9/6/1997	Sead-12	A	744656.5	1013863	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744659.5	1013863	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744662.5	1013863	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744665.5	1013863	2.34	2.58	-9.30%	0033A	
9/6/1997	Sead-12	A	744668.5	1013863	2.41	2.58	-6.59%	0033A	
9/6/1997	Sead-12	A	744671.5	1013863	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744674.5	1013864	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744677.5	1013864	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744680.5	1013864	2.62	2.58	1.55%	0033A	
9/6/1997	Sead-12	A	744683.5	1013864	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744686.5	1013864	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744689.5	1013864	2.66	2.58	3.10%	0033A	
9/6/1997	Sead-12	A	744692.5	1013864	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744695.5	1013864	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744698.5	1013865	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744701.5	1013865	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744704.5	1013865	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744707.5	1013865	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744710.5	1013865	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744713.4	1013865	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744458.6	1013857	2.28	2.58	-11.63%	0033A	
9/6/1997	Sead-12	A	744461.6	1013857	2.47	2.58	-4.26%	0033A	
9/6/1997	Sead-12	A	744464.6	1013857	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744467.6	1013857	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744470.6	1013858	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744473.6	1013858	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744476.6	1013858	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744479.6	1013858	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744482.6	1013858	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744485.6	1013858	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744488.6	1013858	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744491.6	1013858	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744494.6	1013859	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744497.6	1013859	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744500.6	1013859	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744503.6	1013859	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744506.6	1013859	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744509.6	1013859	2.45	2.58	-5.04%	0033A	
9/6/1997	Sead-12	A	744512.6	1013859	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744515.5	1013859	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744518.5	1013860	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744521.5	1013860	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744524.5	1013860	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744527.5	1013860	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744530.5	1013860	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744533.5	1013860	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744536.5	1013860	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744539.5	1013861	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744542.5	1013861	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744545.5	1013861	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744548.5	1013861	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744551.5	1013861	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744554.5	1013861	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744557.5	1013861	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744560.5	1013861	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744563.5	1013862	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744566.5	1013862	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744569.5	1013862	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744572.5	1013862	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744575.5	1013862	2.71	2.58	5.04%	0033A	
9/6/1997	Sead-12	A	744578.5	1013862	2.7	2.58	4.65%	0033A	
9/6/1997	Sead-12	A	744581.4	1013862	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744584.4	1013863	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744587.4	1013863	2.58	2.58	0.00%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/6/1997	Sead-12	A	744590.4	1013863	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744593.4	1013863	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744596.4	1013863	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744599.4	1013863	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744602.4	1013863	2.58	2.58	0.00%	0033A	
9/6/1997	Sead-12	A	744605.4	1013863	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744608.4	1013864	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744611.4	1013864	2.56	2.58	-0.78%	0033A	
9/6/1997	Sead-12	A	744614.4	1013864	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744617.4	1013864	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744620.4	1013864	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744623.4	1013864	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744626.4	1013864	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744629.4	1013864	2.63	2.58	1.94%	0033A	
9/6/1997	Sead-12	A	744632.4	1013865	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744635.4	1013865	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744638.4	1013865	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744641.4	1013865	2.68	2.58	3.88%	0033A	
9/6/1997	Sead-12	A	744644.4	1013865	2.67	2.58	3.49%	0033A	
9/6/1997	Sead-12	A	744647.4	1013865	2.64	2.58	2.33%	0033A	
9/6/1997	Sead-12	A	744650.4	1013865	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744653.4	1013866	2.38	2.58	-7.75%	0033A	
9/6/1997	Sead-12	A	744656.4	1013866	2.32	2.58	-10.08%	0033A	
9/6/1997	Sead-12	A	744659.4	1013866	2.33	2.58	-9.69%	0033A	
9/6/1997	Sead-12	A	744662.4	1013866	2.35	2.58	-8.91%	0033A	
9/6/1997	Sead-12	A	744665.4	1013866	2.39	2.58	-7.36%	0033A	
9/6/1997	Sead-12	A	744668.4	1013866	2.44	2.58	-5.43%	0033A	
9/6/1997	Sead-12	A	744671.4	1013866	2.55	2.58	-1.16%	0033A	
9/6/1997	Sead-12	A	744674.4	1013866	2.57	2.58	-0.39%	0033A	
9/6/1997	Sead-12	A	744677.4	1013867	2.59	2.58	0.39%	0033A	
9/6/1997	Sead-12	A	744680.4	1013867	2.65	2.58	2.71%	0033A	
9/6/1997	Sead-12	A	744683.4	1013867	2.73	2.58	5.81%	0033A	
9/6/1997	Sead-12	A	744686.4	1013867	2.69	2.58	4.26%	0033A	
9/6/1997	Sead-12	A	744689.4	1013867	2.61	2.58	1.16%	0033A	
9/6/1997	Sead-12	A	744692.4	1013867	2.53	2.58	-1.94%	0033A	
9/6/1997	Sead-12	A	744695.4	1013867	2.54	2.58	-1.55%	0033A	
9/6/1997	Sead-12	A	744698.4	1013867	2.46	2.58	-4.65%	0033A	
9/6/1997	Sead-12	A	744701.4	1013868	2.51	2.58	-2.71%	0033A	
9/6/1997	Sead-12	A	744704.4	1013868	2.5	2.58	-3.10%	0033A	
9/6/1997	Sead-12	A	744707.4	1013868	2.49	2.58	-3.49%	0033A	
9/6/1997	Sead-12	A	744710.4	1013868	2.52	2.58	-2.33%	0033A	
9/6/1997	Sead-12	A	744713.3	1013868	2.47	2.58	-4.26%	0033A	
9/7/1997	Sead-12	A	744458.4	1013860	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744461.4	1013860	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744464.4	1013860	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744467.4	1013860	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744470.4	1013860	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744473.4	1013861	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744476.4	1013861	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744479.4	1013861	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744482.4	1013861	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744485.4	1013861	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744488.4	1013861	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744491.4	1013861	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744494.4	1013861	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744497.4	1013862	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744500.4	1013862	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744503.4	1013862	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744506.4	1013862	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744509.4	1013862	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744512.4	1013862	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744515.4	1013862	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744518.4	1013862	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744521.4	1013863	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744524.4	1013863	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744527.4	1013863	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744530.4	1013863	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744533.4	1013863	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744536.4	1013863	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744539.4	1013863	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744542.4	1013864	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744545.4	1013864	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744548.4	1013864	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744551.4	1013864	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744554.4	1013864	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744557.4	1013864	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744560.4	1013864	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744563.4	1013864	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744566.4	1013865	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744569.4	1013865	2.45	2.66	-7.89%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744572.4	1013865	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744575.4	1013865	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744578.4	1013865	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744581.3	1013865	2.5	2.68	-6.02%	0033A	
9/7/1997	Sead-12	A	744584.3	1013865	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744587.3	1013866	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744590.3	1013866	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744593.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744596.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744599.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744602.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744605.3	1013866	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744608.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744611.3	1013867	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744614.3	1013867	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744617.3	1013867	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744620.3	1013867	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744623.3	1013867	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744626.3	1013867	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744629.3	1013867	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744632.3	1013867	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744635.3	1013868	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744638.3	1013868	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744641.3	1013868	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744644.3	1013868	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744647.3	1013868	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744650.3	1013868	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744653.3	1013868	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744656.3	1013869	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744659.3	1013869	2.21	2.66	-16.92%	0033A	
9/7/1997	Sead-12	A	744662.3	1013869	2.21	2.66	-16.92%	0033A	
9/7/1997	Sead-12	A	744665.3	1013869	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744668.3	1013869	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744671.3	1013869	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744674.3	1013869	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744677.3	1013869	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744680.3	1013870	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744683.3	1013870	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744686.3	1013870	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744689.3	1013870	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744692.3	1013870	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744695.3	1013870	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744698.3	1013870	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744701.3	1013870	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744704.3	1013871	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744707.3	1013871	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744710.2	1013871	2.06	2.66	-22.56%	0033A	
9/7/1997	Sead-12	A	744458.3	1013863	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744461.3	1013863	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744464.3	1013863	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744467.3	1013863	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744470.3	1013863	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744473.3	1013863	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744476.3	1013864	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744479.3	1013864	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744482.3	1013864	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744485.3	1013864	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744488.3	1013864	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744491.3	1013864	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744494.3	1013864	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744497.3	1013864	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744500.3	1013865	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744503.3	1013865	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744506.3	1013865	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744509.3	1013865	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744512.3	1013865	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744515.3	1013865	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744518.3	1013865	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744521.3	1013865	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744524.3	1013866	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744527.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744530.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744533.3	1013866	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744536.3	1013866	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744539.3	1013866	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744542.3	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744545.3	1013867	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744548.3	1013867	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744551.3	1013867	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744554.3	1013867	2.45	2.66	-7.89%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744557.3	1013867	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744560.3	1013867	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744563.3	1013867	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744566.3	1013867	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744569.3	1013868	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744572.3	1013868	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744575.3	1013868	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744578.3	1013868	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744581.2	1013868	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744584.2	1013868	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744587.2	1013868	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744590.2	1013869	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744593.2	1013869	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744596.2	1013869	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744599.2	1013869	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744602.2	1013869	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744605.2	1013869	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744608.2	1013869	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744611.2	1013869	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744614.2	1013870	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744617.2	1013870	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744620.2	1013870	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744623.2	1013870	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744626.2	1013870	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744629.2	1013870	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744632.2	1013870	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744635.2	1013870	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744638.2	1013871	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744641.2	1013871	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744644.1	1013871	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744647.1	1013871	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744650.1	1013871	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744653.1	1013871	2.21	2.66	-16.92%	0033A	
9/7/1997	Sead-12	A	744656.1	1013871	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744659.1	1013872	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744662.1	1013872	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744665.1	1013872	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744668.1	1013872	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744671.1	1013872	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744674.1	1013872	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744677.1	1013872	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744680.1	1013872	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744683.1	1013873	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744686.1	1013873	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744689.1	1013873	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744692.1	1013873	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744695.1	1013873	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744698.1	1013873	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744701.1	1013873	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744704.1	1013873	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744707.1	1013874	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744710.1	1013874	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744713.1	1013874	2.03	2.66	-23.68%	0033A	
9/7/1997	Sead-12	A	744458.2	1013866	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744461.2	1013866	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744464.2	1013866	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744467.2	1013866	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744470.2	1013866	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744473.2	1013866	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744476.2	1013866	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744479.2	1013867	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744482.2	1013867	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744485.2	1013867	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744488.2	1013867	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744491.2	1013867	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744494.2	1013867	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744497.2	1013867	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744500.2	1013867	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744503.2	1013868	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744506.2	1013868	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744509.2	1013868	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744512.2	1013868	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744515.1	1013868	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744518.1	1013868	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744521.1	1013868	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744524.1	1013868	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744527.1	1013869	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744530.1	1013869	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744533.1	1013869	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744536.1	1013869	2.43	2.66	-8.65%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744539.1	1013869	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744542.1	1013869	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744545.1	1013869	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744548.1	1013870	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744551.1	1013870	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744554.1	1013870	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744557.1	1013870	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744560.1	1013870	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744563.1	1013870	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744566.1	1013870	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744569.1	1013870	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744572.1	1013871	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744575.1	1013871	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744578.1	1013871	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744581.1	1013871	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744584.1	1013871	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744587.1	1013871	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744590.1	1013871	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744593.1	1013871	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744596.1	1013872	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744599.1	1013872	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744602.1	1013872	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744605.1	1013872	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744608.1	1013872	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744611.1	1013872	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744614.1	1013872	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744617.1	1013873	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744620.1	1013873	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744623.1	1013873	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744626.1	1013873	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744629.1	1013873	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744632.1	1013873	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744635.1	1013873	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744638.1	1013873	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744641.1	1013874	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744644	1013874	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744647	1013874	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744650	1013874	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744653	1013874	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744656	1013874	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744659	1013874	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744662	1013875	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744665	1013875	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744668	1013875	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744671	1013875	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744674	1013875	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744677	1013875	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744680	1013875	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744683	1013875	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744686	1013876	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744689	1013876	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744692	1013876	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744695	1013876	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744698	1013876	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744701	1013876	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744704	1013876	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744707	1013876	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744709.9	1013877	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744712.9	1013877	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744458.1	1013868	2.07	2.66	-22.18%	0033A	
9/7/1997	Sead-12	A	744461.1	1013869	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744464.1	1013869	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744467.1	1013869	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744470.1	1013869	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744473.1	1013869	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744476.1	1013869	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744479.1	1013869	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744482.1	1013870	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744485.1	1013870	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744488.1	1013870	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744491.1	1013870	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744494.1	1013870	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744497.1	1013870	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744500.1	1013870	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744503.1	1013870	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744506.1	1013871	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744509.1	1013871	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744512.1	1013871	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744515	1013871	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744518	1013871	2.3	2.66	-13.53%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744521	1013871	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744524	1013871	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744527	1013871	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744530	1013872	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744533	1013872	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744536	1013872	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744539	1013872	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744542	1013872	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744545	1013872	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744548	1013872	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744551	1013873	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744554	1013873	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744557	1013873	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744560	1013873	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744563	1013873	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744566	1013873	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744569	1013873	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744572	1013873	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744575	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744577.9	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744580.9	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744583.9	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744586.9	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744589.9	1013874	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744592.9	1013874	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744595.9	1013874	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744598.9	1013875	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744601.9	1013875	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744604.9	1013875	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744607.9	1013875	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744610.9	1013875	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744613.9	1013875	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744616.9	1013875	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744619.9	1013876	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744622.9	1013876	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744625.9	1013876	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744628.9	1013876	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744631.9	1013876	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744634.9	1013876	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744637.9	1013876	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744640.9	1013876	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744643.9	1013877	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744646.9	1013877	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744649.9	1013877	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744652.9	1013877	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744655.9	1013877	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744658.9	1013877	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744661.9	1013877	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744664.9	1013878	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744667.9	1013878	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744670.9	1013878	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744673.9	1013878	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744676.9	1013878	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744679.9	1013878	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744682.9	1013878	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744685.9	1013878	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744688.9	1013879	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744691.9	1013879	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744694.9	1013879	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744697.9	1013879	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744700.9	1013879	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744703.9	1013879	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744706.9	1013879	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744709.8	1013879	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744712.8	1013880	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744457.9	1013871	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744460.9	1013871	2.21	2.66	-16.92%	0033A	
9/7/1997	Sead-12	A	744463.9	1013872	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744466.9	1013872	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744469.9	1013872	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744472.9	1013872	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744475.9	1013872	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744478.9	1013872	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744481.9	1013872	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744484.9	1013873	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744487.9	1013873	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744490.9	1013873	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744493.9	1013873	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744496.9	1013873	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744499.9	1013873	2.42	2.66	-9.02%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744502.9	1013873	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744505.9	1013873	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744508.9	1013874	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744511.9	1013874	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744514.9	1013874	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744517.9	1013874	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744520.9	1013874	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744523.9	1013874	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744526.9	1013874	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744529.9	1013874	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744532.9	1013875	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744535.9	1013875	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744538.9	1013875	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744541.9	1013875	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744544.9	1013875	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744547.9	1013875	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744550.9	1013875	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744553.9	1013876	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744556.9	1013876	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744559.9	1013876	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744562.9	1013876	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744565.9	1013876	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744568.9	1013876	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744571.9	1013876	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744574.9	1013876	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744577.8	1013877	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744580.8	1013877	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744583.8	1013877	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744586.8	1013877	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744589.8	1013877	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744592.8	1013877	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744595.8	1013877	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744598.8	1013877	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744601.8	1013878	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744604.8	1013878	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744607.8	1013878	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744610.8	1013878	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744613.8	1013878	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744616.8	1013878	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744619.8	1013878	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744622.8	1013879	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744825.8	1013879	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744628.8	1013879	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744631.8	1013879	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744634.8	1013879	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744637.8	1013879	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744640.8	1013879	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744643.8	1013879	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744646.8	1013880	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744649.8	1013880	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744652.8	1013880	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744655.8	1013880	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744658.8	1013880	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744661.8	1013880	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744664.8	1013880	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744667.8	1013881	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744670.8	1013881	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744673.8	1013881	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744676.8	1013881	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744679.8	1013881	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744682.8	1013881	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744685.8	1013881	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744688.8	1013881	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744691.8	1013882	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744694.8	1013882	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744697.8	1013882	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744700.8	1013882	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744703.8	1013882	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744706.8	1013882	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744709.7	1013882	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744457.8	1013874	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744460.8	1013874	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744463.8	1013874	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744466.8	1013875	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744469.8	1013875	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744472.8	1013875	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744475.8	1013875	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744478.8	1013875	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744481.8	1013875	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744484.8	1013875	2.5	2.66	-6.02%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744487.8	1013876	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744490.8	1013876	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744493.8	1013876	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744496.8	1013876	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744499.8	1013876	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744502.8	1013876	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744505.8	1013876	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744508.8	1013876	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744511.8	1013877	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744514.8	1013877	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744517.8	1013877	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744520.8	1013877	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744523.8	1013877	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744526.8	1013877	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744529.8	1013877	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744532.8	1013877	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744535.8	1013878	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744538.8	1013878	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744541.8	1013878	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744544.8	1013878	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744547.8	1013878	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744550.8	1013878	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744553.8	1013878	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744556.8	1013879	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744559.8	1013879	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744562.8	1013879	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744565.8	1013879	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744568.8	1013879	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744571.8	1013879	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744574.8	1013879	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744577.7	1013879	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744580.7	1013880	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744583.7	1013880	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744586.7	1013880	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744589.7	1013880	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744592.7	1013880	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744595.7	1013880	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744598.7	1013880	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744601.7	1013880	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744604.7	1013881	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744607.7	1013881	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744610.7	1013881	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744613.7	1013881	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744616.7	1013881	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744619.7	1013881	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744622.7	1013881	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744625.7	1013882	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744628.7	1013882	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744631.7	1013882	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744634.7	1013882	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744637.7	1013882	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744640.7	1013882	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744643.6	1013882	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744646.6	1013882	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744649.6	1013883	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744652.6	1013883	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744655.6	1013883	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744658.6	1013883	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744661.6	1013883	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744664.6	1013883	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744667.6	1013883	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744670.6	1013884	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744673.6	1013884	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744676.6	1013884	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744679.6	1013884	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744682.6	1013884	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744685.6	1013884	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744688.6	1013884	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744691.6	1013884	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744694.6	1013885	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744697.6	1013885	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744700.6	1013885	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744703.6	1013885	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744706.6	1013885	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744709.6	1013885	2.15	2.66	-19.17%	0033A	
9/7/1997	Sead-12	A	744457.7	1013877	2.06	2.66	-22.56%	0033A	
9/7/1997	Sead-12	A	744460.7	1013877	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744463.7	1013877	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744466.7	1013877	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744469.7	1013878	2.56	2.66	-3.76%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744472.7	1013878	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744475.7	1013878	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744478.7	1013878	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744481.7	1013878	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744484.7	1013878	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744487.7	1013878	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744490.7	1013879	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744493.7	1013879	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744496.7	1013879	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744499.7	1013879	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744502.7	1013879	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744505.7	1013879	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744508.7	1013879	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744511.6	1013879	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744514.6	1013880	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744517.6	1013880	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744520.6	1013880	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744523.6	1013880	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744526.6	1013880	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744529.6	1013880	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744532.6	1013880	2.77	2.66	4.14%	0033A	
9/7/1997	Sead-12	A	744535.6	1013880	2.8	2.66	5.26%	0033A	
9/7/1997	Sead-12	A	744538.6	1013881	2.72	2.66	2.26%	0033A	
9/7/1997	Sead-12	A	744541.6	1013881	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744544.6	1013881	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744547.6	1013881	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744550.6	1013881	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744553.6	1013881	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744556.6	1013881	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744559.6	1013882	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744562.6	1013882	2.73	2.66	2.63%	0033A	
9/7/1997	Sead-12	A	744565.6	1013882	2.75	2.66	3.38%	0033A	
9/7/1997	Sead-12	A	744568.6	1013882	2.8	2.66	5.26%	0033A	
9/7/1997	Sead-12	A	744571.6	1013882	2.95	2.66	10.90%	0033A	
9/7/1997	Sead-12	A	744574.6	1013882	2.94	2.66	10.53%	0033A	
9/7/1997	Sead-12	A	744577.6	1013882	2.83	2.66	6.39%	0033A	
9/7/1997	Sead-12	A	744580.6	1013882	2.86	2.66	7.52%	0033A	
9/7/1997	Sead-12	A	744583.6	1013883	2.81	2.66	5.64%	0033A	
9/7/1997	Sead-12	A	744586.6	1013883	2.82	2.66	6.02%	0033A	
9/7/1997	Sead-12	A	744589.6	1013883	2.78	2.66	4.51%	0033A	
9/7/1997	Sead-12	A	744592.6	1013883	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744595.6	1013883	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744598.6	1013883	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744601.6	1013883	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744604.6	1013883	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744607.6	1013884	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744610.6	1013884	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744613.6	1013884	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744616.6	1013884	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744619.6	1013884	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744622.6	1013884	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744625.6	1013884	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744628.6	1013885	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744631.6	1013885	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744634.6	1013885	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744637.6	1013885	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744640.6	1013885	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744643.5	1013885	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744646.5	1013885	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744649.5	1013885	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744652.5	1013886	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744655.5	1013886	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744658.5	1013886	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744661.5	1013886	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744664.5	1013886	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744667.5	1013886	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744670.5	1013886	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744673.5	1013887	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744676.5	1013887	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744679.5	1013887	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744682.5	1013887	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744685.5	1013887	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744688.5	1013887	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744691.5	1013887	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744694.5	1013887	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744697.5	1013888	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744700.5	1013888	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744703.5	1013888	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744706.4	1013888	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744457.6	1013880	2	2.66	-24.81%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744460.6	1013880	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744463.6	1013880	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744466.6	1013880	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744469.6	1013880	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744472.6	1013881	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744475.6	1013881	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744478.6	1013881	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744481.6	1013881	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744484.6	1013881	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744487.6	1013881	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744490.6	1013881	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744493.6	1013882	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744496.6	1013882	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744499.6	1013882	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744502.6	1013882	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744505.6	1013882	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744508.6	1013882	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744511.5	1013882	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744514.5	1013882	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744517.5	1013883	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744520.5	1013883	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744523.5	1013883	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744526.5	1013883	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744529.5	1013883	2.74	2.66	3.01%	0033A	
9/7/1997	Sead-12	A	744532.5	1013883	2.77	2.66	4.14%	0033A	
9/7/1997	Sead-12	A	744535.5	1013883	2.79	2.66	4.89%	0033A	
9/7/1997	Sead-12	A	744538.5	1013883	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744541.5	1013884	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744544.5	1013884	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744547.5	1013884	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744550.5	1013884	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744553.5	1013884	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744556.5	1013884	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744559.5	1013884	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744562.5	1013885	2.78	2.66	4.51%	0033A	
9/7/1997	Sead-12	A	744565.5	1013885	2.8	2.66	5.26%	0033A	
9/7/1997	Sead-12	A	744568.5	1013885	2.81	2.66	5.64%	0033A	
9/7/1997	Sead-12	A	744571.5	1013885	2.91	2.66	9.40%	0033A	
9/7/1997	Sead-12	A	744574.5	1013885	2.87	2.66	7.89%	0033A	
9/7/1997	Sead-12	A	744577.4	1013885	2.84	2.66	6.77%	0033A	
9/7/1997	Sead-12	A	744580.4	1013885	2.85	2.66	7.14%	0033A	
9/7/1997	Sead-12	A	744583.4	1013885	2.82	2.66	6.02%	0033A	
9/7/1997	Sead-12	A	744586.4	1013886	2.83	2.66	6.39%	0033A	
9/7/1997	Sead-12	A	744589.4	1013886	2.76	2.66	3.76%	0033A	
9/7/1997	Sead-12	A	744592.4	1013886	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744595.4	1013886	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744598.4	1013886	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744601.4	1013886	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744604.4	1013886	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744607.4	1013886	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744610.4	1013887	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744613.4	1013887	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744616.4	1013887	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744619.4	1013887	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744622.4	1013887	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744625.4	1013887	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744628.4	1013887	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744631.4	1013888	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744634.4	1013888	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744637.4	1013888	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744640.4	1013888	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744643.4	1013888	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744646.4	1013888	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744649.4	1013888	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744652.4	1013888	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744655.4	1013889	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744658.4	1013889	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744661.4	1013889	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744664.4	1013889	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744667.4	1013889	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744670.4	1013889	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744673.4	1013889	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744676.4	1013890	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744679.4	1013890	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744682.4	1013890	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744685.4	1013890	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744688.4	1013890	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744691.4	1013890	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744694.4	1013890	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744697.4	1013890	2.32	2.66	-12.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27 Easting	NAD-27 Northing	Value (kcpm)	Background (kcpm)	% +/- BKG	Instrument (s/n)	Comments
9/7/1997	Sead-12	A	744700.4	1013891	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744703.4	1013891	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744706.3	1013891	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744709.3	1013891	2.06	2.66	-22.56%	0033A	
9/7/1997	Sead-12	A	744457.4	1013883	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744460.4	1013883	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744463.4	1013883	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744466.4	1013883	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744469.4	1013883	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744472.4	1013883	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744475.4	1013884	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744478.4	1013884	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744481.4	1013884	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744484.4	1013884	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744487.4	1013884	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744490.4	1013884	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744493.4	1013884	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744496.4	1013885	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744499.4	1013885	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744502.4	1013885	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744505.4	1013885	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744508.4	1013885	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744511.4	1013885	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744514.4	1013885	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744517.4	1013885	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744520.4	1013886	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744523.4	1013886	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744526.4	1013886	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744529.4	1013886	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744532.4	1013886	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744535.4	1013886	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744538.4	1013886	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744541.4	1013886	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744544.4	1013887	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744547.4	1013887	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744550.4	1013887	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744553.4	1013887	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744556.4	1013887	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744559.4	1013887	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744562.4	1013887	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744565.4	1013888	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744568.4	1013888	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744571.4	1013888	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744574.3	1013888	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744577.3	1013888	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744580.3	1013888	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744583.3	1013888	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744586.3	1013888	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744589.3	1013889	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744592.3	1013889	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744595.3	1013889	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744598.3	1013889	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744601.3	1013889	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744604.3	1013889	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744607.3	1013889	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744610.3	1013889	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744613.3	1013890	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744616.3	1013890	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744619.3	1013890	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744622.3	1013890	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744625.3	1013890	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744628.3	1013890	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744631.3	1013890	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744634.3	1013891	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744637.3	1013891	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744640.3	1013891	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744643.3	1013891	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744646.3	1013891	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744649.3	1013891	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744652.3	1013891	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744655.3	1013891	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744658.3	1013892	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744661.3	1013892	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744664.3	1013892	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744667.3	1013892	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744670.3	1013892	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744673.3	1013892	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744676.3	1013892	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744679.3	1013893	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744682.3	1013893	2.28	2.66	-14.29%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744685.3	1013893	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744688.3	1013893	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744691.3	1013893	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744694.3	1013893	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744697.3	1013893	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744700.3	1013893	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744703.3	1013894	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744706.2	1013894	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744457.3	1013886	2.09	2.66	-21.43%	0033A	
9/7/1997	Sead-12	A	744460.3	1013886	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744463.3	1013886	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744466.3	1013886	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744469.3	1013886	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744472.3	1013886	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744475.3	1013886	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744478.3	1013887	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744481.3	1013887	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744484.3	1013887	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744487.3	1013887	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744490.3	1013887	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744493.3	1013887	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744496.3	1013887	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744499.3	1013888	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744502.3	1013888	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744505.3	1013888	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744508.3	1013888	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744511.3	1013888	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744514.3	1013888	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744517.3	1013888	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744520.3	1013888	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744523.3	1013889	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744526.3	1013889	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744529.3	1013889	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744532.3	1013889	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744535.3	1013889	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744538.3	1013889	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744541.3	1013889	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744544.3	1013889	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744547.3	1013890	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744550.3	1013890	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744553.3	1013890	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744556.3	1013890	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744559.3	1013890	2.48	2.68	-6.77%	0033A	
9/7/1997	Sead-12	A	744562.3	1013890	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744565.3	1013890	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744568.3	1013891	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744571.3	1013891	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744574.2	1013891	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744577.2	1013891	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744580.2	1013891	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744583.2	1013891	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744586.2	1013891	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744589.2	1013891	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744592.2	1013892	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744595.2	1013892	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744598.2	1013892	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744601.2	1013892	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744604.2	1013892	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744607.2	1013892	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744610.2	1013892	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744613.2	1013892	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744616.2	1013893	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744619.2	1013893	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744622.2	1013893	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744625.2	1013893	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744628.2	1013893	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744631.2	1013893	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744634.2	1013893	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744637.2	1013894	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744640.1	1013894	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744643.1	1013894	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744646.1	1013894	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744649.1	1013894	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744652.1	1013894	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744655.1	1013894	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744658.1	1013894	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744661.1	1013895	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744664.1	1013895	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744667.1	1013895	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744670.1	1013895	2.43	2.66	-8.65%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/7/1997	Sead-12	A	744673.1	1013895	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744676.1	1013895	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744679.1	1013895	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744682.1	1013896	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744685.1	1013896	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744688.1	1013896	2.15	2.66	-19.17%	0033A	
9/7/1997	Sead-12	A	744691.1	1013896	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744694.1	1013896	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744697.1	1013896	2.12	2.66	-20.30%	0033A	
9/7/1997	Sead-12	A	744700.1	1013896	2.15	2.66	-19.17%	0033A	
9/7/1997	Sead-12	A	744703.1	1013896	2.17	2.66	-18.42%	0033A	
9/7/1997	Sead-12	A	744706.1	1013897	2.09	2.66	-21.43%	0033A	
9/7/1997	Sead-12	A	744709.1	1013897	2.08	2.66	-21.80%	0033A	
9/7/1997	Sead-12	A	744457.2	1013889	2	2.66	-24.81%	0033A	
9/7/1997	Sead-12	A	744460.2	1013889	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744463.2	1013889	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744466.2	1013889	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744469.2	1013889	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744472.2	1013889	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744475.2	1013889	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744478.2	1013889	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744481.2	1013890	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744484.2	1013890	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744487.2	1013890	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744490.2	1013890	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744493.2	1013890	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744496.2	1013890	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744499.2	1013890	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744502.2	1013891	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744505.2	1013891	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744508.1	1013891	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744511.1	1013891	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744514.1	1013891	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744517.1	1013891	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744520.1	1013891	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744523.1	1013891	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744526.1	1013892	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744529.1	1013892	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744532.1	1013892	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744535.1	1013892	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744538.1	1013892	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744541.1	1013892	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744544.1	1013892	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744547.1	1013892	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744550.1	1013893	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744553.1	1013893	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744556.1	1013893	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744559.1	1013893	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744562.1	1013893	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744565.1	1013893	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744568.1	1013893	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744571.1	1013894	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744574.1	1013894	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744577.1	1013894	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744580.1	1013894	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744583.1	1013894	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744586.1	1013894	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744589.1	1013894	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744592.1	1013894	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744595.1	1013895	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744598.1	1013895	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744601.1	1013895	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744604.1	1013895	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744607.1	1013895	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744610.1	1013895	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744613.1	1013895	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744616.1	1013895	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744619.1	1013896	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744622.1	1013896	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744625.1	1013896	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744628.1	1013896	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744631.1	1013896	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744634.1	1013896	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744637.1	1013896	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744640	1013897	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744643	1013897	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744646	1013897	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744649	1013897	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744652	1013897	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744655	1013897	2.27	2.66	-14.66%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744658	1013897	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744661	1013897	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744664	1013898	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744667	1013898	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744670	1013898	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744673	1013898	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744676	1013898	2.06	2.66	-22.56%	0033A	
9/7/1997	Sead-12	A	744679	1013898	2.02	2.66	-24.06%	0033A	
9/7/1997	Sead-12	A	744682	1013898	2.02	2.66	-24.06%	0033A	
9/7/1997	Sead-12	A	744685	1013899	2	2.66	-24.81%	0033A	
9/7/1997	Sead-12	A	744688	1013899	1.96	2.66	-26.32%	0033A	
9/7/1997	Sead-12	A	744691	1013899	1.78	2.66	-33.08%	0033A	
9/7/1997	Sead-12	A	744694	1013899	1.8	2.66	-32.33%	0033A	
9/7/1997	Sead-12	A	744697	1013899	1.75	2.66	-34.21%	0033A	
9/7/1997	Sead-12	A	744700	1013899	1.84	2.66	-30.83%	0033A	
9/7/1997	Sead-12	A	744703	1013899	1.82	2.66	-31.58%	0033A	
9/7/1997	Sead-12	A	744705.9	1013899	1.81	2.66	-31.95%	0033A	
9/7/1997	Sead-12	A	744708.9	1013900	1.83	2.66	-31.20%	0033A	
9/7/1997	Sead-12	A	744457.1	1013891	2.01	2.66	-24.44%	0033A	
9/7/1997	Sead-12	A	744460.1	1013892	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744463.1	1013892	2.16	2.66	-18.80%	0033A	
9/7/1997	Sead-12	A	744466.1	1013892	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744469.1	1013892	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744472.1	1013892	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744475.1	1013892	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744478.1	1013892	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744481.1	1013892	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744484.1	1013893	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744487.1	1013893	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744490.1	1013893	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744493.1	1013893	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744496.1	1013893	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744499.1	1013893	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744502.1	1013893	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744505.1	1013893	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744508	1013894	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744511	1013894	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744514	1013894	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744517	1013894	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744520	1013894	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744523	1013894	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744526	1013894	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744529	1013895	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744532	1013895	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744535	1013895	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744538	1013895	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744541	1013895	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744544	1013895	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744547	1013895	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744550	1013895	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744553	1013896	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744556	1013896	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744559	1013896	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744562	1013896	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744565	1013896	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744568	1013896	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744571	1013896	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744573.9	1013897	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744576.9	1013897	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744579.9	1013897	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744582.9	1013897	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744585.9	1013897	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744588.9	1013897	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744591.9	1013897	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744594.9	1013897	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744597.9	1013898	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744600.9	1013898	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744603.9	1013898	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744606.9	1013898	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744609.9	1013898	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744612.9	1013898	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744615.9	1013898	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744618.9	1013898	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744621.9	1013899	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744624.9	1013899	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744627.9	1013899	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744630.9	1013899	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744633.9	1013899	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744636.9	1013899	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744639.9	1013899	2.47	2.66	-7.14%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744642.9	1013900	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744645.9	1013900	2.26	2.66	-15.04%	0033A	
9/7/1997	Sead-12	A	744648.9	1013900	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744651.9	1013900	2.19	2.66	-17.67%	0033A	
9/7/1997	Sead-12	A	744654.9	1013900	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744657.9	1013900	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744660.9	1013900	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744663.9	1013900	2.23	2.66	-16.17%	0033A	
9/7/1997	Sead-12	A	744666.9	1013901	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744669.9	1013901	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744672.9	1013901	2.1	2.66	-21.05%	0033A	
9/7/1997	Sead-12	A	744675.9	1013901	2.08	2.66	-21.80%	0033A	
9/7/1997	Sead-12	A	744678.9	1013901	2.02	2.66	-24.06%	0033A	
9/7/1997	Sead-12	A	744681.9	1013901	2	2.66	-24.81%	0033A	
9/7/1997	Sead-12	A	744684.9	1013901	1.98	2.66	-25.56%	0033A	
9/7/1997	Sead-12	A	744687.9	1013902	1.95	2.66	-26.69%	0033A	
9/7/1997	Sead-12	A	744690.9	1013902	1.76	2.66	-33.83%	0033A	
9/7/1997	Sead-12	A	744693.9	1013902	1.75	2.66	-34.21%	0033A	
9/7/1997	Sead-12	A	744696.9	1013902	1.8	2.66	-32.33%	0033A	
9/7/1997	Sead-12	A	744699.9	1013902	1.84	2.66	-30.83%	0033A	
9/7/1997	Sead-12	A	744702.8	1013902	1.81	2.66	-31.95%	0033A	
9/7/1997	Sead-12	A	744705.8	1013902	1.82	2.66	-31.58%	0033A	
9/7/1997	Sead-12	A	744708.8	1013902	1.8	2.66	-32.33%	0033A	
9/7/1997	Sead-12	A	744456.9	1013894	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744459.9	1013894	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744462.9	1013895	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744465.9	1013895	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744468.9	1013895	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744471.9	1013895	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744474.9	1013895	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744477.9	1013895	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744480.9	1013895	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744483.9	1013895	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744486.9	1013896	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744489.9	1013896	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744492.9	1013896	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744495.9	1013896	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744498.9	1013896	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744501.9	1013896	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744504.9	1013896	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744507.9	1013896	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744510.9	1013897	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744513.9	1013897	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744516.9	1013897	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744519.9	1013897	2.73	2.66	2.63%	0033A	
9/7/1997	Sead-12	A	744522.9	1013897	2.74	2.66	3.01%	0033A	
9/7/1997	Sead-12	A	744525.9	1013897	2.75	2.66	3.38%	0033A	
9/7/1997	Sead-12	A	744528.9	1013897	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744531.9	1013898	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744534.9	1013898	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744537.9	1013898	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744540.9	1013898	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744543.9	1013898	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744546.9	1013898	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744549.9	1013898	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744552.9	1013898	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744555.9	1013899	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744558.9	1013899	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744561.9	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744564.9	1013899	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744567.9	1013899	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744570.9	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744573.8	1013899	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744576.8	1013900	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744579.8	1013900	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744582.8	1013900	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744585.8	1013900	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744588.8	1013900	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744591.8	1013900	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744594.8	1013900	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744597.8	1013900	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744600.8	1013901	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744603.8	1013901	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744606.8	1013901	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744609.8	1013901	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744612.8	1013901	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744615.8	1013901	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744618.8	1013901	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744621.8	1013901	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744624.8	1013902	2.56	2.66	-3.76%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744627.8	1013902	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744630.8	1013902	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744633.8	1013902	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744636.8	1013902	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744639.8	1013902	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744642.8	1013902	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744645.8	1013903	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744648.8	1013903	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744651.8	1013903	2	2.66	-24.81%	0033A	
9/7/1997	Sead-12	A	744654.8	1013903	2.04	2.66	-23.31%	0033A	
9/7/1997	Sead-12	A	744657.8	1013903	2.04	2.66	-23.31%	0033A	
9/7/1997	Sead-12	A	744660.8	1013903	2.07	2.66	-22.18%	0033A	
9/7/1997	Sead-12	A	744663.8	1013903	2.05	2.66	-22.93%	0033A	
9/7/1997	Sead-12	A	744666.8	1013903	2.01	2.66	-24.44%	0033A	
9/7/1997	Sead-12	A	744669.8	1013904	1.98	2.66	-25.56%	0033A	
9/7/1997	Sead-12	A	744672.8	1013904	1.99	2.66	-25.19%	0033A	
9/7/1997	Sead-12	A	744675.8	1013904	1.98	2.66	-25.56%	0033A	
9/7/1997	Sead-12	A	744678.8	1013904	1.96	2.66	-26.32%	0033A	
9/7/1997	Sead-12	A	744681.8	1013904	1.96	2.66	-26.32%	0033A	
9/7/1997	Sead-12	A	744684.8	1013904	1.96	2.66	-26.32%	0033A	
9/7/1997	Sead-12	A	744687.8	1013904	1.96	2.66	-26.32%	0033A	
9/7/1997	Sead-12	A	744690.8	1013905	1.9	2.66	-28.57%	0033A	
9/7/1997	Sead-12	A	744693.8	1013905	1.9	2.66	-28.57%	0033A	
9/7/1997	Sead-12	A	744696.8	1013905	1.91	2.66	-28.20%	0033A	
9/7/1997	Sead-12	A	744456.8	1013897	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744459.8	1013897	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744462.8	1013897	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744465.8	1013898	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744468.8	1013898	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744471.8	1013898	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744474.8	1013898	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744477.8	1013898	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744480.8	1013898	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744483.8	1013898	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744486.8	1013898	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744489.8	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744492.8	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744495.8	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744498.8	1013899	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744501.8	1013899	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744504.8	1013899	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744507.8	1013899	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744510.8	1013899	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744513.8	1013900	2.74	2.66	3.01%	0033A	
9/7/1997	Sead-12	A	744516.8	1013900	2.76	2.66	3.76%	0033A	
9/7/1997	Sead-12	A	744519.8	1013900	2.74	2.66	3.01%	0033A	
9/7/1997	Sead-12	A	744522.8	1013900	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744525.8	1013900	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744528.8	1013900	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744531.8	1013900	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744534.8	1013901	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744537.8	1013901	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744540.8	1013901	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744543.8	1013901	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744546.8	1013901	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744549.8	1013901	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744552.8	1013901	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744555.8	1013901	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744558.8	1013902	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744561.8	1013902	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744564.8	1013902	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744567.8	1013902	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744570.7	1013902	2.71	2.66	1.88%	0033A	
9/7/1997	Sead-12	A	744573.7	1013902	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744576.7	1013902	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744579.7	1013903	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744582.7	1013903	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744585.7	1013903	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744588.7	1013903	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744591.7	1013903	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744594.7	1013903	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744597.7	1013903	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744600.7	1013903	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744603.7	1013904	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744606.7	1013904	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744609.7	1013904	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744612.7	1013904	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744615.7	1013904	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744618.7	1013904	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744621.7	1013904	2.55	2.66	-4.14%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744624.7	1013904	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744627.7	1013905	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744630.7	1013905	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744633.7	1013905	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744636.6	1013905	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744639.6	1013905	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744642.6	1013905	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744645.6	1013905	2.96	2.66	11.28%	0033A	
9/7/1997	Sead-12	A	744648.6	1013906	1.87	2.66	-29.70%	0033A	
9/7/1997	Sead-12	A	744651.6	1013906	1.89	2.66	-28.95%	0033A	
9/7/1997	Sead-12	A	744654.6	1013906	1.87	2.66	-29.70%	0033A	
9/7/1997	Sead-12	A	744657.6	1013906	1.83	2.66	-31.20%	0033A	
9/7/1997	Sead-12	A	744660.6	1013906	1.83	2.66	-31.20%	0033A	
9/7/1997	Sead-12	A	744663.6	1013906	1.84	2.66	-30.83%	0033A	
9/7/1997	Sead-12	A	744666.6	1013906	1.81	2.66	-31.95%	0033A	
9/7/1997	Sead-12	A	744669.6	1013906	1.77	2.66	-33.46%	0033A	
9/7/1997	Sead-12	A	744672.6	1013907	1.83	2.66	-31.20%	0033A	
9/7/1997	Sead-12	A	744675.6	1013907	1.88	2.66	-29.32%	0033A	
9/7/1997	Sead-12	A	744678.6	1013907	1.87	2.66	-29.70%	0033A	
9/7/1997	Sead-12	A	744681.6	1013907	1.86	2.66	-30.08%	0033A	
9/7/1997	Sead-12	A	744684.6	1013907	1.87	2.66	-29.70%	0033A	
9/7/1997	Sead-12	A	744687.6	1013907	1.89	2.66	-28.95%	0033A	
9/7/1997	Sead-12	A	744459.7	1013900	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744462.7	1013900	2.2	2.66	-17.29%	0033A	
9/7/1997	Sead-12	A	744465.7	1013900	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744468.7	1013901	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744471.7	1013901	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744474.7	1013901	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744477.7	1013901	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744480.7	1013901	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744483.7	1013901	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744486.7	1013901	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744489.7	1013901	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744492.7	1013902	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744495.7	1013902	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744498.7	1013902	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744501.7	1013902	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744504.6	1013902	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744507.6	1013902	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744510.6	1013902	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744513.6	1013902	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744516.6	1013903	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744519.6	1013903	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744522.6	1013903	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744525.6	1013903	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744528.6	1013903	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744531.6	1013903	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744534.6	1013903	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744537.6	1013904	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744540.6	1013904	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744543.6	1013904	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744546.6	1013904	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744549.6	1013904	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744552.6	1013904	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744555.6	1013904	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744558.6	1013904	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744561.6	1013905	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744564.6	1013905	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744567.6	1013905	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744570.6	1013905	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744573.6	1013905	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744576.6	1013905	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744579.6	1013905	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744582.6	1013906	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744585.6	1013906	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744588.6	1013906	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744591.6	1013906	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744594.6	1013906	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744597.6	1013906	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744600.6	1013906	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744603.6	1013906	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744606.6	1013907	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744609.6	1013907	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744612.6	1013907	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744615.6	1013907	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744618.6	1013907	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744621.6	1013907	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744624.6	1013907	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744627.6	1013907	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744630.6	1013908	2.5	2.66	-6.02%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744633.6	1013908	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744636.5	1013908	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744639.5	1013908	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744642.5	1013908	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744645.5	1013908	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744462.6	1013903	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744465.6	1013903	2.25	2.66	-15.41%	0033A	
9/7/1997	Sead-12	A	744468.6	1013903	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744471.6	1013904	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744474.6	1013904	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744477.6	1013904	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744480.6	1013904	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744483.6	1013904	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744486.6	1013904	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744489.6	1013904	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744492.6	1013904	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744495.6	1013905	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744498.6	1013905	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744501.6	1013905	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744504.5	1013905	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744507.5	1013905	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744510.5	1013905	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744513.5	1013905	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744516.5	1013905	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744519.5	1013906	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744522.5	1013906	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744525.5	1013906	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744528.5	1013906	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744531.5	1013906	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744534.5	1013906	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744537.5	1013906	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744540.5	1013907	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744543.5	1013907	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744546.5	1013907	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744549.5	1013907	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744552.5	1013907	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744555.5	1013907	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744558.5	1013907	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744561.5	1013907	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744564.5	1013908	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744567.5	1013908	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744570.4	1013908	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744573.4	1013908	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744576.4	1013908	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744579.4	1013908	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744582.4	1013908	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744585.4	1013909	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744588.4	1013909	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744591.4	1013909	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744594.4	1013909	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744597.4	1013909	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744600.4	1013909	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744603.4	1013909	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744606.4	1013909	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744609.4	1013910	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744612.4	1013910	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744615.4	1013910	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744618.4	1013910	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744621.4	1013910	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744624.4	1013910	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744627.4	1013910	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744630.4	1013910	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744633.4	1013911	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744636.4	1013911	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744639.4	1013911	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744642.4	1013911	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744645.4	1013911	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744471.4	1013906	1.81	2.66	-31.95%	0033A	
9/7/1997	Sead-12	A	744474.4	1013907	1.95	2.66	-26.69%	0033A	
9/7/1997	Sead-12	A	744477.4	1013907	2	2.66	-24.81%	0033A	
9/7/1997	Sead-12	A	744480.4	1013907	2.04	2.66	-23.31%	0033A	
9/7/1997	Sead-12	A	744483.4	1013907	2.11	2.66	-20.68%	0033A	
9/7/1997	Sead-12	A	744486.4	1013907	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744489.4	1013907	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744492.4	1013907	2.15	2.66	-19.17%	0033A	
9/7/1997	Sead-12	A	744495.4	1013907	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744498.4	1013908	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744501.4	1013908	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744504.4	1013908	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744507.4	1013908	2.38	2.66	-10.53%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744510.4	1013908	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744513.4	1013908	2.31	2.66	-13.16%	0033A	
9/7/1997	Sead-12	A	744516.4	1013908	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744519.4	1013908	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744522.4	1013909	2.24	2.66	-15.79%	0033A	
9/7/1997	Sead-12	A	744525.4	1013909	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744528.4	1013909	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744531.4	1013909	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744534.4	1013909	2.37	2.66	-10.90%	0033A	
9/7/1997	Sead-12	A	744537.4	1013909	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744540.4	1013909	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744543.4	1013910	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744546.4	1013910	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744549.4	1013910	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744552.4	1013910	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744555.4	1013910	2.71	2.66	1.88%	0033A	
9/7/1997	Sead-12	A	744558.4	1013910	2.74	2.66	3.01%	0033A	
9/7/1997	Sead-12	A	744561.4	1013910	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744564.4	1013910	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744567.4	1013911	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744570.3	1013911	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744573.3	1013911	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744576.3	1013911	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744579.3	1013911	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744582.3	1013911	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744585.3	1013911	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744588.3	1013912	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744591.3	1013912	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744594.3	1013912	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744597.3	1013912	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744600.3	1013912	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744603.3	1013912	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744606.3	1013912	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744609.3	1013912	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744612.3	1013913	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744615.3	1013913	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744618.3	1013913	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744621.3	1013913	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744624.3	1013913	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744627.3	1013913	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744630.3	1013913	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744633.3	1013913	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744636.3	1013914	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744639.3	1013914	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744642.3	1013914	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744645.3	1013914	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744477.3	1013910	1.92	2.66	-27.82%	0033A	
9/7/1997	Sead-12	A	744480.3	1013910	1.97	2.66	-25.94%	0033A	
9/7/1997	Sead-12	A	744483.3	1013910	2.02	2.66	-24.06%	0033A	
9/7/1997	Sead-12	A	744486.3	1013910	2.08	2.66	-21.80%	0033A	
9/7/1997	Sead-12	A	744489.3	1013910	2.13	2.66	-19.92%	0033A	
9/7/1997	Sead-12	A	744492.3	1013910	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744495.3	1013910	2.14	2.66	-19.55%	0033A	
9/7/1997	Sead-12	A	744498.3	1013910	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744501.3	1013911	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744504.3	1013911	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744507.3	1013911	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744510.3	1013911	2.22	2.66	-16.54%	0033A	
9/7/1997	Sead-12	A	744513.3	1013911	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744516.3	1013911	2.18	2.66	-18.05%	0033A	
9/7/1997	Sead-12	A	744519.3	1013911	2.21	2.66	-16.92%	0033A	
9/7/1997	Sead-12	A	744522.3	1013911	2.32	2.66	-12.78%	0033A	
9/7/1997	Sead-12	A	744525.3	1013912	2.28	2.66	-14.29%	0033A	
9/7/1997	Sead-12	A	744528.3	1013912	2.41	2.66	-9.40%	0033A	
9/7/1997	Sead-12	A	744531.3	1013912	2.4	2.66	-9.77%	0033A	
9/7/1997	Sead-12	A	744534.3	1013912	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744537.3	1013912	2.42	2.66	-9.02%	0033A	
9/7/1997	Sead-12	A	744540.3	1013912	2.44	2.66	-8.27%	0033A	
9/7/1997	Sead-12	A	744543.3	1013912	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744546.3	1013913	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744549.3	1013913	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744552.3	1013913	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744555.3	1013913	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744558.3	1013913	2.72	2.66	2.26%	0033A	
9/7/1997	Sead-12	A	744561.3	1013913	2.71	2.66	1.88%	0033A	
9/7/1997	Sead-12	A	744564.3	1013913	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744567.3	1013913	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744570.2	1013914	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744573.2	1013914	2.66	2.66	0.00%	0033A	
9/7/1997	Sead-12	A	744576.2	1013914	2.68	2.66	0.75%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744579.2	1013914	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744582.2	1013914	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744585.2	1013914	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744588.2	1013914	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744591.2	1013915	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744594.2	1013915	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744597.2	1013915	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744600.2	1013915	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744603.2	1013915	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744606.2	1013915	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744609.2	1013915	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744612.2	1013915	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744615.2	1013916	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744618.2	1013916	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744621.2	1013916	2.54	2.66	-4.51%	0033A	
9/7/1997	Sead-12	A	744624.2	1013916	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744627.2	1013916	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744630.2	1013916	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744633.1	1013916	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744636.1	1013916	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744639.1	1013917	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744642.1	1013917	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744645.1	1013917	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744525.1	1013914	2.33	2.66	-12.41%	0033A	
9/7/1997	Sead-12	A	744528.1	1013914	2.29	2.66	-13.91%	0033A	
9/7/1997	Sead-12	A	744531.1	1013914	2.3	2.66	-13.53%	0033A	
9/7/1997	Sead-12	A	744534.1	1013914	2.36	2.66	-11.28%	0033A	
9/7/1997	Sead-12	A	744537.1	1013914	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744540.1	1013914	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744543.1	1013914	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744546.1	1013915	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744549.1	1013915	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744552.1	1013915	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744555.1	1013915	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744559.1	1013915	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744561.1	1013915	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744564.1	1013915	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744567.1	1013916	2.65	2.66	-0.38%	0033A	
9/7/1997	Sead-12	A	744570.1	1013916	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744573.1	1013916	2.69	2.66	1.13%	0033A	
9/7/1997	Sead-12	A	744576.1	1013916	2.7	2.66	1.50%	0033A	
9/7/1997	Sead-12	A	744579.1	1013916	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744582.1	1013916	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744585.1	1013916	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744588.1	1013916	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744591.1	1013917	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744594.1	1013917	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744597.1	1013917	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744581.1	1013917	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744603.1	1013917	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744606.1	1013917	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744609.1	1013917	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744612.1	1013918	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744615.1	1013918	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744618.1	1013918	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744621.1	1013918	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744624.1	1013918	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744627.1	1013918	2.45	2.66	-7.89%	0033A	
9/7/1997	Sead-12	A	744630.1	1013918	2.51	2.66	-5.64%	0033A	
9/7/1997	Sead-12	A	744633.1	1013918	2.53	2.66	-4.89%	0033A	
9/7/1997	Sead-12	A	744636.1	1013919	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744639.1	1013919	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744642.1	1013919	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744645.1	1013919	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744528	1013917	2.27	2.66	-14.66%	0033A	
9/7/1997	Sead-12	A	744531	1013917	2.34	2.66	-12.03%	0033A	
9/7/1997	Sead-12	A	744534	1013917	2.39	2.66	-10.15%	0033A	
9/7/1997	Sead-12	A	744537	1013917	2.35	2.66	-11.65%	0033A	
9/7/1997	Sead-12	A	744540	1013917	2.38	2.66	-10.53%	0033A	
9/7/1997	Sead-12	A	744543	1013917	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744546	1013917	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744549	1013917	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744552	1013918	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744555	1013918	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744558	1013918	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744561	1013918	2.56	2.66	-3.76%	0033A	
9/7/1997	Sead-12	A	744564	1013918	2.59	2.66	-2.63%	0033A	
9/7/1997	Sead-12	A	744567	1013918	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744570	1013918	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744573	1013919	2.58	2.66	-3.01%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/7/1997	Sead-12	A	744576	1013919	2.68	2.66	0.75%	0033A	
9/7/1997	Sead-12	A	744579	1013919	2.67	2.66	0.38%	0033A	
9/7/1997	Sead-12	A	744582.9	1013919	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744585.9	1013919	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744588.9	1013919	2.64	2.66	-0.75%	0033A	
9/7/1997	Sead-12	A	744591.9	1013919	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744594.9	1013919	2.6	2.66	-2.26%	0033A	
9/7/1997	Sead-12	A	744597.9	1013920	2.63	2.66	-1.13%	0033A	
9/7/1997	Sead-12	A	744599.9	1013920	2.61	2.66	-1.88%	0033A	
9/7/1997	Sead-12	A	744602.9	1013920	2.62	2.66	-1.50%	0033A	
9/7/1997	Sead-12	A	744605.9	1013920	2.55	2.66	-4.14%	0033A	
9/7/1997	Sead-12	A	744608.9	1013920	2.57	2.66	-3.38%	0033A	
9/7/1997	Sead-12	A	744611.9	1013920	2.58	2.66	-3.01%	0033A	
9/7/1997	Sead-12	A	744614.9	1013920	2.5	2.66	-6.02%	0033A	
9/7/1997	Sead-12	A	744617.9	1013921	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744620.9	1013921	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744623.9	1013921	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744626.9	1013921	2.43	2.66	-8.65%	0033A	
9/7/1997	Sead-12	A	744629.9	1013921	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744632.9	1013921	2.52	2.66	-5.26%	0033A	
9/7/1997	Sead-12	A	744635.9	1013921	2.48	2.66	-6.77%	0033A	
9/7/1997	Sead-12	A	744638.9	1013921	2.47	2.66	-7.14%	0033A	
9/7/1997	Sead-12	A	744641.9	1013922	2.49	2.66	-6.39%	0033A	
9/7/1997	Sead-12	A	744644.9	1013922	2.46	2.66	-7.52%	0033A	
9/7/1997	Sead-12	A	744623.9	1013922	2.37	2.66	-10.90%	0033A	
9/8/1997	Sead-12	A	744524.9	1013920	2.17	2.51	-13.55%	0033A	
9/8/1997	Sead-12	A	744527.9	1013920	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744530.9	1013921	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744533.9	1013921	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744536.9	1013921	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744539.9	1013921	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744542.9	1013921	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744545.9	1013921	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744548.9	1013921	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744551.9	1013922	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744554.9	1013922	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744557.9	1013922	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744560.8	1013922	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744563.8	1013922	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744566.8	1013922	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744569.8	1013922	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744572.8	1013922	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744575.8	1013923	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744578.8	1013923	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744581.8	1013923	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744584.8	1013923	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744587.8	1013923	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744590.8	1013923	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744593.8	1013923	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744596.8	1013924	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744599.8	1013924	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744602.8	1013924	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744605.8	1013924	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744608.8	1013924	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744611.8	1013924	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744614.8	1013924	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744617.8	1013924	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744620.8	1013925	2.21	2.51	-11.95%	0033A	
9/8/1997	Sead-12	A	744623.8	1013925	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744626.8	1013925	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744629.8	1013925	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744632.8	1013925	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744635.8	1013925	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744638.8	1013925	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744641.8	1013925	2.22	2.51	-11.55%	0033A	
9/8/1997	Sead-12	A	744644.8	1013926	2.05	2.51	-18.33%	0033A	
9/8/1997	Sead-12	A	744524.8	1013923	2.18	2.51	-13.15%	0033A	
9/8/1997	Sead-12	A	744527.8	1013923	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744530.8	1013923	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744533.8	1013924	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744536.8	1013924	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744539.8	1013924	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744542.8	1013924	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744545.8	1013924	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744548.8	1013924	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744551.8	1013924	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744554.8	1013925	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744557.8	1013925	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744580.7	1013925	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744563.7	1013925	2.42	2.51	-3.59%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744566.7	1013925	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744569.7	1013925	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744572.7	1013925	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744575.7	1013925	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744578.7	1013926	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744581.7	1013926	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744584.7	1013926	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744587.7	1013926	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744590.7	1013926	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744593.7	1013926	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744596.7	1013926	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744599.7	1013927	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744602.7	1013927	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744605.7	1013927	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744608.7	1013927	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744611.7	1013927	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744614.7	1013927	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744617.7	1013927	2.24	2.51	-10.76%	0033A	
9/8/1997	Sead-12	A	744620.7	1013927	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744623.7	1013928	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744626.6	1013928	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744629.6	1013928	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744632.6	1013928	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744635.6	1013928	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744638.6	1013928	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744641.6	1013928	2.14	2.51	-14.74%	0033A	
9/8/1997	Sead-12	A	744644.6	1013928	2.09	2.51	-16.73%	0033A	
9/8/1997	Sead-12	A	744524.6	1013926	2.17	2.51	-13.55%	0033A	
9/8/1997	Sead-12	A	744527.6	1013926	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744530.6	1013926	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744533.6	1013926	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744536.6	1013927	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744539.6	1013927	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744542.6	1013927	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744545.6	1013927	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744548.6	1013927	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744551.6	1013927	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744554.6	1013927	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744557.6	1013928	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744560.6	1013928	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744563.6	1013928	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744566.6	1013928	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744569.6	1013928	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744572.6	1013928	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744575.6	1013928	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744578.6	1013928	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744581.6	1013929	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744584.6	1013929	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744587.6	1013929	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744590.6	1013929	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744593.6	1013929	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744596.6	1013929	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744599.6	1013929	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744602.6	1013929	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744605.6	1013930	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744608.6	1013930	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744611.6	1013930	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744614.6	1013930	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744617.6	1013930	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744620.6	1013930	2.21	2.51	-11.95%	0033A	
9/8/1997	Sead-12	A	744623.6	1013930	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744626.5	1013931	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744629.5	1013931	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744632.5	1013931	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744635.5	1013931	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744638.5	1013931	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744641.5	1013931	2.22	2.51	-11.55%	0033A	
9/8/1997	Sead-12	A	744644.5	1013931	2.05	2.51	-18.33%	0033A	
9/8/1997	Sead-12	A	744524.5	1013929	2.18	2.51	-13.15%	0033A	
9/8/1997	Sead-12	A	744527.5	1013929	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744530.5	1013929	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744533.5	1013929	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744536.5	1013929	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744539.5	1013930	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744542.5	1013930	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744545.5	1013930	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744548.5	1013930	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744551.5	1013930	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744554.5	1013930	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744557.5	1013930	2.32	2.51	-7.57%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744560.4	1013931	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744563.4	1013931	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744566.4	1013931	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744569.4	1013931	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744572.4	1013931	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744575.4	1013931	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744578.4	1013931	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744581.4	1013931	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744584.4	1013932	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744587.4	1013932	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744590.4	1013932	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744593.4	1013932	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744596.4	1013932	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744599.4	1013932	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744602.4	1013932	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744605.4	1013932	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744608.4	1013933	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744611.4	1013933	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744614.4	1013933	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744617.4	1013933	2.24	2.51	-10.76%	0033A	
9/8/1997	Sead-12	A	744620.4	1013933	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744623.4	1013933	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744626.4	1013933	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744629.4	1013934	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744632.4	1013934	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744635.4	1013934	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744638.4	1013934	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744641.4	1013934	2.14	2.51	-14.74%	0033A	
9/8/1997	Sead-12	A	744644.4	1013934	2.09	2.51	-16.73%	0033A	
9/8/1997	Sead-12	A	744524.4	1013932	2.18	2.51	-13.15%	0033A	
9/8/1997	Sead-12	A	744527.4	1013932	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744530.4	1013932	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744533.4	1013932	2.25	2.51	-10.36%	0033A	
9/8/1997	Sead-12	A	744536.4	1013932	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744539.4	1013932	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744542.4	1013933	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744545.4	1013933	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744548.4	1013933	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744551.4	1013933	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744554.4	1013933	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744557.3	1013933	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744560.3	1013933	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744563.3	1013934	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744566.3	1013934	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744569.3	1013934	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744572.3	1013934	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744575.3	1013934	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744578.3	1013934	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744581.3	1013934	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744584.3	1013934	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744587.3	1013935	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744590.3	1013935	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744593.3	1013935	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744596.3	1013935	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744599.3	1013935	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744602.3	1013935	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744605.3	1013935	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744608.3	1013935	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744611.3	1013936	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744614.3	1013936	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744617.3	1013936	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744620.3	1013936	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744623.3	1013936	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744626.3	1013936	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744629.3	1013936	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744632.3	1013937	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744635.3	1013937	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744638.3	1013937	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744641.3	1013937	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744644.3	1013937	2.22	2.51	-11.55%	0033A	
9/8/1997	Sead-12	A	744524.3	1013935	2.23	2.51	-11.16%	0033A	
9/8/1997	Sead-12	A	744527.3	1013935	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744530.3	1013935	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744533.3	1013935	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744536.3	1013935	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744539.3	1013935	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744542.3	1013935	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744545.3	1013936	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744548.3	1013936	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744551.3	1013936	2.34	2.51	-6.77%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/8/1997	Sead-12	A	744554.3	1013936	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744557.2	1013936	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744560.2	1013936	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744563.2	1013936	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744566.2	1013937	2.26	2.51	-9.96%	0033A	
9/8/1997	Sead-12	A	744569.2	1013937	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744572.2	1013937	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744575.2	1013937	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744578.2	1013937	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744581.2	1013937	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744584.2	1013937	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744587.2	1013937	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744590.2	1013938	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744593.2	1013938	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744596.2	1013938	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744599.2	1013938	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744602.2	1013938	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744605.2	1013938	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744608.2	1013938	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744611.2	1013938	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744614.2	1013939	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744617.2	1013939	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744620.2	1013939	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744623.1	1013939	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744626.1	1013939	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744629.1	1013939	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744632.1	1013939	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744635.1	1013940	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744638.1	1013940	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744641.1	1013940	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744644.1	1013940	2.2	2.51	-12.35%	0033A	
9/8/1997	Sead-12	A	744524.1	1013938	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744527.1	1013938	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744530.1	1013938	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744533.1	1013938	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744536.1	1013938	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744539.1	1013938	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744542.1	1013938	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744545.1	1013938	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744548.1	1013939	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744551.1	1013939	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744554.1	1013939	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744557.1	1013939	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744560.1	1013939	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744563.1	1013939	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744566.1	1013939	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744569.1	1013940	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744572.1	1013940	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744575.1	1013940	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744578.1	1013940	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744581.1	1013940	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744584.1	1013940	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744587.1	1013940	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744590.1	1013940	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744593.1	1013941	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744596.1	1013941	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744599.1	1013941	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744602.1	1013941	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744605.1	1013941	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744608.1	1013941	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744611.1	1013941	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744614.1	1013941	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744617.1	1013942	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744620.1	1013942	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744623	1013942	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744626	1013942	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744629	1013942	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744632	1013942	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744635	1013942	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744638	1013943	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744641	1013943	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744644	1013943	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744524	1013940	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744527	1013941	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744530	1013941	2.27	2.51	-9.56%	0033A	
9/8/1997	Sead-12	A	744533	1013941	2.33	2.51	-7.17%	0033A	
9/8/1997	Sead-12	A	744536	1013941	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744539	1013941	2.31	2.51	-7.97%	0033A	
9/8/1997	Sead-12	A	744542	1013941	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744545	1013941	2.4	2.51	-4.38%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/8/1997	Sead-12	A	744548	1013941	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744551	1013942	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744554	1013942	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744556.9	1013942	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744559.9	1013942	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744562.9	1013942	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744565.9	1013942	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744568.9	1013942	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744571.9	1013943	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744574.9	1013943	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744577.9	1013943	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744580.9	1013943	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744583.9	1013943	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744586.9	1013943	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744589.9	1013943	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744592.9	1013943	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744595.9	1013944	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744598.9	1013944	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744601.9	1013944	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744604.9	1013944	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744607.9	1013944	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744610.9	1013944	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744613.9	1013944	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744616.9	1013944	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744619.9	1013945	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744622.9	1013945	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744625.9	1013945	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744628.9	1013945	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744631.9	1013945	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744634.9	1013945	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744637.9	1013945	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744640.9	1013946	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744643.9	1013946	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744523.9	1013943	2.29	2.51	-8.76%	0033A	
9/8/1997	Sead-12	A	744526.9	1013943	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744529.9	1013944	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744532.9	1013944	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744535.9	1013944	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744538.9	1013944	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744541.9	1013944	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744544.9	1013944	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744547.9	1013944	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744550.9	1013944	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744553.9	1013945	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744556.8	1013945	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744559.8	1013945	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744562.8	1013945	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744565.8	1013945	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744568.8	1013945	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744571.8	1013945	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744574.8	1013946	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744577.8	1013946	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744580.8	1013946	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744583.8	1013946	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744586.8	1013946	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744589.8	1013946	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744592.8	1013946	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744595.8	1013946	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744598.8	1013947	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744601.8	1013947	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744604.8	1013947	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744607.8	1013947	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744610.8	1013947	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744613.8	1013947	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744616.8	1013947	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744619.8	1013947	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744622.8	1013948	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744625.8	1013948	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744628.8	1013948	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744631.8	1013948	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744634.8	1013948	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744637.8	1013948	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744640.8	1013948	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744643.8	1013949	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744523.8	1013946	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744526.8	1013946	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744529.8	1013946	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744532.8	1013947	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744535.8	1013947	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744538.8	1013947	2.44	2.51	-2.79%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744541.8	1013947	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744544.8	1013947	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744547.8	1013947	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744550.8	1013947	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744553.7	1013947	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744556.7	1013948	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744559.7	1013948	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744562.7	1013948	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744565.7	1013948	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744568.7	1013948	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744571.7	1013948	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744574.7	1013948	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744577.7	1013949	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744580.7	1013949	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744583.7	1013949	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744586.7	1013949	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744589.7	1013949	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744592.7	1013949	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744595.7	1013949	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744598.7	1013949	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744601.7	1013950	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744604.7	1013950	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744607.7	1013950	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744610.7	1013950	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744613.7	1013950	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744616.7	1013950	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744619.6	1013950	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744622.6	1013950	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744625.6	1013951	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744628.6	1013951	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744631.6	1013951	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744634.6	1013951	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744637.6	1013951	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744640.6	1013951	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744643.6	1013951	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744523.6	1013949	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744526.6	1013949	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744529.6	1013949	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744532.6	1013949	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744535.6	1013950	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744538.6	1013950	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744541.6	1013950	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744544.6	1013950	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744547.6	1013950	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744550.6	1013950	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744553.6	1013950	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744556.6	1013950	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744559.6	1013951	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744562.6	1013951	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744565.6	1013951	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744568.6	1013951	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744571.6	1013951	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744574.6	1013951	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744577.6	1013951	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744580.6	1013952	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744583.6	1013952	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744586.6	1013952	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744589.6	1013952	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744592.6	1013952	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744595.6	1013952	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744598.6	1013952	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744601.6	1013952	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744604.6	1013953	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744607.6	1013953	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744610.6	1013953	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744613.6	1013953	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744616.6	1013953	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744619.5	1013953	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744622.5	1013953	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744625.5	1013953	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744628.5	1013954	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744631.5	1013954	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744634.5	1013954	2.37	2.51	-5.58%	0033A	
9/8/1997	Sead-12	A	744637.5	1013954	2.39	2.51	-4.78%	0033A	
9/8/1997	Sead-12	A	744640.5	1013954	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744643.5	1013954	2.3	2.51	-8.37%	0033A	
9/8/1997	Sead-12	A	744523.5	1013952	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744526.5	1013952	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744529.5	1013952	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744532.5	1013952	2.48	2.51	-1.20%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744535.5	1013953	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744538.5	1013953	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744541.5	1013953	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744544.5	1013953	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744547.4	1013953	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744550.4	1013953	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744553.4	1013953	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744556.4	1013953	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744559.4	1013954	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744562.4	1013954	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744565.4	1013954	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744568.4	1013954	2.32	2.51	-7.57%	0033A	
9/8/1997	Sead-12	A	744571.4	1013954	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744574.4	1013954	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744577.4	1013954	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744580.4	1013955	2.34	2.51	-6.77%	0033A	
9/8/1997	Sead-12	A	744583.4	1013955	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744586.4	1013955	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744589.4	1013955	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744592.4	1013955	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744595.4	1013955	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744598.4	1013955	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744601.4	1013955	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744604.4	1013956	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744607.4	1013956	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744610.4	1013956	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744613.4	1013956	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744616.4	1013956	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744619.4	1013956	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744622.4	1013956	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744625.4	1013956	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744628.4	1013957	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744631.4	1013957	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744634.4	1013957	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744637.4	1013957	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744640.4	1013957	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744643.4	1013957	2.28	2.51	-9.16%	0033A	
9/8/1997	Sead-12	A	744523.4	1013955	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744526.4	1013955	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744529.4	1013955	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744532.4	1013955	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744535.4	1013956	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744538.4	1013956	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744541.3	1013956	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744544.3	1013956	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744547.3	1013956	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744550.3	1013956	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744553.3	1013956	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744556.3	1013956	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744559.3	1013957	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744562.3	1013957	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744565.3	1013957	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744568.3	1013957	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744571.3	1013957	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744574.3	1013957	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744577.3	1013957	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744580.3	1013958	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744583.3	1013958	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744586.3	1013958	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744589.3	1013958	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744592.3	1013958	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744595.3	1013958	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744598.3	1013958	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744601.3	1013958	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744604.3	1013959	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744607.3	1013959	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744610.3	1013959	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744613.3	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744616.3	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744619.3	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744622.3	1013959	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744625.3	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744628.3	1013960	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744631.3	1013960	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744634.3	1013960	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744637.3	1013960	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744640.3	1013960	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744643.3	1013960	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744523.3	1013958	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744526.3	1013958	2.41	2.51	-3.98%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744529.3	1013958	2.35	2.51	-6.37%	0033A	
9/8/1997	Sead-12	A	744532.3	1013958	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744535.2	1013959	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744538.2	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744541.2	1013959	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744544.2	1013959	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744547.2	1013959	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744550.2	1013959	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744553.2	1013959	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744556.2	1013959	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744559.2	1013960	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744562.2	1013960	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744565.2	1013960	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744568.2	1013960	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744571.2	1013960	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744574.2	1013960	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744577.2	1013960	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744580.2	1013961	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744583.2	1013961	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744586.2	1013961	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744589.2	1013961	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744592.2	1013961	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744595.2	1013961	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744598.2	1013961	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744601.1	1013961	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744604.1	1013962	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744607.1	1013962	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744610.1	1013962	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744613.1	1013962	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744616.1	1013962	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744619.1	1013962	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744622.1	1013962	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744625.1	1013962	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744628.1	1013963	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744631.1	1013963	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744634.1	1013963	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744637.1	1013963	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744640.1	1013963	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744643.1	1013963	2.36	2.51	-5.98%	0033A	
9/8/1997	Sead-12	A	744523.1	1013961	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744526.1	1013961	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744529.1	1013961	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744532.1	1013961	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744535.1	1013962	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744538.1	1013962	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744541.1	1013962	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744544.1	1013962	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744547.1	1013962	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744550.1	1013962	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744553.1	1013962	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744556.1	1013962	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744559.1	1013963	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744562.1	1013963	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744565.1	1013963	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744568.1	1013963	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744571.1	1013963	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744574.1	1013963	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744577.1	1013963	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744580.1	1013964	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744583.1	1013964	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744586.1	1013964	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744589.1	1013964	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744592	1013964	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744595	1013964	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744598	1013964	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744601	1013964	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744604	1013965	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744607	1013965	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744610	1013965	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744613	1013965	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744616	1013965	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744619	1013965	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744622	1013965	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744625	1013965	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744628	1013966	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744631	1013966	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744634	1013966	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744637	1013966	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744640	1013966	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744643	1013966	2.48	2.51	-1.20%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744522.9	1013964	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744525.9	1013964	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744528.9	1013964	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744531.9	1013964	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744534.9	1013965	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744537.9	1013965	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744540.9	1013965	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744543.9	1013965	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744546.9	1013965	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744549.9	1013965	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744552.9	1013965	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744555.9	1013965	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744558.9	1013966	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744561.9	1013966	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744564.9	1013966	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744567.9	1013966	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744570.9	1013966	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744573.9	1013966	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744576.9	1013966	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744579.9	1013967	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744582.9	1013967	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744585.9	1013967	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744588.9	1013967	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744591.9	1013967	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744594.9	1013967	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744597.9	1013967	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744600.9	1013967	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744603.9	1013968	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744606.9	1013968	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744609.9	1013968	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744612.9	1013968	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744615.9	1013968	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744618.9	1013968	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744621.9	1013968	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744624.9	1013968	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744627.9	1013969	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744630.9	1013969	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744633.9	1013969	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744636.9	1013969	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744639.9	1013969	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744642.9	1013969	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744522.8	1013967	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744525.8	1013967	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744528.8	1013967	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744531.8	1013967	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744534.8	1013968	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744537.8	1013968	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744540.8	1013968	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744543.8	1013968	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744546.8	1013968	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744549.8	1013968	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744552.8	1013968	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744555.8	1013968	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744558.8	1013969	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744561.8	1013969	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744564.8	1013969	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744567.8	1013969	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744570.8	1013969	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744573.8	1013969	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744576.8	1013969	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744579.8	1013970	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744582.8	1013970	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744585.8	1013970	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744588.8	1013970	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744591.8	1013970	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744594.8	1013970	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744597.8	1013970	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744600.8	1013970	2.72	2.51	8.37%	0033A	
9/8/1997	Sead-12	A	744603.8	1013971	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744606.8	1013971	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744609.8	1013971	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744612.8	1013971	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744615.8	1013971	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744618.8	1013971	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744621.8	1013971	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744624.8	1013971	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744627.8	1013972	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744630.8	1013972	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744633.8	1013972	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744636.8	1013972	2.55	2.51	1.59%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744639.8	1013972	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744642.8	1013972	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744522.7	1013970	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744525.7	1013970	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744528.7	1013970	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744531.7	1013970	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744534.7	1013971	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744537.7	1013971	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744540.7	1013971	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744543.7	1013971	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744546.7	1013971	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744549.7	1013971	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744552.7	1013971	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744555.7	1013971	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744558.7	1013972	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744561.7	1013972	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744564.7	1013972	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744567.7	1013972	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744570.7	1013972	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744573.6	1013972	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744576.6	1013972	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744579.6	1013972	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744582.6	1013973	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744585.6	1013973	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744588.6	1013973	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744591.6	1013973	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744594.6	1013973	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744597.6	1013973	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744600.6	1013973	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744603.6	1013974	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744606.6	1013974	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744609.6	1013974	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744612.6	1013974	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744615.6	1013974	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744618.6	1013974	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744621.6	1013974	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744624.6	1013974	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744627.6	1013975	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744630.6	1013975	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744633.6	1013975	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744636.6	1013975	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744639.6	1013975	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744642.6	1013975	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744522.6	1013973	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744525.6	1013973	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744528.6	1013973	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744531.6	1013973	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744534.6	1013974	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744537.6	1013974	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744540.6	1013974	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744543.6	1013974	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744546.6	1013974	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744549.6	1013974	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744552.6	1013974	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744555.6	1013974	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744558.6	1013975	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744561.6	1013975	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744564.6	1013975	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744567.5	1013975	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744570.5	1013975	2.73	2.51	8.76%	0033A	
9/8/1997	Sead-12	A	744573.5	1013975	2.73	2.51	8.76%	0033A	
9/8/1997	Sead-12	A	744576.5	1013975	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744579.5	1013975	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744582.5	1013976	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744585.5	1013976	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744588.5	1013976	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744591.5	1013976	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744594.5	1013976	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744597.5	1013976	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744600.5	1013976	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744603.5	1013977	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744606.5	1013977	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744609.5	1013977	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744612.5	1013977	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744615.5	1013977	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744618.5	1013977	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744621.5	1013977	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744624.5	1013977	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744627.5	1013978	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744630.4	1013978	2.59	2.51	3.19%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744633.4	1013978	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744636.4	1013978	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744639.4	1013978	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744642.4	1013978	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744522.4	1013976	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744525.4	1013976	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744528.4	1013976	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744531.4	1013976	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744534.4	1013977	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744537.4	1013977	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744540.4	1013977	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744543.4	1013977	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744546.4	1013977	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744549.4	1013977	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744552.4	1013977	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744555.4	1013977	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744558.4	1013978	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744561.4	1013978	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744564.4	1013978	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744567.4	1013978	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744570.4	1013978	2.74	2.51	9.16%	0033A	
9/8/1997	Sead-12	A	744573.4	1013978	2.73	2.51	8.76%	0033A	
9/8/1997	Sead-12	A	744576.4	1013978	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744579.4	1013978	2.72	2.51	8.37%	0033A	
9/8/1997	Sead-12	A	744582.4	1013979	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744585.4	1013979	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744588.4	1013979	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744591.4	1013979	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744594.4	1013979	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744597.4	1013979	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744600.4	1013979	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744603.4	1013980	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744606.4	1013980	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744609.4	1013980	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744612.4	1013980	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744615.4	1013980	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744618.4	1013980	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744621.4	1013980	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744624.3	1013980	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744627.3	1013981	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744630.3	1013981	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744633.3	1013981	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744636.3	1013981	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744639.3	1013981	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744642.3	1013981	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744522.6	1013973	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744525.6	1013973	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744528.6	1013973	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744531.6	1013973	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744534.6	1013974	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744537.6	1013974	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744540.6	1013974	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744543.6	1013974	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744546.6	1013974	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744549.6	1013974	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744552.6	1013974	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744555.6	1013974	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744558.6	1013975	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744561.6	1013975	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744564.6	1013975	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744567.5	1013975	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744570.5	1013975	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744573.5	1013975	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744576.5	1013975	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744579.5	1013975	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744582.5	1013976	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744585.5	1013976	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744588.5	1013976	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744591.5	1013976	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744594.5	1013976	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744597.5	1013976	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744600.5	1013976	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744603.5	1013977	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744606.5	1013977	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744609.5	1013977	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744612.5	1013977	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744615.5	1013977	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744618.5	1013977	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744621.5	1013977	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744624.5	1013977	2.51	2.51	0.00%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/8/1997	Sead-12	A	744627.5	1013978	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744630.4	1013978	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744633.4	1013978	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744636.4	1013978	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744639.4	1013978	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744642.4	1013978	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744522.4	1013976	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744525.4	1013976	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744528.4	1013976	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744531.4	1013976	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744534.4	1013977	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744537.4	1013977	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744540.4	1013977	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744543.4	1013977	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744546.4	1013977	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744549.4	1013977	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744552.4	1013977	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744555.4	1013977	2.4	2.51	-4.38%	0033A	
9/8/1997	Sead-12	A	744558.4	1013978	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744561.4	1013978	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744564.4	1013978	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744567.4	1013978	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744570.4	1013978	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744573.4	1013978	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744576.4	1013978	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744579.4	1013978	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744582.4	1013979	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744585.4	1013979	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744588.4	1013979	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744591.4	1013979	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744594.4	1013979	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744597.4	1013979	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744600.4	1013979	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744603.4	1013980	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744606.4	1013980	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744609.4	1013980	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744612.4	1013980	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744615.4	1013980	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744618.4	1013980	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744621.4	1013980	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744624.3	1013980	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744627.3	1013981	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744630.3	1013981	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744633.3	1013981	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744636.3	1013981	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744639.3	1013981	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744642.3	1013981	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744522.3	1013979	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744525.3	1013979	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744528.3	1013979	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744531.3	1013979	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744534.3	1013980	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744537.3	1013980	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744540.3	1013980	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744543.3	1013980	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744546.3	1013980	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744549.3	1013980	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744552.3	1013980	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744555.3	1013980	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744558.3	1013981	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744561.3	1013981	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744564.3	1013981	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744567.3	1013981	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744570.3	1013981	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744573.3	1013981	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744576.3	1013981	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744579.3	1013981	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744582.3	1013982	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744585.3	1013982	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744588.3	1013982	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744591.3	1013982	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744594.3	1013982	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744597.3	1013982	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744600.3	1013982	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744603.3	1013983	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744606.3	1013983	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744609.3	1013983	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744612.3	1013983	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744615.3	1013983	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744618.2	1013983	2.51	2.51	0.00%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744621.2	1013983	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744624.2	1013983	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744627.2	1013984	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744630.2	1013984	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744633.2	1013984	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744636.2	1013984	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744639.2	1013984	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744642.2	1013984	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744522.2	1013982	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744525.2	1013982	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744528.2	1013982	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744531.2	1013982	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744534.2	1013983	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744537.2	1013983	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744540.2	1013983	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744543.2	1013983	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744546.1	1013983	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744549.1	1013983	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744552.1	1013983	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744555.1	1013983	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744558.1	1013984	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744561.1	1013984	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744564.1	1013984	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744567.1	1013984	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744570.1	1013984	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744573.1	1013984	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744576.1	1013984	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744579.1	1013984	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744582.1	1013985	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744585.1	1013985	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744588.1	1013985	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744591.1	1013985	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744594.1	1013985	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744597.1	1013985	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744600.1	1013985	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744603.1	1013986	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744606.1	1013986	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744609.1	1013986	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744612.1	1013986	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744615.1	1013986	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744618.1	1013986	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744621.1	1013986	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744624.1	1013986	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744627.1	1013987	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744630.1	1013987	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744633.1	1013987	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744636.1	1013987	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744639.1	1013987	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744642.1	1013987	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744522.1	1013985	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744525.1	1013985	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744528.1	1013985	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744531.1	1013985	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744534.1	1013986	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744537.1	1013986	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744540	1013986	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744543	1013986	2.72	2.51	8.37%	0033A	
9/8/1997	Sead-12	A	744546	1013986	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744549	1013986	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744552	1013986	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744555	1013986	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744558	1013987	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744561	1013987	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744564	1013987	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744567	1013987	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744570	1013987	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744573	1013987	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744576	1013987	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744579	1013987	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744582	1013988	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744585	1013988	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744588	1013988	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744591	1013988	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744594	1013988	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744597	1013988	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744600	1013988	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744603	1013989	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744605.9	1013989	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744608.9	1013989	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744611.9	1013989	2.61	2.51	3.98%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744614.9	1013989	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744617.9	1013989	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744620.9	1013989	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744623.9	1013989	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744626.9	1013990	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744629.9	1013990	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744632.9	1013990	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744635.9	1013990	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744638.9	1013990	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744641.9	1013990	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744521.9	1013988	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744524.9	1013988	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744527.9	1013988	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744530.9	1013988	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744533.9	1013989	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744536.9	1013989	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744539.9	1013989	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744542.9	1013989	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744545.9	1013989	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744548.9	1013989	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744551.9	1013989	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744554.9	1013989	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744557.9	1013990	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744560.9	1013990	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744563.9	1013990	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744566.9	1013990	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744569.9	1013990	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744572.9	1013990	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744575.9	1013990	2.7	2.51	7.57%	0033A	
9/8/1997	Sead-12	A	744578.9	1013990	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744581.9	1013991	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744584.9	1013991	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744587.9	1013991	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744590.9	1013991	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744593.9	1013991	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744596.9	1013991	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744599.8	1013991	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744602.8	1013992	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744605.8	1013992	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744608.8	1013992	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744611.8	1013992	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744614.8	1013992	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744617.8	1013992	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744620.8	1013992	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744623.8	1013992	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744626.8	1013993	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744629.8	1013993	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744632.8	1013993	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744635.8	1013993	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744638.8	1013993	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744641.8	1013993	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744521.8	1013991	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744524.8	1013991	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744527.8	1013991	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744530.8	1013991	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744533.8	1013992	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744536.8	1013992	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744539.8	1013992	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744542.8	1013992	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744545.8	1013992	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744548.8	1013992	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744551.8	1013992	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744554.8	1013992	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744557.8	1013993	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744560.8	1013993	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744563.8	1013993	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744566.8	1013993	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744569.8	1013993	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744572.8	1013993	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744575.8	1013993	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744578.8	1013993	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744581.8	1013994	2.69	2.51	7.17%	0033A	
9/8/1997	Sead-12	A	744584.8	1013994	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744587.8	1013994	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744590.7	1013994	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744593.7	1013994	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744596.7	1013994	2.66	2.51	5.98%	0033A	
9/8/1997	Sead-12	A	744599.7	1013994	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744602.7	1013995	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744605.7	1013995	2.62	2.51	4.38%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744608.7	1013995	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744611.7	1013995	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744814.7	1013995	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744617.7	1013995	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744620.7	1013995	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744623.7	1013995	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744626.7	1013996	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744629.7	1013996	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744632.7	1013996	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744635.7	1013996	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744638.7	1013996	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744641.7	1013996	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744521.6	1013994	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744524.6	1013994	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744527.6	1013994	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744530.6	1013994	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744533.6	1013995	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744536.6	1013995	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744539.6	1013995	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744542.6	1013995	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744545.6	1013995	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744548.6	1013995	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744551.6	1013995	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744554.6	1013995	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744557.6	1013996	2.72	2.51	8.37%	0033A	
9/8/1997	Sead-12	A	744560.6	1013996	2.65	2.51	5.58%	0033A	
9/8/1997	Sead-12	A	744563.6	1013996	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744566.6	1013996	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744569.6	1013996	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744572.6	1013996	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744575.6	1013996	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744578.6	1013996	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744581.6	1013997	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744584.6	1013997	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744587.6	1013997	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744590.6	1013997	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744593.6	1013997	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744598.6	1013997	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744599.6	1013997	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744602.6	1013998	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744605.6	1013998	2.64	2.51	5.18%	0033A	
9/8/1997	Sead-12	A	744608.6	1013998	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744611.6	1013998	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744614.6	1013998	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744617.6	1013998	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744620.6	1013998	2.62	2.51	4.38%	0033A	
9/8/1997	Sead-12	A	744623.6	1013998	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744626.6	1013999	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744629.6	1013999	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744632.6	1013999	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744635.6	1013999	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744638.6	1013999	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744641.6	1013999	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744521.5	1013997	2.38	2.51	-5.18%	0033A	
9/8/1997	Sead-12	A	744524.5	1013997	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744527.5	1013997	2.49	2.51	-0.80%	0033A	
9/8/1997	Sead-12	A	744530.5	1013997	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744533.5	1013998	2.42	2.51	-3.59%	0033A	
9/8/1997	Sead-12	A	744536.5	1013998	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744539.5	1013998	2.45	2.51	-2.39%	0033A	
9/8/1997	Sead-12	A	744542.5	1013998	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744545.5	1013998	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744548.5	1013998	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744551.5	1013998	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744554.5	1013998	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744557.5	1013999	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744560.5	1013999	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744563.5	1013999	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744566.5	1013999	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744569.5	1013999	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744572.5	1013999	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744575.5	1013999	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744578.4	1013999	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744581.4	1014000	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744584.4	1014000	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744587.4	1014000	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744590.4	1014000	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744593.4	1014000	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744596.4	1014000	2.67	2.51	6.37%	0033A	
9/8/1997	Sead-12	A	744599.4	1014000	2.63	2.51	4.78%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/8/1997	Sead-12	A	744602.4	1014001	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744605.4	1014001	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744608.4	1014001	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744611.4	1014001	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744614.4	1014001	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744617.4	1014001	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744620.4	1014001	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744623.4	1014001	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744626.4	1014002	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744629.4	1014002	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744632.4	1014002	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744635.4	1014002	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744638.4	1014002	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744641.4	1014002	2.48	2.51	-1.20%	0033A	
9/8/1997	Sead-12	A	744521.4	1014000	2.41	2.51	-3.98%	0033A	
9/8/1997	Sead-12	A	744524.4	1014000	2.43	2.51	-3.19%	0033A	
9/8/1997	Sead-12	A	744527.4	1014000	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744530.4	1014000	2.46	2.51	-1.99%	0033A	
9/8/1997	Sead-12	A	744533.4	1014001	2.47	2.51	-1.59%	0033A	
9/8/1997	Sead-12	A	744536.4	1014001	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744539.4	1014001	2.44	2.51	-2.79%	0033A	
9/8/1997	Sead-12	A	744542.4	1014001	2.5	2.51	-0.40%	0033A	
9/8/1997	Sead-12	A	744545.4	1014001	2.51	2.51	0.00%	0033A	
9/8/1997	Sead-12	A	744548.4	1014001	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744551.4	1014001	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744554.4	1014001	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744557.4	1014002	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744560.4	1014002	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744563.4	1014002	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744566.4	1014002	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744569.4	1014002	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744572.3	1014002	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744575.3	1014002	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744578.3	1014002	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744581.3	1014003	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744584.3	1014003	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744587.3	1014003	2.6	2.51	3.59%	0033A	
9/8/1997	Sead-12	A	744590.3	1014003	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744593.3	1014003	2.59	2.51	3.19%	0033A	
9/8/1997	Sead-12	A	744596.3	1014003	2.68	2.51	6.77%	0033A	
9/8/1997	Sead-12	A	744599.3	1014003	2.63	2.51	4.78%	0033A	
9/8/1997	Sead-12	A	744602.3	1014004	2.61	2.51	3.98%	0033A	
9/8/1997	Sead-12	A	744605.3	1014004	2.58	2.51	2.79%	0033A	
9/8/1997	Sead-12	A	744608.3	1014004	2.57	2.51	2.39%	0033A	
9/8/1997	Sead-12	A	744611.3	1014004	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744614.3	1014004	2.56	2.51	1.99%	0033A	
9/8/1997	Sead-12	A	744617.3	1014004	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744620.3	1014004	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744623.3	1014004	2.55	2.51	1.59%	0033A	
9/8/1997	Sead-12	A	744626.3	1014005	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744629.3	1014005	2.52	2.51	0.40%	0033A	
9/8/1997	Sead-12	A	744632.3	1014005	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744635.3	1014005	2.54	2.51	1.20%	0033A	
9/8/1997	Sead-12	A	744638.3	1014005	2.53	2.51	0.80%	0033A	
9/8/1997	Sead-12	A	744641.3	1014005	2.46	2.51	-1.99%	0033A	
9/9/1997	Sead-12	A	744521.3	1014003	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744524.3	1014003	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744527.3	1014003	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744530.3	1014003	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744533.3	1014003	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744536.3	1014004	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744539.3	1014004	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744542.3	1014004	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744545.3	1014004	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744548.3	1014004	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744551.3	1014004	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744554.3	1014004	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744557.3	1014005	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744560.3	1014005	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744563.3	1014005	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744566.2	1014005	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744569.2	1014005	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744572.2	1014005	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744575.2	1014005	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744578.2	1014005	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744581.2	1014006	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744584.2	1014006	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744587.2	1014006	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744590.2	1014006	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744593.2	1014006	2.35	2.44	-3.69%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744596.2	1014006	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744599.2	1014006	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744602.2	1014007	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744605.2	1014007	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744608.2	1014007	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744611.2	1014007	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744614.2	1014007	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744617.2	1014007	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744620.2	1014007	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744623.2	1014007	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744626.2	1014008	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744629.2	1014008	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744632.1	1014008	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744635.1	1014008	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744638.1	1014008	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744641.1	1014008	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744521.1	1014006	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744524.1	1014006	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744527.1	1014006	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744530.1	1014006	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744533.1	1014006	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744536.1	1014007	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744539.1	1014007	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744542.1	1014007	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744545.1	1014007	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744548.1	1014007	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744551.1	1014007	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744554.1	1014007	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744557.1	1014008	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744560.1	1014008	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744563.1	1014008	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744566.1	1014008	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744569.1	1014008	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744572.1	1014008	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744575.1	1014008	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744578.1	1014008	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744581.1	1014009	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744584.1	1014009	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744587.1	1014009	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744590.1	1014009	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744593.1	1014009	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744596.1	1014009	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744599.1	1014009	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744602.1	1014010	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744605.1	1014010	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744608.1	1014010	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744611.1	1014010	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744614.1	1014010	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744617.1	1014010	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744620.1	1014010	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744623	1014010	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744626	1014011	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744629	1014011	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744632	1014011	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744635	1014011	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744638	1014011	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744641	1014011	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744521	1014009	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744524	1014009	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744527	1014009	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744530	1014009	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744533	1014009	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744536	1014010	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744539	1014010	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744542	1014010	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744545	1014010	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744548	1014010	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744550.9	1014010	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744553.9	1014010	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744556.9	1014011	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744559.9	1014011	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744562.9	1014011	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744565.9	1014011	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744568.9	1014011	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744571.9	1014011	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744574.9	1014011	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744577.9	1014011	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744580.9	1014012	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744583.9	1014012	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744586.9	1014012	2.36	2.44	-3.28%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744589.9	1014012	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744592.9	1014012	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744595.9	1014012	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744598.9	1014012	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744601.9	1014013	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744604.9	1014013	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744607.9	1014013	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744610.9	1014013	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744613.9	1014013	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744616.9	1014013	2.15	2.44	-11.89%	0033A	
9/9/1997	Sead-12	A	744619.9	1014013	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744622.9	1014013	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744625.9	1014014	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744628.9	1014014	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744631.9	1014014	2.15	2.44	-11.89%	0033A	
9/9/1997	Sead-12	A	744634.9	1014014	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744637.9	1014014	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744640.9	1014014	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744520.9	1014012	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744523.9	1014012	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744526.9	1014012	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744529.9	1014012	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744532.9	1014012	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744535.9	1014013	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744538.9	1014013	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744541.9	1014013	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744544.8	1014013	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744547.8	1014013	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744550.8	1014013	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744553.8	1014013	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744556.8	1014014	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744559.8	1014014	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744562.8	1014014	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744565.8	1014014	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744568.8	1014014	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744571.8	1014014	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744574.8	1014014	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744577.8	1014014	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744580.8	1014015	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744583.8	1014015	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744586.8	1014015	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744589.8	1014015	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744592.8	1014015	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744595.8	1014015	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744598.8	1014015	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744601.8	1014016	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744604.8	1014016	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744607.8	1014016	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744610.8	1014016	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744613.8	1014016	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744616.8	1014016	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744619.8	1014016	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744622.8	1014016	2.04	2.44	-16.39%	0033A	
9/9/1997	Sead-12	A	744625.8	1014017	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744628.8	1014017	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744631.8	1014017	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744634.8	1014017	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744637.8	1014017	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744640.8	1014017	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744520.8	1014015	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744523.8	1014015	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744526.8	1014015	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744529.8	1014015	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744532.8	1014015	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744535.8	1014016	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744538.7	1014016	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744541.7	1014016	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744544.7	1014016	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744547.7	1014016	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744550.7	1014016	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744553.7	1014016	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744556.7	1014017	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744559.7	1014017	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744562.7	1014017	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744565.7	1014017	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744568.7	1014017	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744571.7	1014017	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744574.7	1014017	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744577.7	1014017	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744580.7	1014018	2.37	2.44	-2.87%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744583.7	1014018	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744586.7	1014018	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744589.7	1014018	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744592.7	1014018	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744595.7	1014018	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744598.7	1014018	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744601.7	1014019	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744604.6	1014019	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744607.6	1014019	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744610.6	1014019	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744613.6	1014019	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744616.6	1014019	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744619.6	1014019	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744622.6	1014019	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744625.6	1014020	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744628.6	1014020	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744631.6	1014020	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744634.6	1014020	2.15	2.44	-11.89%	0033A	
9/9/1997	Sead-12	A	744637.6	1014020	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744640.6	1014020	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744520.6	1014018	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744523.6	1014018	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744526.6	1014018	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744529.6	1014018	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744532.6	1014018	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744535.6	1014018	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744538.6	1014019	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744541.6	1014019	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744544.6	1014019	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744547.6	1014019	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744550.6	1014019	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744553.6	1014019	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744556.6	1014019	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744559.6	1014020	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744562.6	1014020	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744565.6	1014020	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744568.6	1014020	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744571.6	1014020	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744574.6	1014020	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744577.6	1014020	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744580.6	1014020	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744583.6	1014021	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744586.6	1014021	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744589.6	1014021	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744592.6	1014021	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744595.6	1014021	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744598.6	1014021	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744601.6	1014021	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744604.5	1014022	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744607.5	1014022	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744610.5	1014022	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744613.5	1014022	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744616.5	1014022	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744619.5	1014022	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744622.5	1014022	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744625.5	1014022	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744628.5	1014023	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744631.5	1014023	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744634.5	1014023	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744637.5	1014023	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744640.5	1014023	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744520.5	1014021	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744523.5	1014021	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744526.5	1014021	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744529.5	1014021	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744532.5	1014021	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744535.5	1014021	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744538.4	1014021	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744541.4	1014022	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744544.4	1014022	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744547.4	1014022	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744550.4	1014022	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744553.4	1014022	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744556.4	1014022	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744559.4	1014022	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744562.4	1014023	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744565.4	1014023	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744568.4	1014023	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744571.4	1014023	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744574.4	1014023	2.45	2.44	0.41%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744577.4	1014023	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744580.4	1014023	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744583.4	1014023	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744586.4	1014024	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744589.4	1014024	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744592.4	1014024	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744595.4	1014024	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744598.4	1014024	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744601.4	1014024	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744604.4	1014024	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744607.4	1014025	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744610.4	1014025	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744613.4	1014025	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744616.4	1014025	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744619.4	1014025	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744622.4	1014025	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744625.4	1014025	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744628.4	1014025	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744631.4	1014026	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744634.4	1014026	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744637.4	1014026	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744640.4	1014026	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744520.4	1014024	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744523.4	1014024	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744526.4	1014024	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744529.4	1014024	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744532.4	1014024	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744535.4	1014024	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744538.3	1014024	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744541.3	1014024	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744544.3	1014025	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744547.3	1014025	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744550.3	1014025	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744553.3	1014025	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744556.3	1014025	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744559.3	1014025	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744562.3	1014025	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744565.3	1014026	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744568.3	1014026	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744571.3	1014026	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744574.3	1014026	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744577.3	1014026	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744580.3	1014026	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744583.3	1014026	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744586.3	1014026	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744589.3	1014027	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744592.3	1014027	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744595.3	1014027	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744598.3	1014027	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744601.3	1014027	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744604.3	1014027	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744607.3	1014027	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744610.3	1014028	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744613.3	1014028	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744616.3	1014028	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744619.3	1014028	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744622.3	1014028	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744625.3	1014028	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744628.3	1014028	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744631.3	1014028	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744634.3	1014029	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744637.3	1014029	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744640.3	1014029	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744520.3	1014026	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744523.3	1014027	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744526.3	1014027	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744529.3	1014027	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744532.3	1014027	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744535.2	1014027	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744538.2	1014027	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744541.2	1014027	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744544.2	1014027	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744547.2	1014028	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744550.2	1014028	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744553.2	1014028	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744556.2	1014028	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744559.2	1014028	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744562.2	1014028	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744565.2	1014028	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744568.2	1014029	2.39	2.44	-2.05%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744571.2	1014029	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744574.2	1014029	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744577.2	1014029	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744580.2	1014029	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744583.2	1014029	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744586.2	1014029	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744589.2	1014029	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744592.2	1014030	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744595.2	1014030	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744598.2	1014030	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744601.1	1014030	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744604.1	1014030	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744607.1	1014030	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744610.1	1014030	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744613.1	1014030	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744616.1	1014031	1.94	2.44	-20.49%	0033A	directly over chiller pipes
9/9/1997	Sead-12	A	744619.1	1014031	1.92	2.44	-21.31%	0033A	directly over chiller pipes
9/9/1997	Sead-12	A	744622.1	1014031	2.02	2.44	-17.21%	0033A	
9/9/1997	Sead-12	A	744625.1	1014031	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744628.1	1014031	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744631.1	1014031	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744634.1	1014031	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744637.1	1014032	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744640.1	1014032	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744520.1	1014029	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744523.1	1014029	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744526.1	1014030	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744529.1	1014030	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744532.1	1014030	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744535.1	1014030	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744538.1	1014030	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744541.1	1014030	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744544.1	1014030	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744547.1	1014030	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744550.1	1014031	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744553.1	1014031	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744556.1	1014031	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744559.1	1014031	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744562.1	1014031	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744565.1	1014031	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744568.1	1014031	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744571.1	1014032	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744574.1	1014032	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744577.1	1014032	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744580.1	1014032	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744583.1	1014032	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744586.1	1014032	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744589.1	1014032	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744592.1	1014032	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744595.1	1014033	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744598.1	1014033	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744601	1014033	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744604	1014033	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744607	1014033	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744610	1014033	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744613	1014033	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744616	1014033	1.8	2.44	-26.23%	0033A	Chiller Pipes
9/9/1997	Sead-12	A	744619	1014034	1.88	2.44	-22.95%	0033A	Chiller Pipes
9/9/1997	Sead-12	A	744622	1014034	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744625	1014034	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744628	1014034	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744631	1014034	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744634	1014034	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744637	1014034	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744640	1014035	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744520	1014032	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744523	1014032	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744526	1014032	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744529	1014033	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744532	1014033	2.12	2.44	-13.11%	0033A	vent
9/9/1997	Sead-12	A	744534.9	1014033	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744537.9	1014033	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744540.9	1014033	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744543.9	1014033	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744546.9	1014033	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744549.9	1014033	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744552.9	1014034	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744555.9	1014034	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744558.9	1014034	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744561.9	1014034	2.37	2.44	-2.87%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744564.9	1014034	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744567.9	1014034	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744570.9	1014034	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744573.9	1014035	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744576.9	1014035	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744579.9	1014035	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744582.9	1014035	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744585.9	1014035	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744588.9	1014035	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744591.9	1014035	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744594.9	1014035	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744597.9	1014036	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744600.9	1014036	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744603.9	1014036	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744606.9	1014036	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744609.9	1014036	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744612.9	1014036	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744615.9	1014036	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744618.9	1014036	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744621.9	1014037	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744624.9	1014037	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744627.9	1014037	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744630.9	1014037	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744633.9	1014037	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744636.9	1014037	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744519.9	1014035	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744522.9	1014035	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744525.9	1014035	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744528.9	1014035	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744531.9	1014036	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744534.8	1014036	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744537.8	1014036	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744540.8	1014036	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744543.8	1014036	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744546.8	1014036	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744549.8	1014036	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744552.8	1014036	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744555.8	1014037	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744558.8	1014037	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744561.8	1014037	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744564.8	1014037	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744567.8	1014037	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744570.8	1014037	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744573.8	1014037	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744576.8	1014038	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744579.8	1014038	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744582.8	1014038	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744585.8	1014038	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744588.8	1014038	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744591.8	1014038	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744594.8	1014038	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744597.8	1014038	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744600.8	1014039	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744603.8	1014039	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744606.8	1014039	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744609.8	1014039	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744612.8	1014039	1.94	2.44	-20.49%	0033A	
9/9/1997	Sead-12	A	744615.8	1014039	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744618.8	1014039	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744621.8	1014039	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744624.8	1014040	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744627.8	1014040	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744630.8	1014040	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744633.8	1014040	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744636.8	1014040	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744639.8	1014040	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744519.8	1014038	2.15	2.44	-11.89%	0033A	
9/9/1997	Sead-12	A	744522.8	1014038	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744525.8	1014038	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744528.8	1014038	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744531.8	1014038	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744534.7	1014039	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744537.7	1014039	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744540.7	1014039	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744543.7	1014039	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744546.7	1014039	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744549.7	1014039	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744552.7	1014039	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744555.7	1014039	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744558.7	1014040	2.57	2.44	5.33%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744561.7	1014040	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744564.7	1014040	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744567.7	1014040	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744570.7	1014040	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744573.7	1014040	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744576.7	1014040	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744579.7	1014041	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744582.7	1014041	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744585.7	1014041	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744588.7	1014041	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744591.7	1014041	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744594.7	1014041	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744597.6	1014041	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744600.6	1014041	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744603.6	1014042	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744606.6	1014042	2.08	2.44	-14.75%	0033A	Under Chiller
9/9/1997	Sead-12	A	744609.6	1014042	1.99	2.44	-18.44%	0033A	Under Chiller
9/9/1997	Sead-12	A	744612.6	1014042	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744615.6	1014042	2.15	2.44	-11.89%	0033A	
9/9/1997	Sead-12	A	744618.6	1014042	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744621.6	1014042	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744624.6	1014042	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744627.6	1014043	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744630.6	1014043	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744633.6	1014043	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744636.6	1014043	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744639.6	1014043	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744519.6	1014041	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744522.6	1014041	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744525.6	1014041	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744528.6	1014041	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744531.6	1014041	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744534.6	1014041	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744537.6	1014042	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744540.6	1014042	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744543.6	1014042	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744546.6	1014042	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744549.6	1014042	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744552.6	1014042	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744555.6	1014042	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744558.6	1014042	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744561.6	1014043	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744564.6	1014043	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744567.6	1014043	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744570.6	1014043	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744573.6	1014043	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744576.6	1014043	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744579.6	1014043	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744582.6	1014044	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744585.6	1014044	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744588.6	1014044	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744591.6	1014044	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744594.6	1014044	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744597.5	1014044	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744600.5	1014044	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744603.5	1014044	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744606.5	1014045	2	2.44	-18.03%	0033A	under chiller
9/9/1997	Sead-12	A	744609.5	1014045	2.02	2.44	-17.21%	0033A	under chiller
9/9/1997	Sead-12	A	744612.5	1014045	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744615.5	1014045	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744618.5	1014045	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744621.5	1014045	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744624.5	1014045	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744627.5	1014045	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744630.5	1014046	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744633.5	1014046	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744636.5	1014046	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744639.5	1014046	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744519.5	1014044	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744522.5	1014044	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744525.5	1014044	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744528.5	1014044	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744531.4	1014044	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744534.4	1014044	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744537.4	1014044	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744540.4	1014045	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744543.4	1014045	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744546.4	1014045	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744549.4	1014045	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744552.4	1014045	2.58	2.44	5.74%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744555.4	1014045	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744558.4	1014045	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744561.4	1014045	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744564.4	1014046	2.61	2.44	6.97%	0033A	
9/9/1997	Sead-12	A	744567.4	1014046	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744570.4	1014046	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744573.4	1014046	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744576.4	1014046	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744579.4	1014046	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744582.4	1014046	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744585.4	1014047	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744588.4	1014047	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744591.4	1014047	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744594.4	1014047	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744597.4	1014047	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744600.4	1014047	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744603.4	1014047	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744606.4	1014047	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744609.4	1014048	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744612.4	1014048	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744615.4	1014048	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744618.4	1014048	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744621.4	1014048	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744624.4	1014048	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744627.4	1014048	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744630.4	1014048	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744633.4	1014049	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744636.4	1014049	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744639.4	1014049	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744519.4	1014047	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744522.4	1014047	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744525.4	1014047	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744528.4	1014047	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744531.3	1014047	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744534.3	1014047	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744537.3	1014047	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744540.3	1014047	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744543.3	1014048	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744546.3	1014048	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744549.3	1014048	2.59	2.44	6.15%	0033A	
9/9/1997	Sead-12	A	744552.3	1014048	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744555.3	1014048	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744558.3	1014048	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744561.3	1014048	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744564.3	1014048	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744567.3	1014049	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744570.3	1014049	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744573.3	1014049	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744576.3	1014049	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744579.3	1014049	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744582.3	1014049	2.6	2.44	6.56%	0033A	
9/9/1997	Sead-12	A	744585.3	1014049	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744588.3	1014050	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744591.3	1014050	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744594.3	1014050	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744597.3	1014050	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744600.3	1014050	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744603.3	1014050	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744606.3	1014050	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744609.3	1014050	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744612.3	1014051	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744615.3	1014051	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744618.3	1014051	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744621.3	1014051	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744624.3	1014051	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744627.3	1014051	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744630.3	1014051	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744633.3	1014051	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744636.3	1014052	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744639.3	1014052	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744519.3	1014049	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744522.3	1014050	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744525.3	1014050	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744528.3	1014050	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744531.2	1014050	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744534.2	1014050	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744537.2	1014050	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744540.2	1014050	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744543.2	1014050	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744546.2	1014051	2.47	2.44	1.23%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744549.2	1014051	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744552.2	1014051	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744555.2	1014051	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744558.2	1014051	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744561.2	1014051	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744564.2	1014051	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744567.2	1014051	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744570.2	1014052	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744573.2	1014052	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744576.2	1014052	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744579.2	1014052	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744582.2	1014052	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744585.2	1014052	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744588.2	1014052	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744591.2	1014053	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744594.2	1014053	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744597.1	1014053	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744600.1	1014053	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744603.1	1014053	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744606.1	1014053	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744609.1	1014053	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744612.1	1014053	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744615.1	1014054	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744618.1	1014054	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744621.1	1014054	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744624.1	1014054	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744627.1	1014054	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744630.1	1014054	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744633.1	1014054	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744636.1	1014054	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744639.1	1014055	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744519.1	1014052	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744522.1	1014052	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744525.1	1014052	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744528.1	1014053	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744531.1	1014053	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744534.1	1014053	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744537.1	1014053	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744540.1	1014053	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744543.1	1014053	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744546.1	1014053	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744549.1	1014054	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744552.1	1014054	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744555.1	1014054	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744558.1	1014054	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744561.1	1014054	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744564.1	1014054	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744567.1	1014054	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744570.1	1014054	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744573.1	1014055	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744576.1	1014055	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744579.1	1014055	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744582.1	1014055	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744585.1	1014055	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744588.1	1014055	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744591.1	1014055	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744594	1014056	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744597	1014056	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744600	1014056	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744603	1014056	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744606	1014056	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744609	1014056	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744612	1014056	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744615	1014056	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744618	1014057	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744621	1014057	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744624	1014057	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744627	1014057	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744630	1014057	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744633	1014057	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744636	1014057	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744639	1014057	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744519	1014055	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744522	1014055	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744525	1014055	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744527.9	1014055	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744530.9	1014056	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744533.9	1014056	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744536.9	1014056	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744539.9	1014056	2.41	2.44	-1.23%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744542.9	1014056	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744545.9	1014056	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744548.9	1014056	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744551.9	1014057	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744554.9	1014057	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744557.9	1014057	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744560.9	1014057	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744563.9	1014057	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744566.9	1014057	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744569.9	1014057	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744572.9	1014057	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744575.9	1014058	2.63	2.44	7.79%	0033A	
9/9/1997	Sead-12	A	744578.9	1014058	2.59	2.44	6.15%	0033A	
9/9/1997	Sead-12	A	744581.9	1014058	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744584.9	1014058	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744587.9	1014058	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744590.9	1014058	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744593.9	1014058	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744596.9	1014059	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744599.9	1014059	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744602.9	1014059	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744605.9	1014059	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744608.9	1014059	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744611.9	1014059	2.59	2.44	6.15%	0033A	
9/9/1997	Sead-12	A	744614.9	1014059	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744617.9	1014059	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744620.9	1014060	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744623.9	1014060	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744626.9	1014060	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744629.9	1014060	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744632.9	1014060	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744635.9	1014060	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744638.9	1014060	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744518.9	1014058	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744521.9	1014058	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744524.9	1014058	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744527.8	1014058	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744530.8	1014058	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744533.8	1014059	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744536.8	1014059	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744539.8	1014059	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744542.8	1014059	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744545.8	1014059	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744548.8	1014059	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744551.8	1014059	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744554.8	1014060	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744557.8	1014060	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744560.8	1014060	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744563.8	1014060	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744566.8	1014060	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744569.8	1014060	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744572.8	1014060	2.66	2.44	9.02%	0033A	
9/9/1997	Sead-12	A	744575.8	1014060	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744578.8	1014061	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744581.8	1014061	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744584.8	1014061	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744587.8	1014061	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744590.8	1014061	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744593.8	1014061	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744596.8	1014061	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744599.8	1014062	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744602.8	1014062	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744605.8	1014062	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744608.8	1014062	2.62	2.44	7.38%	0033A	
9/9/1997	Sead-12	A	744611.8	1014062	2.59	2.44	6.15%	0033A	
9/9/1997	Sead-12	A	744614.8	1014062	2.6	2.44	6.56%	0033A	
9/9/1997	Sead-12	A	744617.8	1014062	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744620.8	1014062	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744623.8	1014063	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744626.8	1014063	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744629.8	1014063	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744632.8	1014063	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744635.8	1014063	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744638.8	1014063	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744518.8	1014061	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744521.8	1014061	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744524.8	1014061	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744527.7	1014061	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744530.7	1014061	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744533.7	1014061	2.47	2.44	1.23%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744536.7	1014062	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744539.7	1014062	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744542.7	1014062	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744545.7	1014062	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744548.7	1014062	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744551.7	1014062	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744554.7	1014062	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744557.7	1014063	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744560.7	1014063	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744563.7	1014063	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744566.7	1014063	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744569.7	1014063	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744572.7	1014063	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744575.7	1014063	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744578.7	1014063	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744581.7	1014064	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744584.7	1014064	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744587.7	1014064	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744590.7	1014064	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744593.6	1014064	2.59	2.44	6.15%	0033A	
9/9/1997	Sead-12	A	744596.6	1014064	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744599.6	1014064	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744602.6	1014065	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744605.6	1014065	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744608.6	1014065	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744611.6	1014065	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744614.6	1014065	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744617.6	1014065	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744620.6	1014065	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744623.6	1014065	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744626.6	1014066	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744629.6	1014066	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744632.6	1014066	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744635.6	1014066	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744638.6	1014066	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744518.6	1014064	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744521.6	1014064	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744524.6	1014064	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744527.6	1014064	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744530.6	1014064	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744533.6	1014064	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744536.6	1014064	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744539.6	1014065	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744542.6	1014065	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744545.6	1014065	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744548.6	1014065	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744551.6	1014065	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744554.6	1014065	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744557.6	1014065	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744560.6	1014066	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744563.6	1014066	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744566.6	1014066	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744569.6	1014066	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744572.6	1014066	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744575.6	1014066	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744578.6	1014066	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744581.6	1014066	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744584.6	1014067	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744587.6	1014067	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744590.6	1014067	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744593.5	1014067	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744596.5	1014067	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744599.5	1014067	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744602.5	1014067	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744605.5	1014068	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744608.5	1014068	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744611.5	1014068	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744614.5	1014068	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744617.5	1014068	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744620.5	1014068	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744623.5	1014068	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744626.5	1014068	2.56	2.44	4.92%	0033A	
9/9/1997	Sead-12	A	744629.5	1014069	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744632.5	1014069	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744635.5	1014069	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744638.5	1014069	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744518.5	1014067	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744521.5	1014067	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744524.5	1014067	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744527.4	1014067	2.29	2.44	-6.15%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744530.4	1014067	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744533.4	1014067	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744536.4	1014067	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744539.4	1014067	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744542.4	1014068	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744545.4	1014068	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744548.4	1014068	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744551.4	1014068	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744554.4	1014068	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744557.4	1014068	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744560.4	1014068	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744563.4	1014069	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744566.4	1014069	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744569.4	1014069	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744572.4	1014069	2.54	2.44	4.10%	0033A	
9/9/1997	Sead-12	A	744575.4	1014069	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744578.4	1014069	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744581.4	1014069	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744584.4	1014069	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744587.4	1014070	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744590.4	1014070	2.51	2.44	2.87%	0033A	
9/9/1997	Sead-12	A	744593.4	1014070	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744596.4	1014070	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744599.4	1014070	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744602.4	1014070	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744605.4	1014070	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744608.4	1014071	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744611.4	1014071	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744614.4	1014071	2.45	2.44	0.41%	0033A	
9/9/1997	Sead-12	A	744617.4	1014071	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744620.4	1014071	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744623.4	1014071	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744626.4	1014071	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744629.4	1014071	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744632.4	1014072	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744635.4	1014072	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744638.4	1014072	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744518.4	1014069	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744521.4	1014070	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744524.4	1014070	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744527.3	1014070	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744530.3	1014070	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744533.3	1014070	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744536.3	1014070	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744539.3	1014070	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744542.3	1014070	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744545.3	1014071	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744548.3	1014071	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744551.3	1014071	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744554.3	1014071	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744557.3	1014071	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744560.3	1014071	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744563.3	1014071	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744566.3	1014072	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744569.3	1014072	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744572.3	1014072	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744575.3	1014072	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744578.3	1014072	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744581.3	1014072	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744584.3	1014072	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744587.3	1014072	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744590.3	1014073	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744593.3	1014073	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744596.3	1014073	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744599.3	1014073	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744602.3	1014073	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744605.3	1014073	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744608.3	1014073	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744611.3	1014074	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744614.3	1014074	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744617.3	1014074	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744620.3	1014074	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744623.3	1014074	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744626.3	1014074	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744629.3	1014074	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744632.3	1014074	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744635.3	1014075	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744518.3	1014072	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744521.3	1014072	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744524.2	1014073	2.32	2.44	-4.92%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744527.2	1014073	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744530.2	1014073	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744533.2	1014073	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744536.2	1014073	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744539.2	1014073	2.44	2.44	0.00%	0033A	
9/9/1997	Sead-12	A	744542.2	1014073	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744545.2	1014073	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744548.2	1014074	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744551.2	1014074	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744554.2	1014074	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744557.2	1014074	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744560.2	1014074	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744563.2	1014074	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744566.2	1014074	2.53	2.44	3.69%	0033A	
9/9/1997	Sead-12	A	744569.2	1014075	2.57	2.44	5.33%	0033A	
9/9/1997	Sead-12	A	744572.2	1014075	2.55	2.44	4.51%	0033A	
9/9/1997	Sead-12	A	744575.2	1014075	2.58	2.44	5.74%	0033A	
9/9/1997	Sead-12	A	744578.2	1014075	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744581.2	1014075	2.49	2.44	2.05%	0033A	
9/9/1997	Sead-12	A	744584.2	1014075	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744587.2	1014075	2.52	2.44	3.28%	0033A	
9/9/1997	Sead-12	A	744590.1	1014075	2.5	2.44	2.46%	0033A	
9/9/1997	Sead-12	A	744593.1	1014076	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744596.1	1014076	2.48	2.44	1.64%	0033A	
9/9/1997	Sead-12	A	744599.1	1014076	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744602.1	1014076	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744605.1	1014076	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744608.1	1014076	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744611.1	1014076	2.47	2.44	1.23%	0033A	
9/9/1997	Sead-12	A	744614.1	1014077	2.43	2.44	-0.41%	0033A	
9/9/1997	Sead-12	A	744617.1	1014077	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744620.1	1014077	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744623.1	1014077	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744626.1	1014077	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744629.1	1014077	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744632.1	1014077	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744635.1	1014077	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744638.1	1014078	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744518.1	1014075	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744521.1	1014075	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744524.1	1014075	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744527.1	1014076	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744530.1	1014076	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744533.1	1014076	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744536.1	1014076	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744539.1	1014076	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744542.1	1014076	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744545.1	1014076	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744548.1	1014076	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744551.1	1014077	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744554.1	1014077	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744557.1	1014077	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744560.1	1014077	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744563.1	1014077	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744566.1	1014077	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744569.1	1014077	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744572.1	1014078	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744575.1	1014078	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744578.1	1014078	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744581.1	1014078	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744584.1	1014078	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744587.1	1014078	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744590	1014078	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744593	1014078	2.42	2.44	-0.82%	0033A	
9/9/1997	Sead-12	A	744596	1014079	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744599	1014079	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744602	1014079	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744605	1014079	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744608	1014079	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744611	1014079	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744614	1014079	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744617	1014080	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744620	1014080	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744623	1014080	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744626	1014080	2.15	2.44	-11.69%	0033A	
9/9/1997	Sead-12	A	744629	1014080	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744632	1014080	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744635	1014080	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744638	1014080	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744517.9	1014078	2.18	2.44	-10.66%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744520.9	1014078	2.29	2.44	-6.15%	0033A	
9/9/1997	Sead-12	A	744523.9	1014078	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744526.9	1014079	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744529.9	1014079	2.3	2.44	-5.74%	0033A	
9/9/1997	Sead-12	A	744532.9	1014079	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744535.9	1014079	2.46	2.44	0.82%	0033A	
9/9/1997	Sead-12	A	744538.9	1014079	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744541.9	1014079	2.35	2.44	-3.69%	0033A	
9/9/1997	Sead-12	A	744544.9	1014079	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744547.9	1014079	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744550.9	1014080	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744553.9	1014080	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744556.9	1014080	2.38	2.44	-2.46%	0033A	
9/9/1997	Sead-12	A	744559.9	1014080	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744562.9	1014080	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744565.9	1014080	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744568.9	1014080	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744571.9	1014081	2.34	2.44	-4.10%	0033A	
9/9/1997	Sead-12	A	744574.9	1014081	2.37	2.44	-2.87%	0033A	
9/9/1997	Sead-12	A	744577.9	1014081	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744580.9	1014081	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744583.9	1014081	2.39	2.44	-2.05%	0033A	
9/9/1997	Sead-12	A	744586.9	1014081	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744589.9	1014081	2.36	2.44	-3.28%	0033A	
9/9/1997	Sead-12	A	744592.9	1014081	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744595.9	1014082	2.41	2.44	-1.23%	0033A	
9/9/1997	Sead-12	A	744598.9	1014082	2.4	2.44	-1.64%	0033A	
9/9/1997	Sead-12	A	744601.9	1014082	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744604.9	1014082	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744607.9	1014082	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744610.9	1014082	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744613.9	1014082	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744616.9	1014083	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744619.9	1014083	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744622.9	1014083	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744625.9	1014083	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744628.9	1014083	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744631.9	1014083	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744634.9	1014083	2	2.44	-18.03%	0033A	
9/9/1997	Sead-12	A	744637.9	1014083	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744517.8	1014081	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744520.8	1014081	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744523.8	1014081	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744526.8	1014082	2.04	2.44	-16.39%	0033A	
9/9/1997	Sead-12	A	744529.8	1014082	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744532.8	1014082	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744535.8	1014082	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744538.8	1014082	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744541.8	1014082	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744544.8	1014082	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744547.8	1014082	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744550.8	1014083	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744553.8	1014083	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744556.8	1014083	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744559.8	1014083	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744562.8	1014083	2.33	2.44	-4.51%	0033A	
9/9/1997	Sead-12	A	744565.8	1014083	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744568.8	1014083	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744571.8	1014084	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744574.8	1014084	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744577.8	1014084	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744580.8	1014084	2.17	2.44	-11.07%	0033A	
9/9/1997	Sead-12	A	744583.8	1014084	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744586.8	1014084	2.2	2.44	-9.84%	0033A	
9/9/1997	Sead-12	A	744589.8	1014084	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744592.8	1014084	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744595.8	1014085	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744598.8	1014085	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744601.8	1014085	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744604.8	1014085	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744607.8	1014085	2.06	2.44	-15.57%	0033A	
9/9/1997	Sead-12	A	744610.8	1014085	2.02	2.44	-17.21%	0033A	
9/9/1997	Sead-12	A	744613.8	1014085	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744616.8	1014085	1.99	2.44	-18.44%	0033A	
9/9/1997	Sead-12	A	744619.8	1014086	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744622.8	1014086	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744625.8	1014086	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744628.8	1014086	1.97	2.44	-19.26%	0033A	
9/9/1997	Sead-12	A	744631.8	1014086	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744634.8	1014086	1.94	2.44	-20.49%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/9/1997	Sead-12	A	744517.7	1014084	1.94	2.44	-20.49%	0033A	
9/9/1997	Sead-12	A	744520.7	1014084	1.97	2.44	-19.26%	0033A	
9/9/1997	Sead-12	A	744523.7	1014084	2	2.44	-18.03%	0033A	
9/9/1997	Sead-12	A	744526.7	1014085	2.02	2.44	-17.21%	0033A	
9/9/1997	Sead-12	A	744529.7	1014085	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744532.7	1014085	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744535.7	1014085	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744538.7	1014085	2.19	2.44	-10.25%	0033A	
9/9/1997	Sead-12	A	744541.7	1014085	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744544.7	1014085	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744547.7	1014085	2.28	2.44	-6.56%	0033A	
9/9/1997	Sead-12	A	744550.7	1014086	2.22	2.44	-9.02%	0033A	
9/9/1997	Sead-12	A	744553.7	1014086	2.23	2.44	-8.61%	0033A	
9/9/1997	Sead-12	A	744556.7	1014086	2.21	2.44	-9.43%	0033A	
9/9/1997	Sead-12	A	744559.7	1014086	2.31	2.44	-5.33%	0033A	
9/9/1997	Sead-12	A	744562.7	1014086	2.32	2.44	-4.92%	0033A	
9/9/1997	Sead-12	A	744565.7	1014086	2.27	2.44	-6.97%	0033A	
9/9/1997	Sead-12	A	744568.6	1014086	2.26	2.44	-7.38%	0033A	
9/9/1997	Sead-12	A	744571.6	1014087	2.24	2.44	-8.20%	0033A	
9/9/1997	Sead-12	A	744574.6	1014087	2.25	2.44	-7.79%	0033A	
9/9/1997	Sead-12	A	744577.6	1014087	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744580.6	1014087	2.14	2.44	-12.30%	0033A	
9/9/1997	Sead-12	A	744583.6	1014087	2.16	2.44	-11.48%	0033A	
9/9/1997	Sead-12	A	744586.6	1014087	2.18	2.44	-10.66%	0033A	
9/9/1997	Sead-12	A	744589.6	1014087	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744592.6	1014087	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744595.6	1014088	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744598.6	1014088	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744601.6	1014088	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744604.6	1014088	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744607.6	1014088	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744610.6	1014088	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744613.6	1014088	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744616.6	1014089	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744619.6	1014089	1.94	2.44	-20.49%	0033A	
9/9/1997	Sead-12	A	744622.6	1014089	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744625.6	1014089	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744628.6	1014089	1.96	2.44	-19.67%	0033A	
9/9/1997	Sead-12	A	744631.6	1014089	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744520.6	1014087	1.83	2.44	-25.00%	0033A	
9/9/1997	Sead-12	A	744523.6	1014087	1.88	2.44	-22.95%	0033A	
9/9/1997	Sead-12	A	744526.6	1014088	1.92	2.44	-21.31%	0033A	
9/9/1997	Sead-12	A	744529.6	1014088	1.93	2.44	-20.90%	0033A	
9/9/1997	Sead-12	A	744532.6	1014088	2	2.44	-18.03%	0033A	
9/9/1997	Sead-12	A	744535.6	1014088	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744538.6	1014088	1.99	2.44	-18.44%	0033A	
9/9/1997	Sead-12	A	744541.6	1014088	2.02	2.44	-17.21%	0033A	
9/9/1997	Sead-12	A	744544.6	1014088	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744547.6	1014088	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744550.6	1014089	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744553.6	1014089	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744556.6	1014089	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744559.6	1014089	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744562.5	1014089	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744565.5	1014089	2.11	2.44	-13.52%	0033A	
9/9/1997	Sead-12	A	744568.5	1014089	2.08	2.44	-14.75%	0033A	
9/9/1997	Sead-12	A	744571.5	1014090	2.04	2.44	-16.39%	0033A	
9/9/1997	Sead-12	A	744574.5	1014090	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744577.5	1014090	2.06	2.44	-15.57%	0033A	
9/9/1997	Sead-12	A	744580.5	1014090	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744583.5	1014090	2.04	2.44	-16.39%	0033A	
9/9/1997	Sead-12	A	744586.5	1014090	2.03	2.44	-16.80%	0033A	
9/9/1997	Sead-12	A	744589.5	1014090	1.99	2.44	-18.44%	0033A	
9/9/1997	Sead-12	A	744592.5	1014090	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744595.5	1014091	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744598.5	1014091	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744601.5	1014091	2	2.44	-18.03%	0033A	
9/9/1997	Sead-12	A	744604.5	1014091	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744607.5	1014091	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744610.5	1014091	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744613.5	1014091	1.94	2.44	-20.49%	0033A	
9/9/1997	Sead-12	A	744616.5	1014092	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744526.4	1014091	1.89	2.44	-22.54%	0033A	
9/9/1997	Sead-12	A	744529.4	1014091	1.95	2.44	-20.08%	0033A	
9/9/1997	Sead-12	A	744532.4	1014091	1.98	2.44	-18.85%	0033A	
9/9/1997	Sead-12	A	744535.4	1014091	2.01	2.44	-17.62%	0033A	
9/9/1997	Sead-12	A	744538.4	1014091	1.99	2.44	-18.44%	0033A	
9/9/1997	Sead-12	A	744541.4	1014091	2.06	2.44	-15.57%	0033A	
9/9/1997	Sead-12	A	744544.4	1014091	2.07	2.44	-15.16%	0033A	
9/9/1997	Sead-12	A	744547.4	1014091	2.07	2.44	-15.16%	0033A	

Appendix F
Area A Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing		(kcpm)		(s/n)	
9/9/1997	Sead-12	A	744550.4	1014092	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744553.4	1014092	2.13	2.44	-12.70%	0033A	
9/9/1997	Sead-12	A	744556.4	1014092	2.12	2.44	-13.11%	0033A	
9/9/1997	Sead-12	A	744559.4	1014092	2.1	2.44	-13.93%	0033A	
9/9/1997	Sead-12	A	744562.4	1014092	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744565.4	1014092	2.09	2.44	-14.34%	0033A	
9/9/1997	Sead-12	A	744568.4	1014092	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744571.4	1014093	2.03	2.44	-16.80%	0033A	
9/9/1997	Sead-12	A	744574.4	1014093	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744577.4	1014093	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744580.4	1014093	2.05	2.44	-15.98%	0033A	
9/9/1997	Sead-12	A	744583.4	1014093	2.06	2.44	-15.57%	0033A	
9/9/1997	Sead-12	A	744586.4	1014093	2.02	2.44	-17.21%	0033A	
	Sead-12						-2.09%		
	Sead-12						16.52%		

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/30/1997	SEAD-12	B	743550.4	1015784	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743547.4	1015784	10.3	9.4	9.57%	A945P/A378Q	
9/30/1997	SEAD-12	B	743544.4	1015784	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743541.4	1015783	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743538.4	1015783	9.5	9.4	1.06%	A945P/A378Q	
9/30/1997	SEAD-12	B	743535.4	1015783	9.2	9.4	-2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743532.4	1015783	8.8	9.4	-6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743529.4	1015783	9.6	9.4	2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743526.4	1015783	9	9.4	-4.26%	A945P/A378Q	
9/30/1997	SEAD-12	B	743523.4	1015783	9.7	9.4	3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743520.4	1015783	9.1	9.4	-3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743517.4	1015782	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743514.4	1015782	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743511.5	1015782	9.1	9.4	-3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743508.5	1015782	9.8	9.4	4.26%	A945P/A378Q	
9/30/1997	SEAD-12	B	743505.5	1015782	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743502.5	1015782	9.2	9.4	-2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743499.5	1015782	8.8	9.4	-6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743496.5	1015781	9.6	9.4	2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743550.3	1015787	11.5	9.4	22.34%	A945P/A378Q	
9/30/1997	SEAD-12	B	743547.3	1015787	10.8	9.4	14.89%	A945P/A378Q	
9/30/1997	SEAD-12	B	743544.3	1015787	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743541.3	1015786	10.7	9.4	13.83%	A945P/A378Q	
9/30/1997	SEAD-12	B	743538.3	1015786	11.1	9.4	18.09%	A945P/A378Q	
9/30/1997	SEAD-12	B	743535.3	1015786	10.6	9.4	12.77%	A945P/A378Q	
9/30/1997	SEAD-12	B	743532.3	1015786	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743529.3	1015786	11	9.4	17.02%	A945P/A378Q	
9/30/1997	SEAD-12	B	743526.3	1015786	10.8	9.4	14.89%	A945P/A378Q	
9/30/1997	SEAD-12	B	743523.3	1015786	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743520.3	1015785	10.7	9.4	13.83%	A945P/A378Q	
9/30/1997	SEAD-12	B	743517.3	1015785	10.9	9.4	15.96%	A945P/A378Q	
9/30/1997	SEAD-12	B	743514.3	1015785	10.4	9.4	10.64%	A945P/A378Q	
9/30/1997	SEAD-12	B	743511.3	1015785	10.7	9.4	13.83%	A945P/A378Q	
9/30/1997	SEAD-12	B	743508.3	1015785	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743505.4	1015785	9.7	9.4	3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743502.4	1015785	9.9	9.4	5.32%	A945P/A378Q	
9/30/1997	SEAD-12	B	743499.4	1015785	9.4	9.4	0.00%	A945P/A378Q	
9/30/1997	SEAD-12	B	743496.4	1015784	9.5	9.4	1.06%	A945P/A378Q	
9/30/1997	SEAD-12	B	743550.2	1015790	11.4	9.4	21.28%	A945P/A378Q	
9/30/1997	SEAD-12	B	743547.2	1015790	11.1	9.4	18.09%	A945P/A378Q	
9/30/1997	SEAD-12	B	743544.2	1015790	10.7	9.4	13.83%	A945P/A378Q	
9/30/1997	SEAD-12	B	743541.2	1015789	11	9.4	17.02%	A945P/A378Q	
9/30/1997	SEAD-12	B	743538.2	1015789	10.6	9.4	12.77%	A945P/A378Q	
9/30/1997	SEAD-12	B	743535.2	1015789	11.1	9.4	18.09%	A945P/A378Q	
9/30/1997	SEAD-12	B	743532.2	1015789	10.9	9.4	15.96%	A945P/A378Q	
9/30/1997	SEAD-12	B	743529.2	1015789	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743526.2	1015789	10.8	9.4	14.89%	A945P/A378Q	
9/30/1997	SEAD-12	B	743523.2	1015789	9.9	9.4	5.32%	A945P/A378Q	
9/30/1997	SEAD-12	B	743520.2	1015788	9.2	9.4	-2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743517.2	1015788	9.5	9.4	1.06%	A945P/A378Q	
9/30/1997	SEAD-12	B	743514.2	1015788	9.4	9.4	0.00%	A945P/A378Q	
9/30/1997	SEAD-12	B	743511.2	1015788	10	9.4	6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743508.2	1015788	8.8	9.4	-6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743505.2	1015788	9.6	9.4	2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743502.2	1015788	9.2	9.4	-2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743499.3	1015788	9.7	9.4	3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743496.3	1015787	9	9.4	-4.26%	A945P/A378Q	
9/30/1997	SEAD-12	B	743550.1	1015793	10.9	9.4	15.96%	A945P/A378Q	
9/30/1997	SEAD-12	B	743547.1	1015793	11.2	9.4	19.15%	A945P/A378Q	
9/30/1997	SEAD-12	B	743544.1	1015793	11.5	9.4	22.34%	A945P/A378Q	
9/30/1997	SEAD-12	B	743541.1	1015792	10.8	9.4	14.89%	A945P/A378Q	
9/30/1997	SEAD-12	B	743538.1	1015792	9.9	9.4	5.32%	A945P/A378Q	
9/30/1997	SEAD-12	B	743535.1	1015792	9.8	9.4	4.26%	A945P/A378Q	
9/30/1997	SEAD-12	B	743532.1	1015792	10.2	9.4	8.51%	A945P/A378Q	
9/30/1997	SEAD-12	B	743529.1	1015792	9.6	9.4	2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743526.1	1015792	9.2	9.4	-2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743523.1	1015792	8.8	9.4	-6.38%	A945P/A378Q	
9/30/1997	SEAD-12	B	743520.1	1015791	9.5	9.4	1.06%	A945P/A378Q	
9/30/1997	SEAD-12	B	743517.1	1015791	9.1	9.4	-3.19%	A945P/A378Q	
9/30/1997	SEAD-12	B	743514.1	1015791	8.9	9.4	-5.32%	A945P/A378Q	
9/30/1997	SEAD-12	B	743511.1	1015791	9.3	9.4	-1.06%	A945P/A378Q	
9/30/1997	SEAD-12	B	743508.1	1015791	9.6	9.4	2.13%	A945P/A378Q	
9/30/1997	SEAD-12	B	743505.1	1015791	9	9.4	-4.26%	A945P/A378Q	
9/30/1997	SEAD-12	B	743502.1	1015791	8.9	9.4	-5.32%	A945P/A378Q	
9/30/1997	SEAD-12	B	743499.1	1015791	9.4	9.4	0.00%	A945P/A378Q	
9/30/1997	SEAD-12	B	743496.1	1015790	9.2	9.4	-2.13%	A945P/A378Q	
9/29/1997	SEAD-12	B	743496.8	1015773	7.6	9.1	-16.48%	A945P/A378Q	
9/29/1997	SEAD-12	B	743499.8	1015774	8.5	9.1	-6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743502.8	1015774	8.2	9.1	-9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743505.8	1015774	7.8	9.1	-14.29%	A945P/A378Q	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/29/1997	SEAD-12	B	743508.8	1015774	8.2	9.1	-9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743511.8	1015774	7.6	9.1	-16.48%	A945P/A378Q	
9/29/1997	SEAD-12	B	743514.8	1015774	7.8	9.1	-14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743517.8	1015774	7	9.1	-23.08%	A945P/A378Q	
9/29/1997	SEAD-12	B	743520.8	1015775	8.1	9.1	-10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743523.8	1015775	8.2	9.1	-9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743526.8	1015775	7.5	9.1	-17.58%	A945P/A378Q	
9/29/1997	SEAD-12	B	743529.8	1015775	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743532.8	1015775	8.6	9.1	-5.49%	A945P/A378Q	
9/29/1997	SEAD-12	B	743535.8	1015775	7.8	9.1	-14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743538.8	1015775	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743541.8	1015775	8.5	9.1	-6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743544.8	1015776	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743547.8	1015776	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743550.8	1015776	7.8	9.1	-14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743553.8	1015776	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743556.8	1015776	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743559.8	1015776	10	9.1	9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743562.8	1015776	9.9	9.1	8.79%	A945P/A378Q	
9/29/1997	SEAD-12	B	743565.8	1015776	10.1	9.1	10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743568.8	1015777	10.7	9.1	17.58%	A945P/A378Q	
9/29/1997	SEAD-12	B	743496.9	1015770	7.7	9.1	-15.38%	A945P/A378Q	
9/29/1997	SEAD-12	B	743499.9	1015771	8	9.1	-12.09%	A945P/A378Q	
9/29/1997	SEAD-12	B	743502.9	1015771	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743505.9	1015771	8.4	9.1	-7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743508.9	1015771	8.5	9.1	-6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743511.9	1015771	8.1	9.1	-10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743514.9	1015771	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743517.9	1015771	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743520.9	1015772	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743523.9	1015772	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743526.9	1015772	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743529.9	1015772	8.9	9.1	-2.20%	A945P/A378Q	
9/29/1997	SEAD-12	B	743532.9	1015772	9.4	9.1	3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743535.9	1015772	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743538.9	1015772	9.3	9.1	2.20%	A945P/A378Q	
9/29/1997	SEAD-12	B	743541.9	1015772	9.4	9.1	3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743544.9	1015773	9.2	9.1	1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743547.9	1015773	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743550.9	1015773	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743553.9	1015773	9.6	9.1	5.49%	A945P/A378Q	
9/29/1997	SEAD-12	B	743556.9	1015773	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743559.9	1015773	10.8	9.1	18.68%	A945P/A378Q	
9/29/1997	SEAD-12	B	743562.9	1015773	11.8	9.1	29.67%	A945P/A378Q	
9/29/1997	SEAD-12	B	743565.9	1015773	11.5	9.1	26.37%	A945P/A378Q	
9/29/1997	SEAD-12	B	743568.9	1015774	11.9	9.1	30.77%	A945P/A378Q	
9/29/1997	SEAD-12	B	743497.1	1015767	7.4	9.1	-18.68%	A945P/A378Q	
9/29/1997	SEAD-12	B	743500.1	1015768	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743503.1	1015768	7.6	9.1	-16.48%	A945P/A378Q	
9/29/1997	SEAD-12	B	743506.1	1015768	8	9.1	-12.09%	A945P/A378Q	
9/29/1997	SEAD-12	B	743509.1	1015768	8.5	9.1	-6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743512.1	1015768	8.4	9.1	-7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743515.1	1015768	8.4	9.1	-7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743518.1	1015768	8.5	9.1	-6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743521.1	1015769	8.2	9.1	-9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743524.1	1015769	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743527.1	1015769	9.2	9.1	1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743530.1	1015769	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743533.1	1015769	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743536.1	1015769	9.7	9.1	6.59%	A945P/A378Q	
9/29/1997	SEAD-12	B	743539.1	1015769	10.1	9.1	10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743542.1	1015769	9.8	9.1	7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743545.1	1015770	9.8	9.1	7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743548.1	1015770	10.1	9.1	10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743551.1	1015770	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743554.1	1015770	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743557.1	1015770	10.3	9.1	13.19%	A945P/A378Q	
9/29/1997	SEAD-12	B	743560.1	1015770	10.4	9.1	14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743563.1	1015770	10.4	9.1	14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743566.1	1015770	11.5	9.1	26.37%	A945P/A378Q	
9/29/1997	SEAD-12	B	743569	1015771	10.8	9.1	18.68%	A945P/A378Q	
9/29/1997	SEAD-12	B	743497.3	1015764	6.8	9.1	-25.27%	A945P/A378Q	
9/29/1997	SEAD-12	B	743500.3	1015765	8.2	9.1	-9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743503.3	1015765	7.5	9.1	-17.58%	A945P/A378Q	
9/29/1997	SEAD-12	B	743506.3	1015765	7.8	9.1	-14.29%	A945P/A378Q	
9/29/1997	SEAD-12	B	743509.2	1015765	8.1	9.1	-10.99%	A945P/A378Q	
9/29/1997	SEAD-12	B	743512.2	1015765	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743515.2	1015765	8.3	9.1	-8.79%	A945P/A378Q	
9/29/1997	SEAD-12	B	743518.2	1015765	8.9	9.1	-2.20%	A945P/A378Q	
9/29/1997	SEAD-12	B	743521.2	1015766	8.6	9.1	-5.49%	A945P/A378Q	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/29/1997	SEAD-12	B	743524.2	1015766	8.8	9.1	-3.30%	A945P/A378Q	
9/29/1997	SEAD-12	B	743527.2	1015766	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743530.2	1015766	9	9.1	-1.10%	A945P/A378Q	
9/29/1997	SEAD-12	B	743533.2	1015766	9.9	9.1	8.79%	A945P/A378Q	
9/29/1997	SEAD-12	B	743536.2	1015766	10	9.1	9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743539.2	1015766	9.1	9.1	0.00%	A945P/A378Q	
9/29/1997	SEAD-12	B	743542.2	1015766	9.8	9.1	7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743545.2	1015767	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743548.2	1015767	9.3	9.1	2.20%	A945P/A378Q	
9/29/1997	SEAD-12	B	743551.2	1015767	10	9.1	9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743554.2	1015767	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743557.2	1015767	10.6	9.1	16.48%	A945P/A378Q	
9/29/1997	SEAD-12	B	743560.2	1015767	11.5	9.1	26.37%	A945P/A378Q	
9/29/1997	SEAD-12	B	743563.2	1015767	10	9.1	9.89%	A945P/A378Q	
9/29/1997	SEAD-12	B	743566.2	1015767	9.8	9.1	7.69%	A945P/A378Q	
9/29/1997	SEAD-12	B	743569.2	1015768	9.5	9.1	4.40%	A945P/A378Q	
9/29/1997	SEAD-12	B	743551.2	1015767	10	9.2	8.70%	A984P/A398Q	
9/29/1997	SEAD-12	B	743551.1	1015770	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550.9	1015773	10.5	9.2	14.13%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550.8	1015776	9.2	9.2	0.00%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550.4	1015785	10.5	9.2	14.13%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550.3	1015788	10	9.2	8.70%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550.1	1015791	9.5	9.2	3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743550	1015794	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.9	1015797	8.8	9.2	-4.35%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.8	1015800	8.2	9.2	-10.87%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.6	1015803	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.5	1015806	8.8	9.2	-4.35%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.3	1015809	8	9.2	-13.04%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.2	1015812	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743549.1	1015815	8.8	9.2	-4.35%	A984P/A398Q	
9/29/1997	SEAD-12	B	743548.9	1015818	8.3	9.2	-9.78%	A984P/A398Q	
9/29/1997	SEAD-12	B	743548.8	1015821	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743548.7	1015824	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743548.6	1015827	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.2	1015767	10.2	9.2	10.87%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.1	1015770	9.7	9.2	5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553.9	1015773	9.3	9.2	1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553.8	1015776	9.3	9.2	1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553.4	1015785	11.1	9.2	20.65%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553.3	1015788	10.3	9.2	11.96%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553.1	1015791	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743553	1015794	9.4	9.2	2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.9	1015797	9.2	9.2	0.00%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.8	1015800	9.3	9.2	1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.6	1015803	9.3	9.2	1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.5	1015806	9.3	9.2	1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.3	1015809	9.5	9.2	3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.2	1015812	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743552.1	1015815	9.1	9.2	-1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743551.9	1015818	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743551.8	1015821	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743551.7	1015824	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743551.6	1015827	8.3	9.2	-9.78%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.2	1015767	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.1	1015770	9.5	9.2	3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556.9	1015773	8.9	9.2	-3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556.8	1015776	8.3	9.2	-9.78%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556.4	1015785	10.2	9.2	10.87%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556.3	1015788	11.5	9.2	25.00%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556.1	1015791	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743556	1015794	10.6	9.2	15.22%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.9	1015797	10.8	9.2	17.39%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.8	1015800	10.4	9.2	13.04%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.6	1015803	10.1	9.2	9.78%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.4	1015806	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.3	1015809	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.2	1015812	9.5	9.2	3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743555.1	1015815	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.9	1015818	9.1	9.2	-1.09%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.8	1015821	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.7	1015824	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743554.6	1015827	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743560.2	1015767	10	9.2	8.70%	A984P/A398Q	
9/29/1997	SEAD-12	B	743560.1	1015770	10.2	9.2	10.87%	A984P/A398Q	
9/29/1997	SEAD-12	B	743559.9	1015773	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743559.8	1015776	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743559.4	1015785	10.6	9.2	15.22%	A984P/A398Q	
9/29/1997	SEAD-12	B	743559.3	1015788	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743559.1	1015791	10.2	9.2	10.87%	A984P/A398Q	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/29/1997	SEAD-12	B	743559	1015794	9.8	9.2	6.52%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.9	1015797	10.1	9.2	9.78%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.8	1015800	10	9.2	8.70%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.6	1015803	9.2	9.2	0.00%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.4	1015806	8.5	9.2	-7.61%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.3	1015809	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.2	1015812	8.9	9.2	-3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743558.1	1015815	8.7	9.2	-5.43%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.9	1015818	8.9	9.2	-3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.8	1015821	9	9.2	-2.17%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.7	1015824	8.9	9.2	-3.26%	A984P/A398Q	
9/29/1997	SEAD-12	B	743557.6	1015827	8.7	9.2	-5.43%	A984P/A398Q	
9/30/1997	SEAD-12	B	743617.9	1015776	7.4	9.4	-21.28%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.8	1015779	8	9.4	-14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.6	1015782	7.1	9.4	-24.47%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.4	1015785	7.8	9.4	-17.02%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.3	1015788	8.1	9.4	-13.83%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.2	1015791	7.5	9.4	-20.21%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743617.1	1015794	8.4	9.4	-10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.9	1015797	9	9.4	-4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.8	1015800	10.5	9.4	11.70%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.7	1015803	10.8	9.4	14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.6	1015806	10.7	9.4	13.83%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.4	1015809	10.3	9.4	9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.3	1015812	10.4	9.4	10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616.1	1015815	10.8	9.4	14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743616	1015818	11	9.4	17.02%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743615.9	1015821	9.5	9.4	1.06%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743615.8	1015824	8.4	9.4	-10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743615.6	1015827	9	9.4	-4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743615.5	1015830	8.5	9.4	-9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.9	1015776	7.8	9.4	-17.02%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.7	1015779	7.2	9.4	-23.40%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.6	1015782	8.5	9.4	-9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.4	1015785	8.4	9.4	-10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.3	1015788	9.8	9.4	4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.2	1015791	9.8	9.4	4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743620.1	1015794	10.4	9.4	10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.9	1015797	10.8	9.4	14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.8	1015800	10.3	9.4	9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.7	1015803	11	9.4	17.02%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.6	1015806	10.4	9.4	10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.4	1015809	10	9.4	6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.3	1015812	10	9.4	6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619.1	1015815	8.9	9.4	-5.32%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743619	1015818	9.2	9.4	-2.13%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743618.9	1015821	9.3	9.4	-1.06%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743618.8	1015824	8.8	9.4	-6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743618.6	1015827	9.1	9.4	-3.19%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743618.5	1015830	9	9.4	-4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.9	1015776	7.6	9.4	-19.15%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.7	1015779	8.2	9.4	-12.77%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.6	1015782	8.5	9.4	-9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.4	1015785	8.4	9.4	-10.64%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.3	1015788	8.8	9.4	-6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.2	1015791	9.6	9.4	2.13%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743623.1	1015794	9.6	9.4	2.13%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.9	1015797	10.2	9.4	8.51%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.8	1015800	10	9.4	6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.7	1015803	10.2	9.4	8.51%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.6	1015806	9.8	9.4	4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.4	1015809	10.8	9.4	14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.3	1015812	10.1	9.4	7.45%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622.1	1015815	9.1	9.4	-3.19%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743622	1015818	9.4	9.4	0.00%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743621.9	1015821	8.8	9.4	-6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743621.8	1015824	8.9	9.4	-5.32%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743621.6	1015827	9.1	9.4	-3.19%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743621.5	1015830	8.6	9.4	-8.51%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.8	1015776	9	9.4	-4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.7	1015779	10.1	9.4	7.45%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.6	1015782	8.7	9.4	-7.45%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.4	1015785	8.9	9.4	-5.32%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.3	1015788	9.4	9.4	0.00%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.2	1015791	8.5	9.4	-9.57%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743626.1	1015794	8	9.4	-14.89%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743625.9	1015797	9	9.4	-4.26%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743625.8	1015800	10	9.4	6.38%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743625.7	1015803	10.5	9.4	11.70%	*A945P/A378Q*	
9/30/1997	SEAD-12	B	743625.5	1015806	9.5	9.4	1.06%	*A945P/A378Q*	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/30/1997	SEAD-12	B	743625.4	1015809	9.2	9.4	-2.13%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743625.3	1015812	9	9.4	-4.26%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743625.1	1015815	9.8	9.4	4.26%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743625	1015818	8.7	9.4	-7.45%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743624.9	1015821	8.9	9.4	-5.32%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743624.8	1015824	8	9.4	-14.89%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743624.6	1015827	8.4	9.4	-10.64%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743624.5	1015830	7.8	9.4	-17.02%	***A945P/A378Q***	
9/30/1997	SEAD-12	B	743599.6	1015780	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743599.5	1015783	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743599.4	1015786	9.1	10.2	-10.78%	A984P/A398Q	
9/30/1997	SEAD-12	B	743599.3	1015789	12.9	10.2	26.47%	A984P/A398Q	
9/30/1997	SEAD-12	B	743599.1	1015792	13	10.2	27.45%	A984P/A398Q	
9/30/1997	SEAD-12	B	743599	1015795	12.8	10.2	25.49%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.9	1015798	12.5	10.2	22.55%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.8	1015801	12.5	10.2	22.55%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.6	1015804	12.8	10.2	25.49%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.4	1015808	12	10.2	17.65%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.3	1015811	12	10.2	17.65%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598.2	1015814	11.5	10.2	12.75%	A984P/A398Q	
9/30/1997	SEAD-12	B	743598	1015817	9.5	10.2	-6.86%	A984P/A398Q	
9/30/1997	SEAD-12	B	743602.3	1015787	8.6	10.2	-15.69%	A984P/A398Q	
9/30/1997	SEAD-12	B	743558.9	1015818	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743561.9	1015818	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743564.9	1015818	8.8	10.2	-13.73%	A984P/A398Q	
9/30/1997	SEAD-12	B	743567.9	1015819	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743570.9	1015819	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743573.9	1015819	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743576.9	1015819	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743579.9	1015819	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743582.9	1015819	7.8	10.2	-23.53%	A984P/A398Q	
9/30/1997	SEAD-12	B	743585.9	1015819	7.8	10.2	-23.53%	A984P/A398Q	
9/30/1997	SEAD-12	B	743588.9	1015820	7.5	10.2	-26.47%	A984P/A398Q	
9/30/1997	SEAD-12	B	743594.9	1015820	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743597.9	1015820	9.2	10.2	-9.80%	A984P/A398Q	
9/30/1997	SEAD-12	B	743600.9	1015820	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743603.9	1015820	9.4	10.2	-7.84%	A984P/A398Q	
9/30/1997	SEAD-12	B	743606.9	1015820	10	10.2	-1.96%	A984P/A398Q	
9/30/1997	SEAD-12	B	743609.9	1015820	10.2	10.2	0.00%	A984P/A398Q	
9/30/1997	SEAD-12	B	743612.9	1015821	10	10.2	-1.96%	A984P/A398Q	
9/30/1997	SEAD-12	B	743615.9	1015821	9.6	10.2	-5.88%	A984P/A398Q	
9/30/1997	SEAD-12	B	743558.8	1015821	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743561.8	1015821	9.4	10.2	-7.84%	A984P/A398Q	
9/30/1997	SEAD-12	B	743564.8	1015821	9.5	10.2	-6.86%	A984P/A398Q	
9/30/1997	SEAD-12	B	743567.8	1015822	9.6	10.2	-5.88%	A984P/A398Q	
9/30/1997	SEAD-12	B	743570.8	1015822	9.3	10.2	-8.82%	A984P/A398Q	
9/30/1997	SEAD-12	B	743573.8	1015822	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743576.8	1015822	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743579.8	1015822	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743594.8	1015823	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743597.8	1015823	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743600.8	1015823	9.4	10.2	-7.84%	A984P/A398Q	
9/30/1997	SEAD-12	B	743603.8	1015823	10	10.2	-1.96%	A984P/A398Q	
9/30/1997	SEAD-12	B	743606.8	1015823	9.9	10.2	-2.94%	A984P/A398Q	
9/30/1997	SEAD-12	B	743609.8	1015823	9.8	10.2	-3.92%	A984P/A398Q	
9/30/1997	SEAD-12	B	743612.8	1015824	9.8	10.2	-3.92%	A984P/A398Q	
9/30/1997	SEAD-12	B	743615.8	1015824	9.8	10.2	-3.92%	A984P/A398Q	
9/30/1997	SEAD-12	B	743558.7	1015824	9.1	10.2	-10.78%	A984P/A398Q	
9/30/1997	SEAD-12	B	743561.7	1015824	9.6	10.2	-5.88%	A984P/A398Q	
9/30/1997	SEAD-12	B	743564.7	1015824	9.2	10.2	-9.80%	A984P/A398Q	
9/30/1997	SEAD-12	B	743567.7	1015825	9.5	10.2	-6.86%	A984P/A398Q	
9/30/1997	SEAD-12	B	743570.7	1015825	9.7	10.2	-4.90%	A984P/A398Q	
9/30/1997	SEAD-12	B	743573.7	1015825	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743576.7	1015825	8.8	10.2	-13.73%	A984P/A398Q	
9/30/1997	SEAD-12	B	743579.6	1015825	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743594.6	1015826	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743597.6	1015826	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743600.6	1015826	9.6	10.2	-5.88%	A984P/A398Q	
9/30/1997	SEAD-12	B	743603.6	1015826	9.5	10.2	-6.86%	A984P/A398Q	
9/30/1997	SEAD-12	B	743606.6	1015826	9.9	10.2	-2.94%	A984P/A398Q	
9/30/1997	SEAD-12	B	743609.6	1015826	10	10.2	-1.96%	A984P/A398Q	
9/30/1997	SEAD-12	B	743612.6	1015827	9.4	10.2	-7.84%	A984P/A398Q	
9/30/1997	SEAD-12	B	743615.6	1015827	9.8	10.2	-3.92%	A984P/A398Q	
9/30/1997	SEAD-12	B	743558.6	1015827	8.9	10.2	-12.75%	A984P/A398Q	
9/30/1997	SEAD-12	B	743561.6	1015827	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743564.6	1015827	8.8	10.2	-13.73%	A984P/A398Q	
9/30/1997	SEAD-12	B	743567.6	1015828	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743570.6	1015828	8.9	10.2	-12.75%	A984P/A398Q	
9/30/1997	SEAD-12	B	743573.5	1015826	8.4	10.2	-17.65%	A984P/A398Q	
9/30/1997	SEAD-12	B	743576.5	1015828	8.7	10.2	-14.71%	A984P/A398Q	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/30/1997	SEAD-12	B	743579.5	1015828	8.5	10.2	-16.67%	A984P/A398Q	
9/30/1997	SEAD-12	B	743582.5	1015828	8.2	10.2	-19.61%	A984P/A398Q	
9/30/1997	SEAD-12	B	743585.5	1015828	7.8	10.2	-23.53%	A984P/A398Q	
9/30/1997	SEAD-12	B	743588.5	1015829	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743591.5	1015829	8	10.2	-21.57%	A984P/A398Q	
9/30/1997	SEAD-12	B	743594.5	1015829	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743597.5	1015829	8.2	10.2	-19.61%	A984P/A398Q	
9/30/1997	SEAD-12	B	743600.5	1015829	8.6	10.2	-15.69%	A984P/A398Q	
9/30/1997	SEAD-12	B	743603.5	1015829	9	10.2	-11.76%	A984P/A398Q	
9/30/1997	SEAD-12	B	743606.5	1015829	9.2	10.2	-9.80%	A984P/A398Q	
9/30/1997	SEAD-12	B	743609.5	1015829	8.7	10.2	-14.71%	A984P/A398Q	
9/30/1997	SEAD-12	B	743612.5	1015830	8.4	10.2	-17.65%	A984P/A398Q	
9/30/1997	SEAD-12	B	743615.5	1015830	8.7	10.2	-14.71%	A984P/A398Q	
9/15/1997	SEAD-12	B	743577.9	1015841	2.18	2.6	-16.15%	0034A	
9/15/1997	SEAD-12	B	743574.5	1015920	2.3	2.6	-11.54%	0034A	
9/15/1997	SEAD-12	B	743570.1	1016020	2.12	2.6	-18.46%	0034A	
9/15/1997	SEAD-12	B	743583.9	1015841	2.2	2.6	-15.38%	0034A	
9/15/1997	SEAD-12	B	743580.5	1015920	2.45	2.6	-5.77%	0034A	
9/15/1997	SEAD-12	B	743576.1	1016020	2.23	2.6	-14.23%	0034A	
9/15/1997	SEAD-12	B	743589.9	1015842	2.32	2.6	-10.77%	0034A	
9/15/1997	SEAD-12	B	743586.5	1015921	2.32	2.6	-10.77%	0034A	
9/15/1997	SEAD-12	B	743582.1	1016020	2.12	2.6	-18.46%	0034A	
9/15/1997	SEAD-12	B	743595.9	1015842	2.36	2.6	-9.23%	0034A	
9/15/1997	SEAD-12	B	743592.5	1015921	2.43	2.6	-6.54%	0034A	
9/15/1997	SEAD-12	B	743588.1	1016021	2.29	2.6	-11.92%	0034A	
9/15/1997	SEAD-12	B	743601.9	1015842	2.3	2.6	-11.54%	0034A	
9/15/1997	SEAD-12	B	743598.5	1015921	2.28	2.6	-12.31%	0034A	
9/15/1997	SEAD-12	B	743594.1	1016021	1.98	2.6	-23.85%	0034A	
9/15/1997	SEAD-12	B	743607.9	1015842	2.34	2.6	-10.00%	0034A	
9/15/1997	SEAD-12	B	743604.5	1015921	2.38	2.6	-8.46%	0034A	
9/15/1997	SEAD-12	B	743600.1	1016021	2.16	2.6	-16.92%	0034A	
9/15/1997	SEAD-12	B	743613.9	1015843	2.47	2.6	-5.00%	0034A	
9/15/1997	SEAD-12	B	743610.4	1015922	2.34	2.6	-10.00%	0034A	
9/15/1997	SEAD-12	B	743606.1	1016021	2.16	2.6	-16.92%	0034A	
9/15/1997	SEAD-12	B	743619.9	1015843	2.42	2.6	-6.92%	0034A	
9/15/1997	SEAD-12	B	743616.4	1015922	2.46	2.6	-5.38%	0034A	
9/15/1997	SEAD-12	B	743612.1	1016022	2.24	2.6	-13.85%	0034A	
9/15/1997	SEAD-12	B	743625.9	1015843	2.41	2.6	-7.31%	0034A	
9/15/1997	SEAD-12	B	743622.4	1015922	2.36	2.6	-9.23%	0034A	
9/15/1997	SEAD-12	B	743618.1	1016022	2.1	2.6	-19.23%	0034A	
9/15/1997	SEAD-12	B	743631.9	1015843	2.6	2.6	0.00%	0034A	
9/15/1997	SEAD-12	B	743628.4	1015922	2.54	2.6	-2.31%	0034A	
9/15/1997	SEAD-12	B	743624.1	1016022	2.35	2.6	-9.62%	0034A	
9/15/1997	SEAD-12	B	743638.8	1015823	2.45	2.6	-5.77%	0034A	
9/15/1997	SEAD-12	B	743634.4	1015923	2.25	2.6	-13.46%	0034A	
9/15/1997	SEAD-12	B	743630.1	1016023	2.02	2.6	-22.31%	0034A	
9/15/1997	SEAD-12	B	743644.8	1015823	2.34	2.6	-10.00%	0034A	
9/15/1997	SEAD-12	B	743640.4	1015923	2.37	2.6	-8.85%	0034A	
9/15/1997	SEAD-12	B	743636.1	1016023	2.05	2.6	-21.15%	0034A	
9/15/1997	SEAD-12	B	743650.8	1015823	2.54	2.6	-2.31%	0034A	
9/15/1997	SEAD-12	B	743646.4	1015923	2.47	2.6	-5.00%	0034A	
9/15/1997	SEAD-12	B	743642.1	1016023	2.15	2.6	-17.31%	0034A	
9/15/1997	SEAD-12	B	743656.8	1015824	2.24	2.6	-13.85%	0034A	
9/15/1997	SEAD-12	B	743652.4	1015923	2.34	2.6	-10.00%	0034A	
9/15/1997	SEAD-12	B	743648.1	1016023	2.22	2.6	-14.62%	0034A	
9/15/1997	SEAD-12	B	743662.8	1015824	2.23	2.6	-14.23%	0034A	
9/15/1997	SEAD-12	B	743658.4	1015924	2.38	2.6	-8.46%	0034A	
9/15/1997	SEAD-12	B	743654.1	1016024	2.24	2.6	-13.85%	0034A	
9/15/1997	SEAD-12	B	743668.8	1015824	2.32	2.6	-10.77%	0034A	
9/15/1997	SEAD-12	B	743664.4	1015924	2.36	2.6	-9.23%	0034A	
9/15/1997	SEAD-12	B	743660.1	1016024	2.28	2.6	-12.31%	0034A	
9/15/1997	SEAD-12	B	743674.8	1015824	2.65	2.6	1.92%	0034A	
9/15/1997	SEAD-12	B	743670.4	1015924	2.44	2.6	-6.15%	0034A	
9/15/1997	SEAD-12	B	743666.1	1016024	2.26	2.6	-13.08%	0034A	
9/16/1997	SEAD-12	B	743680.8	1015825	2.11	2.6	-18.85%	0034A	
9/16/1997	SEAD-12	B	743676.4	1015924	2.16	2.6	-16.92%	0034A	
9/16/1997	SEAD-12	B	743672	1016024	2.08	2.6	-20.00%	0034A	
9/16/1997	SEAD-12	B	743686.8	1015825	2.26	2.6	-13.08%	0034A	
9/16/1997	SEAD-12	B	743682.4	1015925	2.28	2.6	-12.31%	0034A	
9/16/1997	SEAD-12	B	743678	1016025	2.12	2.6	-18.46%	0034A	
9/16/1997	SEAD-12	B	743692.8	1015825	2.07	2.6	-20.38%	0034A	
9/16/1997	SEAD-12	B	743688.4	1015925	2.13	2.6	-18.08%	0034A	
9/16/1997	SEAD-12	B	743684	1016025	2.16	2.6	-16.92%	0034A	
9/16/1997	SEAD-12	B	743698.8	1015825	2.34	2.6	-10.00%	0034A	
9/16/1997	SEAD-12	B	743694.4	1015925	2.23	2.6	-14.23%	0034A	
9/16/1997	SEAD-12	B	743690	1016025	2.1	2.6	-19.23%	0034A	
9/16/1997	SEAD-12	B	743704.8	1015826	2.13	2.6	-18.08%	0034A	
9/16/1997	SEAD-12	B	743700.4	1015926	2.15	2.6	-17.31%	0034A	
9/16/1997	SEAD-12	B	743696	1016025	2.07	2.6	-20.38%	0034A	
9/16/1997	SEAD-12	B	743710.8	1015826	2.33	2.6	-10.38%	0034A	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/16/1997	SEAD-12	B	743706.4	1015926	2.27	2.6	-12.69%	0034A	
9/16/1997	SEAD-12	B	743702	1016026	2.3	2.6	-11.54%	0034A	
9/16/1997	SEAD-12	B	743716.8	1015826	2.2	2.6	-15.38%	0034A	
9/16/1997	SEAD-12	B	743712.4	1015926	2.21	2.6	-15.00%	0034A	
9/16/1997	SEAD-12	B	743708	1016026	2.24	2.6	-13.85%	0034A	
9/16/1997	SEAD-12	B	743722.8	1015826	2.2	2.6	-15.38%	0034A	
9/16/1997	SEAD-12	B	743718.4	1015926	2.24	2.6	-13.85%	0034A	
9/16/1997	SEAD-12	B	743714	1016026	2.34	2.6	-10.00%	0034A	
9/16/1997	SEAD-12	B	743728.8	1015827	2.29	2.6	-11.92%	0034A	
9/16/1997	SEAD-12	B	743724.4	1015927	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743720	1016026	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743734.8	1015827	2.23	2.6	-14.23%	0034A	
9/16/1997	SEAD-12	B	743730.4	1015927	2.21	2.6	-15.00%	0034A	
9/16/1997	SEAD-12	B	743726	1016027	2.12	2.6	-18.46%	0034A	
9/16/1997	SEAD-12	B	743740.8	1015827	2.16	2.6	-16.92%	0034A	
9/16/1997	SEAD-12	B	743736.4	1015927	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743732	1016027	2.15	2.6	-17.31%	0034A	
9/16/1997	SEAD-12	B	743746.7	1015827	2.33	2.6	-10.38%	0034A	
9/16/1997	SEAD-12	B	743742.3	1015927	2.32	2.6	-10.77%	0034A	
9/16/1997	SEAD-12	B	743737.9	1016027	2.3	2.6	-11.54%	0034A	
9/16/1997	SEAD-12	B	743752.7	1015828	2.12	2.6	-18.46%	0034A	
9/16/1997	SEAD-12	B	743748.3	1015928	2.26	2.6	-13.08%	0034A	
9/16/1997	SEAD-12	B	743743.9	1016028	2.1	2.6	-19.23%	0034A	
9/16/1997	SEAD-12	B	743758.7	1015828	2.34	2.6	-10.00%	0034A	
9/16/1997	SEAD-12	B	743754.3	1015928	2.36	2.6	-9.23%	0034A	
9/16/1997	SEAD-12	B	743749.9	1016028	2.17	2.6	-16.54%	0034A	
9/16/1997	SEAD-12	B	743764.7	1015828	2.18	2.6	-16.15%	0034A	
9/16/1997	SEAD-12	B	743760.3	1015928	2.2	2.6	-15.38%	0034A	
9/16/1997	SEAD-12	B	743755.9	1016028	2.14	2.6	-17.69%	0034A	
9/16/1997	SEAD-12	B	743770.7	1015828	2.32	2.6	-10.77%	0034A	
9/16/1997	SEAD-12	B	743766.3	1015928	2.4	2.6	-7.69%	0034A	
9/16/1997	SEAD-12	B	743761.9	1016028	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743776.7	1015829	2.14	2.6	-17.69%	0034A	
9/16/1997	SEAD-12	B	743772.3	1015929	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743767.9	1016029	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743782.7	1015829	2.21	2.6	-15.00%	0034A	
9/16/1997	SEAD-12	B	743778.3	1015929	2.39	2.6	-8.08%	0034A	
9/16/1997	SEAD-12	B	743773.9	1016029	2.26	2.6	-13.08%	0034A	
9/16/1997	SEAD-12	B	743788.7	1015829	2.2	2.6	-15.38%	0034A	
9/16/1997	SEAD-12	B	743784.3	1015929	2.25	2.6	-13.46%	0034A	
9/16/1997	SEAD-12	B	743779.9	1016029	2.26	2.6	-13.08%	0034A	
9/16/1997	SEAD-12	B	743794.7	1015830	2.38	2.6	-8.46%	0034A	
9/16/1997	SEAD-12	B	743790.3	1015929	2.44	2.6	-6.15%	0034A	
9/16/1997	SEAD-12	B	743785.9	1016029	2.38	2.6	-8.46%	0034A	
9/16/1997	SEAD-12	B	743800.7	1015830	2.3	2.6	-11.54%	0034A	
9/16/1997	SEAD-12	B	743796.3	1015930	2.41	2.6	-7.31%	0034A	
9/16/1997	SEAD-12	B	743791.9	1016030	2.4	2.6	-7.69%	0034A	
9/16/1997	SEAD-12	B	743806.6	1015830	2.48	2.6	-4.62%	0034A	
9/16/1997	SEAD-12	B	743802.3	1015930	2.55	2.6	-1.92%	0034A	
9/16/1997	SEAD-12	B	743797.9	1016030	2.38	2.6	-8.46%	0034A	
9/16/1997	SEAD-12	B	743812.6	1015830	2.32	2.6	-10.77%	0034A	
9/16/1997	SEAD-12	B	743808.3	1015930	2.44	2.6	-6.15%	0034A	
9/16/1997	SEAD-12	B	743803.9	1016030	2.35	2.6	-9.62%	0034A	
9/16/1997	SEAD-12	B	743818.6	1015831	2.42	2.6	-6.92%	0034A	
9/16/1997	SEAD-12	B	743814.3	1015930	2.68	2.6	3.08%	0034A	
9/16/1997	SEAD-12	B	743809.9	1016030	2.6	2.6	0.00%	0034A	
9/16/1997	SEAD-12	B	743824.6	1015831	2.36	2.6	-9.23%	0034A	
9/16/1997	SEAD-12	B	743820.3	1015931	2.51	2.6	-3.46%	0034A	
9/16/1997	SEAD-12	B	743815.9	1016031	2.5	2.6	-3.85%	0034A	
9/16/1997	SEAD-12	B	743830.6	1015831	2.52	2.6	-3.08%	0034A	
9/16/1997	SEAD-12	B	743826.3	1015931	2.68	2.6	3.08%	0034A	
9/16/1997	SEAD-12	B	743821.9	1016031	2.52	2.6	-3.08%	0034A	
9/16/1997	SEAD-12	B	743836.6	1015831	2.35	2.6	-9.62%	0034A	
9/16/1997	SEAD-12	B	743832.3	1015931	2.69	2.6	3.46%	0034A	
9/16/1997	SEAD-12	B	743827.9	1016031	2.6	2.6	0.00%	0034A	
9/16/1997	SEAD-12	B	743842.6	1015832	2.4	2.6	-7.69%	0034A	
9/16/1997	SEAD-12	B	743838.3	1015932	2.69	2.6	3.46%	0034A	
9/16/1997	SEAD-12	B	743833.9	1016031	2.5	2.6	-3.85%	0034A	
9/16/1997	SEAD-12	B	743848.6	1015832	2.42	2.6	-6.92%	0034A	
9/16/1997	SEAD-12	B	743844.3	1015932	2.41	2.6	-7.31%	0034A	
9/16/1997	SEAD-12	B	743839.9	1016032	2.5	2.6	-3.85%	0034A	
9/16/1997	SEAD-12	B	743854.6	1015832	2.42	2.6	-6.92%	0034A	
9/16/1997	SEAD-12	B	743850.3	1015932	2.72	2.6	4.62%	0034A	
9/16/1997	SEAD-12	B	743845.9	1016032	2.5	2.6	-3.85%	0034A	
9/17/1997	SEAD-12	B	743860.6	1015832	2.13	2.5	-14.80%	0034A	
9/17/1997	SEAD-12	B	743856.3	1015932	2.29	2.5	-8.40%	0034A	
9/17/1997	SEAD-12	B	743851.9	1016032	2.25	2.5	-10.00%	0034A	
9/17/1997	SEAD-12	B	743866.6	1015833	2.25	2.5	-10.00%	0034A	
9/17/1997	SEAD-12	B	743862.3	1015933	2.49	2.5	-0.40%	0034A	
9/17/1997	SEAD-12	B	743857.9	1016032	2.39	2.5	-4.40%	0034A	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/17/1997	SEAD-12	B	743872.6	1015833	2.3	2.5	-8.00%	0034A	
9/17/1997	SEAD-12	B	743868.3	1015933	2.28	2.5	-8.80%	0034A	
9/17/1997	SEAD-12	B	743863.9	1016033	2.3	2.5	-8.00%	0034A	
9/17/1997	SEAD-12	B	743878.6	1015833	2.38	2.5	-4.80%	0034A	
9/17/1997	SEAD-12	B	743874.2	1015933	2.5	2.5	0.00%	0034A	
9/17/1997	SEAD-12	B	743869.8	1016033	2.35	2.5	-6.00%	0034A	
9/17/1997	SEAD-12	B	743884.6	1015833	2.31	2.5	-7.60%	0034A	
9/17/1997	SEAD-12	B	743880.2	1015933	2.37	2.5	-5.20%	0034A	
9/17/1997	SEAD-12	B	743875.8	1016033	2.28	2.5	-8.80%	0034A	
9/17/1997	SEAD-12	B	743890.6	1015834	2.36	2.5	-5.60%	0034A	
9/17/1997	SEAD-12	B	743886.2	1015934	2.4	2.5	-4.00%	0034A	
9/17/1997	SEAD-12	B	743881.8	1016034	2.3	2.5	-8.00%	0034A	
9/17/1997	SEAD-12	B	743896.6	1015834	2.33	2.5	-6.80%	0034A	
9/17/1997	SEAD-12	B	743892.2	1015934	2.27	2.5	-9.20%	0034A	
9/17/1997	SEAD-12	B	743887.8	1016034	2.35	2.5	-6.00%	0034A	
9/17/1997	SEAD-12	B	743902.6	1015834	2.25	2.5	-10.00%	0034A	
9/17/1997	SEAD-12	B	743898.2	1015934	2.43	2.5	-2.80%	0034A	
9/17/1997	SEAD-12	B	743893.8	1016034	2.2	2.5	-12.00%	0034A	
9/17/1997	SEAD-12	B	743908.6	1015835	2.3	2.5	-8.00%	0034A	
9/17/1997	SEAD-12	B	743904.2	1015934	2.45	2.5	-2.00%	0034A	
9/17/1997	SEAD-12	B	743899.8	1016034	2.35	2.5	-6.00%	0034A	
9/17/1997	SEAD-12	B	743914.6	1015835	2.43	2.5	-2.80%	0034A	
9/17/1997	SEAD-12	B	743910.2	1015935	2.59	2.5	3.60%	0034A	
9/17/1997	SEAD-12	B	743905.8	1016035	2.54	2.5	1.60%	0034A	
9/17/1997	SEAD-12	B	743920.6	1015835	2.33	2.5	-6.80%	0034A	
9/17/1997	SEAD-12	B	743916.2	1015935	2.5	2.5	0.00%	0034A	
9/17/1997	SEAD-12	B	743911.8	1016035	2.51	2.5	0.40%	0034A	
9/17/1997	SEAD-12	B	743926.6	1015835	2.4	2.5	-4.00%	0034A	
9/17/1997	SEAD-12	B	743922.2	1015935	2.74	2.5	9.60%	0034A	
9/17/1997	SEAD-12	B	743917.8	1016035	2.48	2.5	-0.80%	0034A	
9/17/1997	SEAD-12	B	743932.6	1015836	2.28	2.5	-8.80%	0034A	
9/17/1997	SEAD-12	B	743928.2	1015935	2.7	2.5	8.00%	0034A	
9/17/1997	SEAD-12	B	743923.8	1016035	2.62	2.5	4.80%	0034A	
9/17/1997	SEAD-12	B	743938.5	1015836	2.38	2.5	-4.80%	0034A	
9/17/1997	SEAD-12	B	743934.1	1015936	2.75	2.5	10.00%	0034A	
9/17/1997	SEAD-12	B	743929.8	1016036	2.72	2.5	8.80%	0034A	
9/18/1997	SEAD-12	B	743944.5	1015836	2.12	2.7	-21.48%	0034A	
9/18/1997	SEAD-12	B	743940.1	1015936	2.4	2.7	-11.11%	0034A	
9/18/1997	SEAD-12	B	743935.8	1016036	2.32	2.7	-14.07%	0034A	
9/18/1997	SEAD-12	B	743950.5	1015836	2.25	2.7	-16.67%	0034A	
9/18/1997	SEAD-12	B	743946.1	1015936	2.5	2.7	-7.41%	0034A	
9/18/1997	SEAD-12	B	743941.8	1016036	2.42	2.7	-10.37%	0034A	
9/18/1997	SEAD-12	B	743956.5	1015837	2.15	2.7	-20.37%	0034A	
9/18/1997	SEAD-12	B	743952.1	1015937	2.35	2.7	-12.96%	0034A	
9/18/1997	SEAD-12	B	743947.8	1016036	2.3	2.7	-14.81%	0034A	
9/18/1997	SEAD-12	B	743962.5	1015837	2.25	2.7	-16.67%	0034A	
9/18/1997	SEAD-12	B	743958.1	1015937	2.5	2.7	-7.41%	0034A	
9/18/1997	SEAD-12	B	743953.8	1016037	2.38	2.7	-11.85%	0034A	
9/18/1997	SEAD-12	B	743968.5	1015837	2.28	2.7	-15.56%	0034A	
9/18/1997	SEAD-12	B	743964.1	1015937	2.34	2.7	-13.33%	0034A	
9/18/1997	SEAD-12	B	743959.8	1016037	2.45	2.7	-9.26%	0034A	
9/18/1997	SEAD-12	B	743974.5	1015837	2.2	2.7	-18.52%	0034A	
9/18/1997	SEAD-12	B	743970.1	1015937	2.58	2.7	-4.44%	0034A	
9/18/1997	SEAD-12	B	743965.8	1016037	2.55	2.7	-5.56%	0034A	
9/18/1997	SEAD-12	B	743980.5	1015838	2.25	2.7	-16.67%	0034A	
9/18/1997	SEAD-12	B	743976.1	1015938	2.4	2.7	-11.11%	0034A	
9/18/1997	SEAD-12	B	743971.8	1016037	2.5	2.7	-7.41%	0034A	
9/18/1997	SEAD-12	B	743986.5	1015838	2.42	2.7	-10.37%	0034A	
9/18/1997	SEAD-12	B	743982.1	1015938	2.58	2.7	-4.44%	0034A	
9/18/1997	SEAD-12	B	743977.8	1016038	2.6	2.7	-3.70%	0034A	
9/18/1997	SEAD-12	B	743992.5	1015838	2.34	2.7	-13.33%	0034A	
9/18/1997	SEAD-12	B	743988.1	1015938	2.53	2.7	-6.30%	0034A	
9/18/1997	SEAD-12	B	743983.8	1016038	2.54	2.7	-5.93%	0034A	
9/18/1997	SEAD-12	B	743998.5	1015838	2.34	2.7	-13.33%	0034A	
9/18/1997	SEAD-12	B	743994.1	1015938	2.46	2.7	-8.89%	0034A	
9/18/1997	SEAD-12	B	743989.8	1016038	2.44	2.7	-9.63%	0034A	
9/18/1997	SEAD-12	B	744004.4	1015839	2.38	2.7	-11.85%	0034A	
9/18/1997	SEAD-12	B	744000.1	1015939	2.48	2.7	-8.15%	0034A	
9/18/1997	SEAD-12	B	743995.7	1016039	2.54	2.7	-5.93%	0034A	
9/18/1997	SEAD-12	B	744010.4	1015839	2.55	2.7	-5.56%	0034A	
9/18/1997	SEAD-12	B	744006.1	1015939	2.73	2.7	1.11%	0034A	
9/18/1997	SEAD-12	B	744001.7	1016039	2.6	2.7	-3.70%	0034A	
9/18/1997	SEAD-12	B	744016.4	1015839	2.5	2.7	-7.41%	0034A	
9/18/1997	SEAD-12	B	744012.1	1015939	2.61	2.7	-3.33%	0034A	
9/18/1997	SEAD-12	B	744007.7	1016039	2.54	2.7	-5.93%	0034A	
9/18/1997	SEAD-12	B	744022.4	1015840	2.6	2.7	-3.70%	0034A	
9/18/1997	SEAD-12	B	744018.1	1015939	2.77	2.7	2.59%	0034A	
9/18/1997	SEAD-12	B	744013.7	1016039	2.7	2.7	0.00%	0034A	
9/18/1997	SEAD-12	B	744028.4	1015840	2.44	2.7	-9.63%	0034A	
9/18/1997	SEAD-12	B	744024.1	1015940	2.59	2.7	-4.07%	0034A	

Appendix F
Area B Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Value	Background	% +/- BKG	Instrument	Comments
			Easting	Northing	(kcpm)			(s/n)	
9/18/1997	SEAD-12	B	744019.7	1016040	2.45	2.7	-9.26%	0034A	
							30.77%		
							-3.85%		

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Line	Min	Mean	Max	Background	% +/- Background	Instrument	Comments
			easting	northing				(Kcpm)			(s/n)	
9/18/1997	SEAD-12	C	744598 9	1015339	C-0	2 63	2 7	2 75	2 74	-1 46%	0034A	
9/18/1997	SEAD-12	C	744698 8	1015344	C-0	2 74	2 79	2 86	2 74	1 82%	0034A	
9/18/1997	SEAD-12	C	744798 7	1015348	C-0	2 67	2 74	2 82	2 74	0.00%	0034A	
9/18/1997	SEAD-12	C	744598 6	1015345	C-2	2 67	2 73	2 78	2 74	-0 36%	0034A	
9/18/1997	SEAD-12	C	744698 5	1015350	C-2	2 69	2 75	2 76	2 74	0 36%	0034A	
9/18/1997	SEAD-12	C	744798 4	1015354	C-2	2 61	2 7	2 78	2 74	-1 46%	0034A	
9/18/1997	SEAD-12	C	744598 4	1015351	C-4	2 74	2 79	2 88	2 74	1 82%	0034A	
9/18/1997	SEAD-12	C	744698 3	1015356	C-4	2 78	2 85	2 96	2 74	4 01%	0034A	
9/18/1997	SEAD-12	C	744798 2	1015360	C-4	2 7	2 78	2 82	2 74	1 46%	0034A	
9/18/1997	SEAD-12	C	744598 1	1015357	C-6	2 68	2 79	2 85	2 74	1 82%	0034A	
9/18/1997	SEAD-12	C	744698	1015362	C-6	2 61	2 84	2 92	2 74	3 65%	0034A	
9/18/1997	SEAD-12	C	744797 9	1015366	C-6	2 62	2 65	2 71	2 74	-3 28%	0034A	
9/18/1997	SEAD-12	C	744597 8	1015363	C-8	2 76	2 83	2 89	2 74	3 28%	0034A	
9/18/1997	SEAD-12	C	744697 8	1015368	C-8	2 72	2 8	2 88	2 74	2 19%	0034A	
9/18/1997	SEAD-12	C	744797 6	1015372	C-8	2 66	2 74	2 87	2 74	0 00%	0034A	
9/18/1997	SEAD-12	C	744597 6	1015369	C-10	2 68	2 87	2 97	2 74	4 74%	0034A	
9/18/1997	SEAD-12	C	744697 5	1015374	C-10	2 66	2 74	2 82	2 74	0 00%	0034A	
9/18/1997	SEAD-12	C	744797 4	1015378	C-10	2 66	2 75	2 85	2 74	0 36%	0034A	
11/18/1998	SEAD-12	C	744652 4	1015375	C-11	9	10 8	12	10 8	0 00%	B009V/B125V	
11/18/1998	SEAD-12	C	744682 4	1015376	C-11	9	11	12	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744712 3	1015377	C-11	9	11	12	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744742 3	1015379	C-11	9	10 9	12	10 8	0 93%	B009V/B125V	
11/18/1998	SEAD-12	C	744772 3	1015380	C-11	9	10 9	12	10 8	0 93%	B009V/B125V	
11/18/1998	SEAD-12	C	744802 3	1015381	C-11	9	11 2	12	10 8	3 70%	B009V/B125V	
11/18/1998	SEAD-12	C	744832 2	1015382	C-11	9	10 8	12	10 8	0 00%	B009V/B125V	
9/18/1997	SEAD-12	C	744597 3	1015375	C-12	2 64	2 73	2 79	2 74	-0 36%	0034A	
9/18/1997	SEAD-12	C	744697 2	1015380	C-12	2 65	2 77	2 9	2 74	1 09%	0034A	
9/18/1997	SEAD-12	C	744797 1	1015384	C-12	2 69	2 77	2 86	2 74	1 09%	0034A	
11/18/1998	SEAD-12	C	744652 1	1015381	C-13	10	10 9	12	10 8	0 93%	B009V/B125V	
11/18/1998	SEAD-12	C	744682 1	1015382	C-13	10	11 3	12	10 8	4 63%	B009V/B125V	
11/18/1998	SEAD-12	C	744712 1	1015383	C-13	10	11 3	12	10 8	4 63%	B009V/B125V	
11/18/1998	SEAD-12	C	744742 1	1015385	C-13	10	11 2	12	10 8	3 70%	B009V/B125V	
11/18/1998	SEAD-12	C	744772	1015386	C-13	10	11 1	12	10 8	2 78%	B009V/B125V	
11/18/1998	SEAD-12	C	744802	1015387	C-13	10	11	12	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744831 9	1015388	C-13	10	11	12	10 8	1 85%	B009V/B125V	
9/18/1997	SEAD-12	C	744597 1	1015381	C-14	2 64	2 71	2 78	2 74	-1 09%	0034A	
9/18/1997	SEAD-12	C	744696 9	1015386	C-14	2 61	2 72	2 8	2 74	-0 73%	0034A	
9/18/1997	SEAD-12	C	744796 9	1015390	C-14	2 69	2 72	2 79	2 74	-0 73%	0034A	
11/18/1998	SEAD-12	C	744651 9	1015387	C-15	8	11	13	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744681 8	1015388	C-15	8	11 1	13	10 8	2 78%	B009V/B125V	
11/18/1998	SEAD-12	C	744711 8	1015389	C-15	8	11	13	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744741 8	1015391	C-15	8	10 9	13	10 8	0 93%	B009V/B125V	
11/18/1998	SEAD-12	C	744771.8	1015392	C-15	8	11 4	13	10 8	5.56%	B009V/B125V	
11/18/1998	SEAD-12	C	744801 8	1015393	C-15	8	11 3	13	10 8	4 63%	B009V/B125V	
11/18/1998	SEAD-12	C	744831 7	1015394	C-15	8	11 4	13	10 8	5 56%	B009V/B125V	
9/18/1997	SEAD-12	C	744596 8	1015387	C-16	2 72	2 84	2 92	2 74	3 65%	0034A	
9/18/1997	SEAD-12	C	744696 7	1015392	C-16	2 61	2 7	2 82	2 74	-1 46%	0034A	
9/18/1997	SEAD-12	C	744796 6	1015396	C-16	2 56	2 68	2 8	2 74	-2 19%	0034A	
11/18/1998	SEAD-12	C	744651 6	1015393	C-17	9	11 4	12	10 8	5 56%	B009V/B125V	
11/18/1998	SEAD-12	C	744681 6	1015394	C-17	9	11 2	12	10 8	3 70%	B009V/B125V	
11/18/1998	SEAD-12	C	744711 6	1015395	C-17	9	11 1	12	10 8	2 78%	B009V/B125V	
11/18/1998	SEAD-12	C	744741 5	1015397	C-17	9	11	12	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744771 5	1015398	C-17	9	10 9	12	10 8	0 93%	B009V/B125V	
11/18/1998	SEAD-12	C	744801 4	1015399	C-17	9	11	12	10 8	1 85%	B009V/B125V	
11/18/1998	SEAD-12	C	744831 4	1015400	C-17	9	11 1	12	10 8	2.78%	B009V/B125V	
9/19/1997	SEAD-12	C	744596 5	1015393	C-18	2 5	2 58	2 65	2 62	-1 53%	0034A	
9/19/1997	SEAD-12	C	744696 4	1015398	C-18	2 34	2 49	2 65	2 62	-4 96%	0034A	
9/19/1997	SEAD-12	C	744796 3	1015402	C-18	2 38	2 46	2 54	2 62	-6 11%	0034A	
11/18/1998	SEAD-12	C	744651 3	1015399	C-19	8	8 9	12	10 8	-17 59%	B009V/B125V	
11/18/1998	SEAD-12	C	744681 3	1015400	C-19	8	9 2	12	10 8	-14 81%	B009V/B125V	
11/18/1998	SEAD-12	C	744711 3	1015401	C-19	8	9 7	12	10 8	-10 19%	B009V/B125V	
11/18/1998	SEAD-12	C	744741 3	1015403	C-19	8	9 8	12	10 8	-9 26%	B009V/B125V	
11/18/1998	SEAD-12	C	744771 3	1015404	C-19	8	9 6	12	10 8	-11 11%	B009V/B125V	
11/18/1998	SEAD-12	C	744801 2	1015405	C-19	8	10 2	12	10 8	-5 56%	B009V/B125V	
11/18/1998	SEAD-12	C	744831 2	1015406	C-19	8	10 3	12	10 8	-4 63%	B009V/B125V	
9/19/1997	SEAD-12	C	744596 3	1015399	C-20	2 42	2 52	2 57	2 62	-3 82%	0034A	
9/19/1997	SEAD-12	C	744696 2	1015404	C-20	2 3	2 39	2 47	2 62	-8 78%	0034A	
9/19/1997	SEAD-12	C	744796 1	1015408	C-20	2 36	2 47	2 54	2 62	-5 73%	0034A	
11/18/1998	SEAD-12	C	744651 1	1015405	C-21	8	10 3	12	10 8	-4 63%	B009V/B125V	
11/18/1998	SEAD-12	C	744681 1	1015406	C-21	8	10 1	12	10 8	-6 48%	B009V/B125V	
11/18/1998	SEAD-12	C	744711	1015407	C-21	8	9 8	12	10 8	-9 26%	B009V/B125V	
11/18/1998	SEAD-12	C	744741	1015409	C-21	8	9 4	12	10 8	-12 96%	B009V/B125V	
11/18/1998	SEAD-12	C	744770 9	1015410	C-21	8	9 1	12	10 8	-15 74%	B009V/B125V	
11/18/1998	SEAD-12	C	744800 9	1015411	C-21	8	9 2	12	10 8	-14 81%	B009V/B125V	
11/18/1998	SEAD-12	C	744830 9	1015412	C-21	8	9 6	12	10 8	-11 11%	B009V/B125V	
9/19/1997	SEAD-12	C	744596	1015405	C-22	2 5	2 59	2 7	2 62	-1 15%	0034A	
9/19/1997	SEAD-12	C	744695 9	1015410	C-22	2 41	2 5	2 6	2 62	-4 58%	0034A	
9/19/1997	SEAD-12	C	744795 8	1015414	C-22	2 39	2 49	2 57	2 62	-4 96%	0034A	
11/18/1998	SEAD-12	C	744650 8	1015411	C-23	9	9 9	11	10 8	-8 33%	B009V/B125V	
11/18/1998	SEAD-12	C	744680 8	1015412	C-23	9	9 2	11	10 8	-14 81%	B009V/B125V	
11/18/1998	SEAD-12	C	744710 8	1015413	C-23	9	9 6	11	10 8	-11 11%	B009V/B125V	
11/18/1998	SEAD-12	C	744740 8	1015415	C-23	9	9 6	11	10 8	-11 11%	B009V/B125V	
11/18/1998	SEAD-12	C	744770 7	1015416	C-23	9	9 7	11	10 8	-10 19%	B009V/B125V	
11/18/1998	SEAD-12	C	744800 7	1015417	C-23	9	10	11	10 8	-7 41%	B009V/B125V	
11/18/1998	SEAD-12	C	744830 6	1015418	C-23	9	10 2	11	10 8	-5 56%	B009V/B125V	
9/19/1997	SEAD-12	C	744595 8	1015411	C-24	3 17	3 2	3 34	3 31	-3 32%	0033A	
9/19/1997	SEAD-12	C	744695 6	1015416	C-24	3 07	3 12	3 34	3 31	-5 74%	0033A	

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Line	Min	Mean	Max	Background	% +/- Background	Instrument	Comments
			easting	northing				(Kcpm)			(s/n)	
9/19/1997	SEAD-12	C	744795.6	1015420	C-24	2.99	3.03	3.16	3.31	-8.46%	0033A	
11/18/1998	SEAD-12	C	744650.6	1015417	C-25	8	10.7	12	10.8	-0.93%	B009V/B125V	
11/18/1998	SEAD-12	C	744680.5	1015418	C-25	8	9.9	12	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744710.5	1015419	C-25	8	10	12	10.8	-7.41%	B009V/B125V	
11/18/1998	SEAD-12	C	744740.4	1015421	C-25	8	10	12	10.8	-7.41%	B009V/B125V	
11/18/1998	SEAD-12	C	744770.4	1015422	C-25	8	9.7	12	10.8	-10.19%	B009V/B125V	
11/18/1998	SEAD-12	C	744800.4	1015423	C-25	8	9.5	12	10.8	-12.04%	B009V/B125V	
11/18/1998	SEAD-12	C	744830.4	1015424	C-25	8	10.3	12	10.8	-4.63%	B009V/B125V	
9/19/1997	SEAD-12	C	744595.5	1015417	C-26	2.99	3.02	3.11	3.31	-8.76%	0033A	
9/19/1997	SEAD-12	C	744695.4	1015422	C-26	2.74	2.83	2.9	3.31	-14.50%	0033A	
9/19/1997	SEAD-12	C	744795.3	1015426	C-26	2.74	2.9	3.16	3.31	-12.39%	0033A	
11/18/1998	SEAD-12	C	744650.3	1015423	C-27	8	10.2	11	10.8	-5.56%	B009V/B125V	
11/18/1998	SEAD-12	C	744680.3	1015424	C-27	8	10	11	10.8	-7.41%	B009V/B125V	
11/18/1998	SEAD-12	C	744710.3	1015425	C-27	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744740.2	1015427	C-27	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744770.2	1015428	C-27	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744800.1	1015429	C-27	8	9.5	11	10.8	-12.04%	B009V/B125V	
11/18/1998	SEAD-12	C	744830.1	1015430	C-27	8	10	11	10.8	-7.41%	B009V/B125V	
9/19/1997	SEAD-12	C	744595.2	1015423	C-28	2.58	2.64	2.74	2.62	0.76%	0034A	
9/19/1997	SEAD-12	C	744695.1	1015428	C-28	2.5	2.58	2.74	2.62	-1.53%	0034A	
9/19/1997	SEAD-12	C	744795	1015432	C-28	2.4	2.57	2.74	2.62	-1.91%	0034A	
11/18/1998	SEAD-12	C	744650	1015429	C-29	8	10.2	11	10.8	-5.56%	B009V/B125V	
11/18/1998	SEAD-12	C	744680	1015430	C-29	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744709.9	1015431	C-29	8	9.8	11	10.8	-9.26%	B009V/B125V	
11/18/1998	SEAD-12	C	744739.9	1015433	C-29	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744769.9	1015434	C-29	8	9.5	11	10.8	-12.04%	B009V/B125V	
11/18/1998	SEAD-12	C	744799.9	1015435	C-29	8	9.8	11	10.8	-9.26%	B009V/B125V	
11/18/1998	SEAD-12	C	744829.9	1015436	C-29	8	10	11	10.8	-7.41%	B009V/B125V	
9/19/1997	SEAD-12	C	744595.4	1015419	C-30	2.63	2.69	2.79	2.62	2.67%	0034A	
9/19/1997	SEAD-12	C	744695.3	1015424	C-30	2.54	2.6	2.65	2.62	-0.76%	0034A	
9/19/1997	SEAD-12	C	744795.2	1015428	C-30	2.51	2.64	2.78	2.62	0.76%	0034A	
11/18/1998	SEAD-12	C	744650.2	1015425	C-29	8	10.2	11	10.8	-5.56%	B009V/B125V	
11/18/1998	SEAD-12	C	744680.2	1015426	C-29	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744710.1	1015427	C-29	8	9.8	11	10.8	-9.26%	B009V/B125V	
11/18/1998	SEAD-12	C	744740.1	1015429	C-29	8	9.9	11	10.8	-8.33%	B009V/B125V	
11/18/1998	SEAD-12	C	744770.1	1015430	C-29	8	9.5	11	10.8	-12.04%	B009V/B125V	
11/18/1998	SEAD-12	C	744800.1	1015431	C-29	8	9.8	11	10.8	-9.26%	B009V/B125V	
11/18/1998	SEAD-12	C	744830	1015432	C-29	8	10	11	10.8	-7.41%	B009V/B125V	
9/19/1997	SEAD-12	C	744595.1	1015425	C-32	3.16	3.24	3.32	3.31	-2.11%	0033A	
9/19/1997	SEAD-12	C	744695	1015430	C-32	3.07	3.28	3.41	3.31	-0.91%	0033A	
9/19/1997	SEAD-12	C	744794.9	1015434	C-32	3.09	3.18	3.31	3.31	-3.93%	0033A	
11/18/1998	SEAD-12	C	744649.9	1015431	C-33	8	9.6	12	10.2	-5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744679.9	1015432	C-33	8	9.9	12	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744709.9	1015433	C-33	8	9.9	12	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744739.9	1015435	C-33	8	10.5	12	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744769.8	1015436	C-33	8	10.3	12	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744799.8	1015437	C-33	8	10.7	12	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744829.8	1015438	C-33	8	10.6	12	10.2	3.92%	B009V/B125V	
9/19/1997	SEAD-12	C	744594.9	1015431	C-34	2.9	2.97	3.07	3.31	-10.27%	0033A	
9/19/1997	SEAD-12	C	744694.8	1015436	C-34	2.84	2.94	3.01	3.31	-11.18%	0033A	
9/19/1997	SEAD-12	C	744794.7	1015440	C-34	2.74	2.92	3.19	3.31	-11.78%	0033A	
11/18/1998	SEAD-12	C	744649.7	1015437	C-35	8	9.6	12	10.2	-5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744679.6	1015438	C-35	8	9.9	12	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744709.6	1015439	C-35	8	9.9	12	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744739.6	1015440	C-35	8	10.5	12	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744769.6	1015442	C-35	8	10.3	12	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744799.6	1015443	C-35	8	10.7	12	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744829.5	1015444	C-35	8	10.6	12	10.2	3.92%	B009V/B125V	
9/19/1997	SEAD-12	C	744594.6	1015437	C-36	2.61	2.68	2.8	2.62	2.29%	0034A	
9/19/1997	SEAD-12	C	744694.5	1015442	C-36	2.57	2.65	2.73	2.62	1.15%	0034A	
9/19/1997	SEAD-12	C	744794.4	1015446	C-36	2.26	2.52	2.64	2.62	-3.82%	0034A	
11/18/1998	SEAD-12	C	744649.4	1015443	C-37	9	10.6	13	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744679.4	1015444	C-37	9	10.4	13	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744709.4	1015445	C-37	9	10.4	13	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744739.3	1015446	C-37	9	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744769.3	1015448	C-37	9	10.2	13	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744799.3	1015449	C-37	9	10.2	13	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744829.3	1015450	C-37	9	9.9	13	10.2	-2.94%	B009V/B125V	
9/19/1997	SEAD-12	C	744594.3	1015443	C-38	2.56	2.66	2.76	2.62	1.53%	0034A	
9/19/1997	SEAD-12	C	744694.3	1015448	C-38	2.46	2.51	2.56	2.62	-4.20%	0034A	
9/19/1997	SEAD-12	C	744794.1	1015452	C-38	2.57	2.41	2.55	2.62	-8.02%	0034A	
11/18/1998	SEAD-12	C	744649.1	1015449	C-39	7	10.3	11	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744679.1	1015450	C-39	7	10.3	11	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744709.1	1015451	C-39	7	10.4	11	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744739.1	1015452	C-39	7	10.6	11	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744769.1	1015454	C-39	7	10.3	11	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744799	1015455	C-39	7	10.5	11	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744829	1015456	C-39	7	10.6	11	10.2	3.92%	B009V/B125V	
9/19/1997	SEAD-12	C	744594.1	1015449	C-40	3.11	3.17	3.23	3.31	-4.23%	0033A	
9/19/1997	SEAD-12	C	744694	1015454	C-40	3.01	3.15	3.27	3.31	-4.83%	0033A	
9/19/1997	SEAD-12	C	744793.9	1015458	C-40	2.87	2.95	3.08	3.31	-10.88%	0033A	
11/18/1998	SEAD-12	C	744648.9	1015455	C-41	9	10.4	13	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744678.9	1015456	C-41	9	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744708.8	1015457	C-41	9	10.2	13	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744738.8	1015458	C-41	9	10.7	13	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744768.8	1015460	C-41	9	10.8	13	10.2	5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744798.8	1015461	C-41	9	10.1	13	10.2	-0.98%	B009V/B125V	

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27 easting	NAD-27 northing	Line	Min	Mean	Max (Kcpm)	Background	% +/- Background	Instrument (s/n)	Comments
11/18/1998	SEAD-12	C	744828.7	1015462	C-41	9	10.7	13	10.2	4.90%	B009V/B125V	
9/19/1997	SEAD-12	C	744593.8	1015455	C-42	2.83	2.97	3.05	3.31	-10.27%	0033A	
9/19/1997	SEAD-12	C	744693.7	1015460	C-42	2.76	2.79	2.88	3.31	-15.71%	0033A	
9/19/1997	SEAD-12	C	744793.6	1015464	C-42	2.58	2.7	3.01	3.31	-18.43%	0033A	
11/18/1998	SEAD-12	C	744648.6	1015461	C-43	8	11.1	13	10.2	8.82%	B009V/B125V	
11/18/1998	SEAD-12	C	744678.6	1015462	C-43	8	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744708.6	1015463	C-43	8	10.5	13	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744738.6	1015464	C-43	8	10.6	13	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744768.5	1015466	C-43	8	10.2	13	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744798.5	1015467	C-43	8	10.1	13	10.2	-0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744828.4	1015468	C-43	8	10.3	13	10.2	0.98%	B009V/B125V	
9/19/1997	SEAD-12	C	744593.6	1015461	C-44	2.54	2.62	2.71	2.62	0.00%	0034A	
9/19/1997	SEAD-12	C	744693.4	1015466	C-44	2.39	2.5	2.6	2.62	-4.58%	0034A	
9/19/1997	SEAD-12	C	744793.4	1015470	C-44	2.24	2.3	2.39	2.62	-12.21%	0034A	
11/18/1998	SEAD-12	C	744648.4	1015467	C-45	9	10.2	13	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744678.3	1015468	C-45	9	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744708.3	1015469	C-45	9	10.4	13	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744738.3	1015470	C-45	9	11.2	13	10.2	9.80%	B009V/B125V	
11/18/1998	SEAD-12	C	744768.3	1015472	C-45	9	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744798.3	1015473	C-45	9	9.9	13	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744828.2	1015474	C-45	9	10	13	10.2	-1.96%	B009V/B125V	
9/19/1997	SEAD-12	C	744593.3	1015467	C-46	2.6	2.66	2.86	2.62	1.53%	0034A	
9/19/1997	SEAD-12	C	744693.2	1015471	C-46	2.3	2.44	2.59	2.62	-6.87%	0034A	
9/19/1997	SEAD-12	C	744793.1	1015476	C-46	2.31	2.42	2.53	2.62	-7.63%	0034A	
11/18/1998	SEAD-12	C	744648.1	1015473	C-47	9	10.4	12	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744678.1	1015474	C-47	9	9.8	12	10.2	-3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744708.1	1015475	C-47	9	10	12	10.2	-1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744738	1015476	C-47	9	10.6	12	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744768	1015478	C-47	9	10.5	12	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744797.9	1015479	C-47	9	10.2	12	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744827.9	1015480	C-47	9	10.1	12	10.2	-0.98%	B009V/B125V	
9/19/1997	SEAD-12	C	744593	1015473	C-48	3.15	3.22	3.28	3.31	-2.72%	0033A	
9/19/1997	SEAD-12	C	744692.9	1015477	C-48	2.86	3.15	3.33	3.31	-4.83%	0033A	
9/19/1997	SEAD-12	C	744792.8	1015482	C-48	2.73	2.85	2.96	3.31	-13.90%	0033A	
11/18/1998	SEAD-12	C	744647.8	1015479	C-49	7	10.7	12	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744677.8	1015480	C-49	7	10.3	12	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744707.8	1015481	C-49	7	10.2	12	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744737.8	1015482	C-49	7	10.3	12	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744767.8	1015484	C-49	7	9.9	12	10.2	-2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744797.7	1015485	C-49	7	10.1	12	10.2	-0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744827.7	1015486	C-49	7	10.1	12	10.2	-0.98%	B009V/B125V	
9/19/1997	SEAD-12	C	744592.8	1015479	C-50	2.8	2.95	3.07	3.31	-10.88%	0033A	
9/19/1997	SEAD-12	C	744692.7	1015483	C-50	2.7	2.85	2.96	3.31	-13.90%	0033A	
9/19/1997	SEAD-12	C	744792.6	1015488	C-50	2.6	2.75	2.89	3.31	-16.92%	0033A	
11/18/1998	SEAD-12	C	744647.6	1015485	C-51	9	10.3	12	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744677.6	1015486	C-51	9	10.4	12	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744707.5	1015487	C-51	9	10.2	12	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744737.5	1015488	C-51	9	10.1	12	10.2	-0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744767.4	1015490	C-51	9	10.2	12	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744797.4	1015491	C-51	9	10.4	12	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744827.4	1015492	C-51	9	10.6	12	10.2	3.92%	B009V/B125V	
9/19/1997	SEAD-12	C	744592.5	1015485	C-52	2.52	2.6	2.7	2.62	-0.76%	0034A	
9/19/1997	SEAD-12	C	744692.4	1015489	C-52	2.5	2.56	2.62	2.62	-2.29%	0034A	
9/19/1997	SEAD-12	C	744792.3	1015494	C-52	2.32	2.41	2.5	2.62	-8.02%	0034A	
11/18/1998	SEAD-12	C	744647.3	1015491	C-53	8	10.8	12	10.2	5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744677.3	1015492	C-53	8	10.7	12	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744707.3	1015493	C-53	8	10.2	12	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744737.3	1015494	C-53	8	10.8	12	10.2	5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744767.2	1015496	C-53	8	10.1	12	10.2	-0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744797.2	1015497	C-53	8	10.6	12	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744827.1	1015498	C-53	8	10.5	12	10.2	2.94%	B009V/B125V	
9/19/1997	SEAD-12	C	744592.3	1015491	C-54	2.54	2.6	2.66	2.62	-0.76%	0034A	
9/19/1997	SEAD-12	C	744692.1	1015495	C-54	2.4	2.52	2.64	2.62	-3.82%	0034A	
9/19/1997	SEAD-12	C	744792.1	1015500	C-54	2.25	2.28	2.34	2.62	-12.98%	0034A	
11/18/1998	SEAD-12	C	744647.1	1015497	C-55	7	10.5	13	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744677	1015498	C-55	7	10.5	13	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744707	1015499	C-55	7	10.1	13	10.2	-0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744736.9	1015500	C-55	7	10.6	13	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744766.9	1015502	C-55	7	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744796.9	1015503	C-55	7	10.6	13	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744826.9	1015504	C-55	7	10.8	13	10.2	5.88%	B009V/B125V	
9/19/1997	SEAD-12	C	744592	1015497	C-56	3.05	3.1	3.24	3.31	-6.34%	0033A	
9/19/1997	SEAD-12	C	744691.9	1015501	C-56	2.91	3.15	3.27	3.31	-4.83%	0033A	
9/19/1997	SEAD-12	C	744791.8	1015506	C-56	2.78	2.85	2.87	3.31	-13.90%	0033A	
11/18/1998	SEAD-12	C	744646.8	1015502	C-57	9	10.8	14	10.2	5.88%	B009V/B125V	
11/18/1998	SEAD-12	C	744676.8	1015504	C-57	9	10.5	14	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744706.8	1015505	C-57	9	10.2	14	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744736.7	1015506	C-57	9	10.6	14	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744766.7	1015508	C-57	9	10.2	14	10.2	0.00%	B009V/B125V	
11/18/1998	SEAD-12	C	744796.6	1015509	C-57	9	10.6	14	10.2	3.92%	B009V/B125V	
11/18/1998	SEAD-12	C	744826.6	1015510	C-57	9	10.4	14	10.2	1.96%	B009V/B125V	
9/19/1997	SEAD-12	C	744591.7	1015503	C-58	2.79	2.9	3.12	3.31	-12.39%	0033A	
9/19/1997	SEAD-12	C	744691.6	1015507	C-58	2.58	2.6	2.82	3.31	-21.45%	0033A	
9/19/1997	SEAD-12	C	744791.5	1015512	C-58	2.72	2.81	2.89	3.31	-15.11%	0033A	
11/18/1998	SEAD-12	C	744646.5	1015508	C-59	9	10.7	13	10.2	4.90%	B009V/B125V	
11/18/1998	SEAD-12	C	744676.5	1015510	C-59	9	10.3	13	10.2	0.98%	B009V/B125V	
11/18/1998	SEAD-12	C	744706.4	1015511	C-59	9	10.4	13	10.2	1.96%	B009V/B125V	

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Line	Min	Mean	Max	Background	% +/- Background	Instrument	Comments
			easting	northing				(Kcpm)			(s/n)	
11/18/1998	SEAD-12	C	744736.4	1015512	C-59	9	10.4	13	10.2	1.96%	B009V/B125V	
11/18/1998	SEAD-12	C	744766.4	1015514	C-59	9	10.5	13	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744796.4	1015515	C-59	9	10.5	13	10.2	2.94%	B009V/B125V	
11/18/1998	SEAD-12	C	744826.4	1015516	C-59	9	10.4	13	10.2	1.96%	B009V/B125V	
9/19/1997	SEAD-12	C	744591.4	1015509	C-60	2.52	2.6	2.69	2.62	-0.76%	0034A	
9/19/1997	SEAD-12	C	744691.4	1015513	C-60	2.38	2.42	2.45	2.62	-7.63%	0034A	
9/19/1997	SEAD-12	C	744791.3	1015518	C-60	2.21	2.24	2.29	2.62	-14.50%	0034A	
9/19/1997	SEAD-12	C	744591.2	1015515	C-62	2.46	2.52	2.59	2.62	-3.82%	0034A	
9/19/1997	SEAD-12	C	744691.1	1015519	C-62	2.28	2.43	2.57	2.62	-7.25%	0034A	
9/19/1997	SEAD-12	C	744791	1015524	C-62	2.19	2.22	2.28	2.62	-15.27%	0034A	
9/19/1997	SEAD-12	C	744590.9	1015521	C-64	3.12	3.19	3.25	3.31	-3.63%	0033A	
9/19/1997	SEAD-12	C	744690.8	1015525	C-64	2.91	3.1	3.22	3.31	-6.34%	0033A	
9/19/1997	SEAD-12	C	744790.8	1015530	C-64	2.72	2.76	2.81	3.31	-16.62%	0033A	
9/19/1997	SEAD-12	C	744590.7	1015527	C-66	2.78	2.88	2.99	3.31	-12.99%	0033A	
9/19/1997	SEAD-12	C	744690.6	1015531	C-66	2.6	2.78	2.82	3.31	-16.01%	0033A	
9/19/1997	SEAD-12	C	744765.5	1015535	C-66	2.68	2.73	2.78	3.31	-17.52%	0033A	
9/19/1997	SEAD-12	C	744590.4	1015533	C-68	2.5	2.58	2.66	2.62	-1.53%	0034A	
9/19/1997	SEAD-12	C	744690.3	1015537	C-68	2.4	2.5	2.61	2.62	-4.58%	0034A	
9/19/1997	SEAD-12	C	744765.3	1015541	C-68	2.19	2.36	2.53	2.62	-9.92%	0034A	
9/19/1997	SEAD-12	C	744590.1	1015539	C-70	2.55	2.59	2.64	2.62	-1.15%	0034A	
9/19/1997	SEAD-12	C	744690.1	1015543	C-70	2.34	2.45	2.57	2.62	-6.49%	0034A	
9/19/1997	SEAD-12	C	744764.9	1015547	C-70	2.12	2.15	2.21	2.62	-17.94%	0034A	
9/20/1997	SEAD-12	C	744589.9	1015545	C-72	2.53	2.67	2.82	2.98	-10.40%	0034A	
9/20/1997	SEAD-12	C	744689.8	1015549	C-72	2.47	2.53	2.61	2.98	-15.10%	0034A	
9/20/1997	SEAD-12	C	744764.7	1015553	C-72	2.3	2.37	2.47	2.98	-20.47%	0034A	
9/20/1997	SEAD-12	C	744589.6	1015551	C-74	2.58	2.62	2.84	2.98	-12.08%	0034A	
9/20/1997	SEAD-12	C	744689.5	1015555	C-74	2.37	2.53	2.63	2.98	-15.10%	0034A	
9/20/1997	SEAD-12	C	744764.4	1015559	C-74	2.18	2.26	2.34	2.98	-24.16%	0034A	
9/20/1997	SEAD-12	C	744589.4	1015557	C-76	2.94	3.05	2.12	2.84	7.39%	0033A	
9/20/1997	SEAD-12	C	744689.3	1015561	C-76	2.8	2.92	3.1	2.84	2.82%	0033A	
9/20/1997	SEAD-12	C	744764.2	1015565	C-76	2.6	2.66	2.75	2.84	-6.34%	0033A	
9/20/1997	SEAD-12	C	744589.1	1015563	C-78	2.7	2.75	2.8	2.84	-3.17%	0033A	
9/20/1997	SEAD-12	C	744689	1015567	C-78	2.56	2.63	2.74	2.84	-7.39%	0033A	
9/20/1997	SEAD-12	C	744763.9	1015571	C-78	2.48	2.55	2.59	2.84	-10.21%	0033A	
9/20/1997	SEAD-12	C	744588.8	1015569	C-80	2.91	3	3.11	2.84	5.63%	0033A	
9/20/1997	SEAD-12	C	744688.8	1015573	C-80	2.87	2.95	3.11	2.84	3.87%	0033A	
9/20/1997	SEAD-12	C	744763.6	1015577	C-80	2.66	2.75	2.84	2.84	-3.17%	0033A	
9/20/1997	SEAD-12	C	744613.6	1015576	C-82	2.68	2.77	2.86	2.84	-2.46%	0033A	
9/20/1997	SEAD-12	C	744688.4	1015579	C-82	2.61	2.78	2.83	2.84	-2.11%	0033A	
9/20/1997	SEAD-12	C	744763.4	1015583	C-82	2.57	2.65	2.74	2.84	-6.69%	0033A	
9/20/1997	SEAD-12	C	744613.3	1015582	C-84	2.44	2.57	2.7	2.98	-13.76%	0034A	
9/20/1997	SEAD-12	C	744688.2	1015585	C-84	2.43	2.49	2.54	2.98	-16.44%	0034A	
9/20/1997	SEAD-12	C	744763.1	1015589	C-84	2.23	2.36	2.5	2.98	-20.81%	0034A	
9/20/1997	SEAD-12	C	744613	1015588	C-86	2.52	2.59	2.65	2.98	-13.09%	0034A	
9/20/1997	SEAD-12	C	744687.9	1015591	C-86	2.29	2.41	2.52	2.98	-19.13%	0034A	
9/20/1997	SEAD-12	C	744762.9	1015595	C-86	2.16	2.19	2.26	2.98	-26.51%	0034A	
9/20/1997	SEAD-12	C	744612.8	1015594	C-88	2.47	2.55	2.62	2.98	-14.43%	0034A	
9/20/1997	SEAD-12	C	744687.7	1015597	C-88	2.39	2.49	2.55	2.98	-16.44%	0034A	
9/20/1997	SEAD-12	C	744762.6	1015601	C-88	2.12	2.26	2.4	2.98	-24.16%	0034A	
9/20/1997	SEAD-12	C	744612.5	1015600	C-90	1.98	2.06	2.14	2.98	-30.87%	0034A	
9/20/1997	SEAD-12	C	744687.4	1015603	C-90	2.25	2.44	2.63	2.98	-18.12%	0034A	
9/20/1997	SEAD-12	C	744762.3	1015607	C-90	2.54	2.6	2.65	2.98	-12.75%	0034A	
9/20/1997	SEAD-12	C	744612.3	1015606	C-92	2.56	2.6	2.64	2.98	-12.75%	0034A	
9/20/1997	SEAD-12	C	744687.1	1015609	C-92	2.47	2.55	2.64	2.98	-14.43%	0034A	
9/20/1997	SEAD-12	C	744762.1	1015613	C-92	2.14	2.26	2.38	2.98	-24.16%	0034A	
9/20/1997	SEAD-12	C	744611.9	1015612	C-94	2.55	2.61	2.66	2.98	-12.42%	0034A	
9/20/1997	SEAD-12	C	744686.9	1015615	C-94	2.3	2.46	2.65	2.98	-17.45%	0034A	
9/20/1997	SEAD-12	C	744761.8	1015619	C-94	2.16	2.2	2.25	2.98	-26.17%	0034A	
9/20/1997	SEAD-12	C	744611.7	1015618	C-96	2.97	3	3.03	2.84	5.63%	0033A	
9/20/1997	SEAD-12	C	744686.6	1015621	C-96	2.87	2.85	3.13	2.84	0.35%	0033A	
9/20/1997	SEAD-12	C	744761.6	1015625	C-96	2.54	2.71	2.88	2.84	-4.58%	0033A	
9/20/1997	SEAD-12	C	744611.4	1015624	C-98	2.71	2.75	2.79	2.84	-3.17%	0033A	
9/20/1997	SEAD-12	C	744686.4	1015627	C-98	2.56	2.78	2.89	2.84	-2.11%	0033A	
9/20/1997	SEAD-12	C	744761.3	1015631	C-98	2.49	2.54	2.74	2.84	-10.56%	0033A	
9/20/1997	SEAD-12	C	744611.2	1015630	C-100	2.88	2.94	3.07	2.84	3.52%	0033A	
9/20/1997	SEAD-12	C	744686.1	1015633	C-100	2.82	3	3.16	2.84	5.63%	0033A	
9/20/1997	SEAD-12	C	744610.9	1015636	C-102	2.68	2.75	2.82	2.84	-3.17%	0033A	
9/20/1997	SEAD-12	C	744685.8	1015639	C-102	2.78	2.81	2.83	2.84	-1.06%	0033A	
9/20/1997	SEAD-12	C	744610.6	1015642	C-104	2.54	2.58	2.61	2.98	-13.42%	0034A	
9/20/1997	SEAD-12	C	744685.6	1015645	C-104	2.43	2.6	2.7	2.98	-12.75%	0034A	
9/20/1997	SEAD-12	C	744610.4	1015648	C-106	2.55	2.62	2.69	2.98	-12.08%	0034A	
9/20/1997	SEAD-12	C	744685.3	1015651	C-106	2.42	2.54	2.65	2.98	-14.77%	0034A	Standing water 200-242
9/20/1997	SEAD-12	C	744610.1	1015654	C-108	2.9	3	3.08	2.84	5.63%	0033A	
9/20/1997	SEAD-12	C	744685.1	1015657	C-108	2.89	3.03	3.09	2.84	6.69%	0033A	
9/20/1997	SEAD-12	C	744609.9	1015660	C-110	2.73	2.78	2.82	2.84	-2.11%	0033A	
9/20/1997	SEAD-12	C	744684.8	1015663	C-110	2.69	2.82	2.89	2.84	-0.70%	0033A	
9/20/1997	SEAD-12	C	744609.6	1015666	C-112	2.67	2.71	2.76	2.98	-9.06%	0034A	
9/20/1997	SEAD-12	C	744684.5	1015669	C-112	2.46	2.6	2.71	2.98	-12.75%	0034A	
9/20/1997	SEAD-12	C	744609.3	1015672	C-114	2.55	2.59	2.63	2.98	-13.09%	0034A	
9/20/1997	SEAD-12	C	744684.3	1015675	C-114	2.55	2.62	2.68	2.98	-12.08%	0034A	
9/21/1997	SEAD-12	C	744609.1	1015678	C-116	2.3	2.36	2.42	2.58	-8.53%	0034A	
9/21/1997	SEAD-12	C	744684	1015681	C-116	2.24	2.35	2.45	2.58	-8.91%	0034A	
9/21/1997	SEAD-12	C	744608.8	1015684	C-118	2.24	2.3	2.35	2.58	-10.85%	0034A	
9/21/1997	SEAD-12	C	744683.8	1015687	C-118	2.28	2.39	2.49	2.58	-7.36%	0034A	
9/21/1997	SEAD-12	C	744608.6	1015690	C-120	2.63	2.73	2.82	2.85	-4.21%	0033A	
9/21/1997	SEAD-12	C	744683.5	1015693	C-120	2.66	2.8	2.85	2.85	-1.75%	0033A	
9/21/1997	SEAD-12	C	744608.3	1015696	C-122	2.59	2.71	2.83	2.85	-4.91%	0033A	

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Line	Min	Mean	Max	Background	% +/- Background	Instrument	Comments
			easting	northing				(Kcpm)			(s/n)	
9/21/1997	SEAD-12	C	744683.2	1015699	C-122	2.48	2.65	2.78	2.85	-7.02%	0033A	
9/21/1997	SEAD-12	C	744608	1015702	C-124	2.25	2.3	2.34	2.58	-10.85%	0034A	
9/21/1997	SEAD-12	C	744682.9	1015705	C-124	2.24	2.31	2.35	2.58	-10.47%	0034A	
9/21/1997	SEAD-12	C	744607.8	1015708	C-126	2.28	2.37	2.44	2.58	-8.14%	0034A	
9/21/1997	SEAD-12	C	744682.7	1015711	C-126	2.24	2.29	2.34	2.58	-11.24%	0034A	
9/21/1997	SEAD-12	C	744607.5	1015714	C-128	2.52	2.65	2.71	2.85	-7.02%	0033A	
9/21/1997	SEAD-12	C	744682.4	1015717	C-128	2.63	2.7	2.78	2.85	-5.26%	0033A	
9/21/1997	SEAD-12	C	744607.3	1015720	C-130	2.57	2.74	2.8	2.85	-3.86%	0033A	
9/21/1997	SEAD-12	C	744682.2	1015723	C-130	2.5	2.58	2.77	2.85	-9.47%	0033A	
9/21/1997	SEAD-12	C	744607	1015726	C-132	2.21	2.25	2.28	2.58	-12.79%	0034A	
9/21/1997	SEAD-12	C	744681.9	1015729	C-132	2.14	2.25	2.36	2.58	-12.79%	0034A	
9/21/1997	SEAD-12	C	744606.7	1015732	C-134	2.16	2.2	2.24	2.58	-14.73%	0034A	
9/21/1997	SEAD-12	C	744681.6	1015735	C-134	2.17	2.22	2.26	2.58	-13.95%	0034A	
9/21/1997	SEAD-12	C	744606.4	1015738	C-136	2.42	2.74	2.8	2.85	-3.86%	0033A	
9/21/1997	SEAD-12	C	744681.4	1015741	C-136	2.5	2.58	2.77	2.85	-9.47%	0033A	
9/21/1997	SEAD-12	C	744606.2	1015744	C-138	2.59	2.67	2.74	2.85	-6.32%	0033A	
9/21/1997	SEAD-12	C	744681.1	1015747	C-138	2.57	2.65	2.78	2.85	-7.02%	0033A	
9/21/1997	SEAD-12	C	744605.9	1015750	C-140	2.2	2.25	2.3	2.58	-12.79%	0034A	
9/21/1997	SEAD-12	C	744680.9	1015753	C-140	2.2	2.28	2.37	2.58	-11.63%	0034A	
9/21/1997	SEAD-12	C	744605.7	1015756	C-142	2.22	2.24	2.28	2.58	-13.18%	0034A	
9/21/1997	SEAD-12	C	744680.6	1015759	C-142	2.19	2.27	2.36	2.58	-12.02%	0034A	
9/21/1997	SEAD-12	C	744605.4	1015762	C-144	2.5	2.7	2.86	2.85	-5.26%	0033A	
9/21/1997	SEAD-12	C	744680.3	1015765	C-144	2.6	2.75	2.82	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744605.1	1015768	C-146	2.69	2.74	2.94	2.85	-3.86%	0033A	
9/21/1997	SEAD-12	C	744680.1	1015771	C-146	2.57	2.75	2.87	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744604.9	1015774	C-148	2.28	2.34	2.4	2.58	-9.30%	0034A	
9/21/1997	SEAD-12	C	744679.8	1015777	C-148	2.28	2.34	2.41	2.58	-9.30%	0034A	
9/21/1997	SEAD-12	C	744604.6	1015780	C-150	2.21	2.36	2.42	2.58	-8.53%	0034A	
9/21/1997	SEAD-12	C	744679.6	1015783	C-150	2.18	2.26	2.34	2.58	-12.40%	0034A	
9/21/1997	SEAD-12	C	744604.4	1015786	C-152	2.57	2.74	2.94	2.85	-3.86%	0033A	
9/21/1997	SEAD-12	C	744679.3	1015789	C-152	2.68	2.75	2.87	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744604.1	1015792	C-154	2.82	2.86	2.9	2.85	0.35%	0033A	
9/21/1997	SEAD-12	C	744679	1015795	C-154	2.66	2.73	2.81	2.85	-4.21%	0033A	
9/21/1997	SEAD-12	C	744603.8	1015798	C-156	2.26	2.32	2.38	2.58	-10.08%	0034A	
9/21/1997	SEAD-12	C	744678.8	1015801	C-156	2.22	2.36	2.46	2.58	-8.53%	0034A	
9/21/1997	SEAD-12	C	744603.6	1015804	C-158	2.42	2.49	2.55	2.58	-3.49%	0034A	
9/21/1997	SEAD-12	C	744678.5	1015807	C-158	2.14	2.31	2.41	2.58	-10.47%	0034A	
9/21/1997	SEAD-12	C	744603.3	1015810	C-160	2.59	2.78	2.88	2.85	-2.46%	0033A	
9/21/1997	SEAD-12	C	744678.3	1015813	C-160	2.53	2.7	2.8	2.85	-5.26%	0033A	
9/21/1997	SEAD-12	C	744603.1	1015816	C-162	2.31	2.68	2.86	2.85	-5.96%	0033A	
9/21/1997	SEAD-12	C	744677.9	1015819	C-162	2.81	2.83	2.92	2.85	-0.70%	0033A	
9/21/1997	SEAD-12	C	744602.8	1015822	C-164	2.42	2.47	2.62	2.58	-4.26%	0034A	
9/21/1997	SEAD-12	C	744677.7	1015825	C-164	2.07	2.3	2.44	2.58	-10.85%	0034A	
9/21/1997	SEAD-12	C	744602.5	1015828	C-166	2.38	2.48	2.58	2.58	-3.88%	0034A	
9/21/1997	SEAD-12	C	744677.4	1015831	C-166	2.04	2.32	2.46	2.58	-10.08%	0034A	
9/21/1997	SEAD-12	C	744602.3	1015834	C-168	2.7	2.75	2.82	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744677.2	1015837	C-168	2.37	2.73	2.84	2.85	-4.21%	0033A	
9/21/1997	SEAD-12	C	744602	1015840	C-170	2.71	2.8	2.99	2.85	-1.75%	0033A	
9/21/1997	SEAD-12	C	744676.9	1015843	C-170	2.27	2.75	2.86	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744601.8	1015846	C-172	2.33	2.42	2.52	2.58	-6.20%	0034A	
9/21/1997	SEAD-12	C	744676.6	1015849	C-172	2.1	2.27	2.44	2.58	-12.02%	0034A	
9/21/1997	SEAD-12	C	744601.4	1015852	C-174	2.46	2.5	2.55	2.58	-3.10%	0034A	
9/21/1997	SEAD-12	C	744676.4	1015855	C-174	2.15	2.32	2.5	2.58	-10.08%	0034A	
9/21/1997	SEAD-12	C	744601.2	1015858	C-176	2.82	2.86	2.96	2.85	0.35%	0033A	
9/21/1997	SEAD-12	C	744676.1	1015861	C-176	2.49	2.75	2.88	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744600.9	1015864	C-178	2.81	2.9	3.03	2.85	1.75%	0033A	
9/21/1997	SEAD-12	C	744675.9	1015867	C-178	2.38	2.81	2.86	2.85	-1.40%	0033A	
9/21/1997	SEAD-12	C	744600.7	1015870	C-180	2.38	2.48	2.58	2.58	-3.88%	0034A	
9/21/1997	SEAD-12	C	744675.6	1015873	C-180	2.01	2.36	2.44	2.58	-8.53%	0034A	
9/21/1997	SEAD-12	C	744600.4	1015876	C-182	2.45	2.48	2.52	2.58	-3.88%	0034A	
9/21/1997	SEAD-12	C	744675.3	1015879	C-182	1.96	2.3	2.41	2.58	-10.85%	0034A	
9/21/1997	SEAD-12	C	744600.1	1015882	C-184	2.59	2.81	2.95	2.85	-1.40%	0033A	
9/21/1997	SEAD-12	C	744675.1	1015885	C-184	2.39	2.78	2.91	2.85	-2.46%	0033A	
9/21/1997	SEAD-12	C	744599.9	1015888	C-186	2.85	2.89	2.95	2.85	1.40%	0033A	
9/21/1997	SEAD-12	C	744674.8	1015891	C-186	2.37	2.75	2.89	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744599.6	1015894	C-188	2.84	2.88	2.98	2.85	1.05%	0033A	
9/21/1997	SEAD-12	C	744674.6	1015897	C-188	2.48	2.8	2.93	2.85	-1.75%	0033A	
9/21/1997	SEAD-12	C	744599.4	1015900	C-190	2.73	2.85	3.02	2.85	0.00%	0033A	
9/21/1997	SEAD-12	C	744674.3	1015903	C-190	2.51	2.83	2.92	2.85	-0.70%	0033A	
9/21/1997	SEAD-12	C	744599.1	1015906	C-192	2.5	2.55	2.71	2.58	-1.16%	0034A	
9/21/1997	SEAD-12	C	744674	1015909	C-192	2.18	2.4	2.57	2.58	-6.98%	0034A	
9/21/1997	SEAD-12	C	744598.8	1015912	C-194	2.55	2.58	2.62	2.58	0.00%	0034A	
9/21/1997	SEAD-12	C	744673.8	1015915	C-194	2.25	2.41	2.58	2.58	-6.59%	0034A	
9/21/1997	SEAD-12	C	744598.6	1015918	C-196	2.66	2.78	2.91	2.85	-2.46%	0033A	
9/21/1997	SEAD-12	C	744673.5	1015921	C-196	2.55	2.7	2.86	2.85	-5.26%	0033A	
9/21/1997	SEAD-12	C	744598.3	1015924	C-198	2.78	2.88	3.04	2.85	1.05%	0033A	
9/21/1997	SEAD-12	C	744673.3	1015927	C-198	2.47	2.75	2.84	2.85	-3.51%	0033A	
9/21/1997	SEAD-12	C	744598.1	1015930	C-200	2.46	2.54	2.63	2.58	-1.55%	0034A	
9/21/1997	SEAD-12	C	744673	1015933	C-200	2.33	2.42	2.51	2.58	-6.20%	0034A	
9/21/1997	SEAD-12	C	744597.8	1015936	C-202	2.24	2.3	2.54	2.58	-10.85%	0034A	
9/21/1997	SEAD-12	C	744672.7	1015939	C-202	2.52	2.54	2.59	2.58	-1.55%	0034A	
9/21/1997	SEAD-12	C	744597.5	1015942	C-204	2.58	2.75	2.92	2.58	6.59%	0034A	
9/21/1997	SEAD-12	C	744672.4	1015945	C-204	2.59	2.7	2.85	2.58	4.65%	0034A	
9/21/1997	SEAD-12	C	744597.3	1015948	C-206	2.71	2.79	2.88	2.58	8.14%	0034A	
9/21/1997	SEAD-12	C	744672.2	1015951	C-206	2.51	2.68	2.74	2.58	3.88%	0034A	
9/21/1997	SEAD-12	C	744597.1	1015952	C-208	2.44	2.54	2.63	2.58	-1.55%	0034A	
9/21/1997	SEAD-12	C	744672	1015955	C-208	2.24	2.38	2.53	2.58	-7.75%	0034A	

Appendix F
Area C Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	NAD-27		Line	Min	Mean	Max	Background	% +/- Background	Instrument	Comments
			easting	northing				(Kcpm)			(s/n)	
										-4 20%		
										9 80%		

Appendix F
Area D Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD83		Min	Value	Max	Background	% +/- BKG	Instrument	Comments
				easting	northing		(cpm)				(s/n)	
1/23/2000	SEAD-12	Pit A	D	745034.9	105098.1	8200	8871	10100	8445	5.04%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.8	105100.2	7700	8887	9600	8445	5.23%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.7	105101.1	7800	8925	10000	8445	5.68%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.7	105103.2	8700	8975	9900	8445	6.28%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.6	105104.1	7600	8793	9400	8445	4.12%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.5	105106.2	7400	8775	9400	8445	3.91%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.5	105107.1	8200	8833	9700	8445	4.59%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.4	105109.2	8400	8838	10300	8445	4.65%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.3	105110.1	8200	8586	9300	8445	1.67%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.3	105112.2	8600	8835	9400	8445	4.62%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.2	105113.1	7800	8526	9900	8445	0.96%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083.2	105115.2	8600	8912	9300	8445	5.53%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745034.1	105116.1	8700	8740	9600	8445	3.49%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745083	105118.2	8000	8818	10000	8445	4.42%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.9	105119.1	7900	8829	10000	8445	4.55%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.9	105121.2	8700	8809	9700	8445	4.31%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.8	105122.1	7900	8680	9400	8445	2.78%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.8	105124.2	7600	8765	10000	8445	3.79%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.7	105125.1	7600	8635	9100	8445	2.25%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.6	105127.2	7700	8408	9000	8445	-0.44%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.5	105128.1	7600	8740	9700	8445	3.49%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.5	105130.2	8200	8715	10000	8445	3.20%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.4	105131.1	7200	8556	8900	8445	1.31%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.4	105133.2	8300	8815	9600	8445	4.38%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.3	105134.1	8200	8631	9100	8445	2.20%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.2	105136.2	8200	9031	9700	8445	6.94%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033.1	105137	8600	8820	10100	8445	4.44%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082.1	105139.2	8000	8665	9700	8445	2.61%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745033	105140	8400	9171	10600	8445	8.60%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745082	105142.2	7900	9066	10600	8445	7.35%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.9	105143	7900	8984	10400	8445	6.38%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.8	105145.2	7800	9200	11300	8445	8.94%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.8	105146	7600	8951	9500	8445	5.99%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.7	105148.2	7900	9109	10000	8445	7.86%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.6	105149	8100	8788	9700	8445	4.06%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.6	105151.2	7900	9014	10000	8445	6.74%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.5	105152	7100	8458	9500	8445	0.15%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.4	105154.2	7900	8857	9500	8445	4.88%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.4	105155	7100	8650	10500	8445	2.43%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.3	105157.2	7000	8870	9900	8445	5.03%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.2	105158	8200	8700	9800	8445	3.02%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.2	105160.2	6700	8935	10600	8445	5.80%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032.1	105161	7900	8866	9600	8445	4.99%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745081.1	105163.2	5700	8975	9900	8445	6.28%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745032	105164	7700	9063	10000	8445	7.32%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.9	105166.2	7500	9097	10200	8445	7.72%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.8	105167	7500	9219	10100	8445	9.17%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.8	105169.2	8600	9094	9400	8445	7.69%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.7	105170	8800	9221	10100	8445	9.19%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.7	105172.2	8200	9001	10300	8445	6.58%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.6	105173	7900	9057	8900	8445	7.25%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.5	105175.2	8200	9276	9900	8445	9.84%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.4	105176	8000	9471	10300	8445	12.15%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.4	105178.2	8400	9235	10500	8445	9.35%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.3	105179	8600	9082	9700	8445	7.54%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.3	105181.2	8400	9177	9800	8445	8.67%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031.2	105182	8100	9046	10400	8445	7.12%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080.1	105184.1	8100	9759	11800	8445	15.56%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745031	105185	7500	9305	10200	8445	10.18%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745080	105187.1	7700	9200	9900	8445	8.94%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.9	105188	8000	9876	11200	8445	16.94%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.9	105190.1	8200	9339	10800	8445	10.59%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.8	105191	7900	9481	11700	8445	12.27%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.7	105193.1	8400	9157	10200	8445	8.43%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.7	105194	7600	9280	10100	8445	9.89%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.6	105196.1	8000	9017	9900	8445	6.77%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.5	105197	8600	9380	10200	8445	11.07%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.5	105199.1	8200	9118	10000	8445	7.97%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.4	105200	7700	9000	9900	8445	6.57%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.3	105202.1	8200	9120	10300	8445	7.99%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.3	105203	8000	9280	10000	8445	9.89%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.2	105205.1	8100	9317	10100	8445	10.33%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030.1	105206	7900	9305	10300	8445	10.18%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079.1	105208.1	7700	9235	9400	8445	9.35%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745030	105209	8600	9219	9800	8445	9.17%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745079	105211.1	7500	9228	10100	8445	9.27%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.9	105212	7900	9179	10300	8445	8.69%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.8	105214.1	8000	9082	9900	8445	7.54%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.7	105215	8200	9391	10400	8445	11.20%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.7	105217.1	7500	9099	10800	8445	7.74%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.6	105218	8100	9086	9900	8445	7.59%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.6	105220.1	7900	8991	9700	8445	6.47%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.5	105221	7500	9198	10300	8445	8.92%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.4	105223.1	8600	9209	10700	8445	9.05%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.3	105224	7900	9318	9900	8445	10.34%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.3	105226.1	8100	9097	10500	8445	7.72%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.2	105227	8500	9228	10500	8445	9.27%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078.2	105229.1	8100	9198	10100	8445	8.92%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745029.1	105230	7900	9291	10600	8445	10.02%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745078	105232.1	7700	9367	10500	8445	10.92%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745028.9	105233	7800	9090	10500	8445	7.64%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745077.9	105235.1	8100	8978	10000	8445	6.31%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745028.8	105236	8200	8318	10200	8445	-1.50%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745077.8	105238.1	8500	9400	11000	8445	11.31%	142488/A370Q	
1/23/2000	SEAD-12	Pit A	D	745028.7	105239	7700	8981	10500	8445	6.35%	142488/A370Q	

1/23/2000	SEAD-12	Pit A	D	745077.6	105241.1	8500	9217	10200	8445	9.14%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745028.6	105241.9	7900	8237	10100	8445	-2.46%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745077.5	105244.1	8000	8180	11200	8445	-3.14%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745028.4	105244.9	7500	9301	10400	8445	10.14%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745077.4	105247.1	7700	9237	10700	8445	9.38%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745028.3	105247.9	7600	8789	9800	8445	4.07%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745077.2	105250.1	7400	8641	9400	8445	2.32%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745028.2	105250.9	8600	8821	10200	8445	4.45%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745077.1	105253.1	8000	8665	9800	8445	2.61%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745028	105253.9	8800	9057	10800	8445	7.25%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745077	105256.1	8000	9339	11700	8445	10.59%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.9	105256.9	8100	8788	10600	8445	4.06%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.9	105259.1	8200	8981	10400	8445	6.35%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.8	105259.9	8000	8838	10300	8445	4.65%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.7	105262.1	8400	8740	11200	8445	3.49%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.6	105262.9	7300	8516	10800	8445	0.84%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.6	105265.1	7700	9066	10000	8445	7.35%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.5	105265.9	7600	8793	10300	8445	4.12%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.5	105268.1	7400	8818	9900	8445	4.42%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.4	105268.9	8200	9218	10500	8445	9.15%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.3	105271.1	8800	8987	11200	8445	6.42%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.2	105271.9	8700	9120	9900	8445	7.99%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.2	105274.1	7800	8765	10500	8445	3.79%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027.1	105274.9	8400	8818	10000	8445	4.42%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745076.1	105277.1	8600	8997	10800	8445	6.54%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745027	105277.9	7800	9082	10800	8445	7.54%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.9	105280.1	8100	9338	11200	8445	10.57%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.8	105280.9	8400	9046	11000	8445	7.12%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.8	105283.1	8000	8935	10200	8445	5.80%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.7	105283.9	8200	8840	11200	8445	4.68%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.7	105286.1	8900	9271	11800	8445	9.78%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.6	105286.9	7700	8981	10800	8445	6.35%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.5	105289	8000	9037	10200	8445	7.01%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.5	105289.9	7400	8701	9900	8445	3.03%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.4	105292	8100	8999	10500	8445	6.56%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.3	105292.9	7700	8985	11100	8445	6.39%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.3	105295	8200	8586	10300	8445	1.67%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.2	105294.9	7600	8673	9900	8445	2.70%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.2	105297	7400	6778	10500	8445	3.94%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745026.1	105297.9	7800	8531	9800	8445	1.02%	142488/A370Q
1/23/2000	SEAD-12	Pit A	D	745075.1	105300	8200	8586	9300	8445	1.67%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.7	105145.9	7200	8581	8900	8445	1.61%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.6	105148.8	7600	8680	10400	8445	2.78%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.5	105151.8	8200	8705	9800	8445	3.08%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.3	105154.8	7900	8866	9900	8445	4.99%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.2	105157.8	7600	8740	9700	8445	3.49%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744982.1	105160.8	7200	8556	8900	8445	1.31%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.9	105163.8	7100	8456	9500	8445	0.13%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.8	105166.8	8200	9391	10400	8445	11.20%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.7	105169.8	7500	9199	10300	8445	8.93%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.5	105172.8	7900	9480	11700	8445	12.26%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.4	105175.8	7900	9058	9600	8445	7.26%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.3	105178.8	7500	9219	10100	8445	9.17%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981.1	105181.8	7900	9316	9500	8445	10.31%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744981	105184.8	7600	8890	10200	8445	5.27%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.9	105187.8	8000	8970	10800	8445	6.22%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.7	105190.8	7400	8701	9900	8445	3.03%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.6	105193.8	7700	8250	10200	8445	-2.31%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.5	105196.8	8500	9318	10500	8445	10.34%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.4	105199.8	7800	9090	10500	8445	7.64%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.2	105202.8	8200	9218	10500	8445	9.15%	142488/A370Q
1/23/2000	SEAD-12	Pit B	D	744980.1	105205.8	8400	8910	10800	8445	5.51%	142488/A370Q
										6.27%	
										16.94%	

Appendix F
Area E Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	% +/- Backround	Instrument	Comments
				easting	northing		(kcpm)				(s/n)	
9/22/1997	SEAD-12	E	Regional	742903.4	1013483	2.16	2.22	2.28	2.87	-22.65%	0033A	
9/22/1997	SEAD-12	E	Regional	742901.4	1013528	2.22	2.24	2.31	2.87	-21.95%	0033A	
9/22/1997	SEAD-12	E	Regional	742900.3	1013487	2.08	2.16	2.24	2.87	-24.74%	0033A	
9/22/1997	SEAD-12	E	Regional	742898.4	1013528	2.2	2.25	2.29	2.87	-21.60%	0033A	
9/22/1997	SEAD-12	E	Regional	742897.1	1013559	2.25	2.28	2.3	2.87	-20.56%	0033A	
9/22/1997	SEAD-12	E	Regional	742897.4	1013483	1.76	2.09	2.14	2.62	-20.23%	0034A	
9/22/1997	SEAD-12	E	Regional	742895.4	1013528	2.12	2.15	2.2	2.62	-17.94%	0034A	
9/22/1997	SEAD-12	E	Regional	742893.7	1013568	2	2.07	2.23	2.62	-20.99%	0034A	
9/22/1997	SEAD-12	E	Regional	742894.4	1013483	1.75	2.22	2.53	2.62	-15.27%	0034A	
9/22/1997	SEAD-12	E	Regional	742892.4	1013528	2.18	2.33	2.5	2.62	-11.07%	0034A	
9/22/1997	SEAD-12	E	Regional	742890.7	1013568	2	2.11	2.21	2.62	-19.47%	0034A	
9/22/1997	SEAD-12	E	Regional	742891.5	1013481	2.03	2.7	2.75	2.87	-5.92%	0033A	
9/22/1997	SEAD-12	E	Regional	742889.4	1013528	2.71	2.75	2.8	2.87	-4.18%	0033A	
9/22/1997	SEAD-12	E	Regional	742887.3	1013578	2.23	2.65	2.69	2.87	-7.67%	0033A	
9/22/1997	SEAD-12	E	Regional	742888.6	1013479	2.09	2.54	2.82	2.87	-11.50%	0033A	
9/22/1997	SEAD-12	E	Regional	742886.4	1013528	2.65	2.8	2.94	2.87	-2.44%	0033A	
9/22/1997	SEAD-12	E	Regional	742884.7	1013568	2.32	2.6	2.68	2.87	-9.41%	0033A	
9/22/1997	SEAD-12	E	Regional	742885.6	1013479	1.72	2.24	2.37	2.62	-14.50%	0034A	
9/22/1997	SEAD-12	E	Regional	742883.4	1013528	2.23	2.31	2.38	2.62	-11.83%	0034A	
9/22/1997	SEAD-12	E	Regional	742881.7	1013567	2.11	2.26	2.36	2.62	-13.74%	0034A	
9/22/1997	SEAD-12	E	Regional	742882.6	1013478	2	2.48	2.59	2.62	-5.34%	0034A	
9/22/1997	SEAD-12	E	Regional	742880.4	1013527	2.42	2.47	2.52	2.62	-5.73%	0034A	
9/22/1997	SEAD-12	E	Regional	742878.7	1013567	2.15	2.3	2.45	2.62	-12.21%	0034A	
9/22/1997	SEAD-12	E	Regional	742879.6	1013478	1.88	2.7	2.8	2.87	-5.92%	0033A	
9/22/1997	SEAD-12	E	Regional	742877.4	1013527	2.57	2.64	2.73	2.87	-8.01%	0033A	
9/22/1997	SEAD-12	E	Regional	742875.7	1013567	2.48	2.55	2.74	2.87	-11.15%	0033A	
9/22/1997	SEAD-12	E	Regional	742876.6	1013478	1.9	2.72	2.8	2.87	-5.23%	0033A	
9/22/1997	SEAD-12	E	Regional	742874.4	1013527	2.76	2.8	2.93	2.87	-2.44%	0033A	
9/22/1997	SEAD-12	E	Regional	742872.7	1013567	2.38	2.75	2.89	2.87	-4.18%	0033A	
9/22/1997	SEAD-12	E	Regional	742873.6	1013478	1.73	2.3	2.41	2.62	-12.21%	0034A	
9/22/1997	SEAD-12	E	Regional	742871.4	1013527	2.29	2.43	2.56	2.62	-7.25%	0034A	
9/22/1997	SEAD-12	E	Regional	742869.7	1013567	2.15	2.35	2.52	2.62	-10.31%	0034A	
9/22/1997	SEAD-12	E	Regional	742870.6	1013478	2	2.37	2.6	2.62	-9.54%	0034A	
9/22/1997	SEAD-12	E	Regional	742868.5	1013527	2.53	2.59	2.66	2.62	-1.15%	0034A	
9/22/1997	SEAD-12	E	Regional	742866.8	1013567	2	2.45	2.63	2.62	-6.49%	0034A	
9/22/1997	SEAD-12	E	Regional	742867.6	1013478	1.92	2.5	2.54	2.87	-12.89%	0033A	
9/22/1997	SEAD-12	E	Regional	742865.5	1013527	2.54	2.58	2.68	2.87	-10.10%	0033A	
9/22/1997	SEAD-12	E	Regional	742863.8	1013567	2.37	2.56	2.64	2.87	-10.80%	0033A	
9/22/1997	SEAD-12	E	Regional	742864.6	1013478	1.9	2.7	2.77	2.87	-5.92%	0033A	
9/22/1997	SEAD-12	E	Regional	742862.5	1013527	2.53	2.65	2.79	2.87	-7.67%	0033A	
9/22/1997	SEAD-12	E	Regional	742860.8	1013567	2.32	2.5	2.58	2.87	-12.89%	0033A	
9/22/1997	SEAD-12	E	Regional	742861.6	1013478	1.94	2.23	2.35	2.62	-14.89%	0034A	
9/22/1997	SEAD-12	E	Regional	742859.5	1013526	2.3	2.37	2.44	2.62	-9.54%	0034A	
9/22/1997	SEAD-12	E	Regional	742857.8	1013566	1.96	2.2	2.29	2.62	-16.03%	0034A	
9/22/1997	SEAD-12	E	Regional	742858.6	1013477	1.98	2.23	2.59	2.62	-14.89%	0034A	
9/22/1997	SEAD-12	E	Regional	742856.5	1013526	2.24	2.41	2.57	2.62	-8.02%	0034A	
9/22/1997	SEAD-12	E	Regional	742854.8	1013566	1.94	2.18	2.23	2.62	-16.79%	0034A	
9/22/1997	SEAD-12	E	Regional	742855.6	1013477	1.86	2.5	2.66	2.87	-12.89%	0033A	
9/22/1997	SEAD-12	E	Regional	742853.5	1013526	2.52	2.6	2.68	2.87	-9.41%	0033A	
9/22/1997	SEAD-12	E	Regional	742851.8	1013566	2.29	2.48	2.57	2.87	-13.59%	0033A	
9/22/1997	SEAD-12	E	Regional	742852.6	1013477	1.87	2.75	2.8	2.87	-4.18%	0033A	
9/22/1997	SEAD-12	E	Regional	742850.5	1013526	2.64	2.75	2.82	2.87	-4.18%	0033A	
9/22/1997	SEAD-12	E	Regional	742848.8	1013566	2.27	2.45	2.52	2.87	-14.63%	0033A	
9/22/1997	SEAD-12	E	Regional	742849.6	1013477	1.79	2.18	2.36	2.62	-16.79%	0034A	
9/22/1997	SEAD-12	E	Regional	742847.5	1013526	2.25	2.34	2.44	2.62	-10.69%	0034A	
9/22/1997	SEAD-12	E	Regional	742845.8	1013566	2.11	2.15	2.21	2.62	-17.94%	0034A	
9/22/1997	SEAD-12	E	Regional	742846.6	1013477	2.07	2.29	2.43	2.62	-12.60%	0034A	
9/22/1997	SEAD-12	E	Regional	742844.5	1013526	2.15	2.35	2.5	2.62	-10.31%	0034A	
9/22/1997	SEAD-12	E	Regional	742842.8	1013566	2.09	2.16	2.28	2.62	-17.56%	0034A	
9/22/1997	SEAD-12	E	Regional	742843.6	1013477	1.96	2.15	2.3	2.87	-25.09%	0033A	
9/22/1997	SEAD-12	E	Regional	742841.5	1013526	2.29	2.35	2.43	2.87	-18.12%	0033A	
9/22/1997	SEAD-12	E	Regional	742839.8	1013566	2.25	2.31	2.37	2.87	-19.51%	0033A	
9/22/1997	SEAD-12	E	Regional	742840.6	1013477	1.97	2.1	2.17	2.87	-26.83%	0033A	
9/22/1997	SEAD-12	E	Regional	742838.5	1013526	2.13	2.19	2.24	2.87	-23.69%	0033A	
9/22/1997	SEAD-12	E	Regional	742836.8	1013566	2.11	2.17	2.23	2.87	-24.39%	0033A	
9/22/1997	SEAD-12	E	Regional	742837.6	1013476	1.83	1.87	1.89	2.62	-28.63%	0034A	
9/22/1997	SEAD-12	E	Regional	742835.5	1013525	1.89	1.9	1.93	2.62	-27.48%	0034A	
9/22/1997	SEAD-12	E	Regional	742833.8	1013565	1.91	1.91	1.91	2.62	-27.10%	0034A	
9/22/1997	SEAD-12	E	Regional	742831.2	1013555	2.27	2.32	2.37	2.87	-19.16%	0033A	
9/22/1997	SEAD-12	E	Regional	742828.2	1013555	2.19	2.2	2.22	2.87	-23.34%	0033A	
9/22/1997	SEAD-12	E	Regional	742825.2	1013555	2.53	2.58	2.62	2.87	-10.10%	0033A	
9/22/1997	SEAD-12	E	Regional	742693.6	1013474	1.97	2.01	2.06	2.87	-29.97%	0033A	
9/22/1997	SEAD-12	E	Regional	742691.6	1013519	1.97	2.01	2.05	2.87	-29.97%	0033A	
9/22/1997	SEAD-12	E	Regional	742689.7	1013564	2.01	2.05	2.1	2.87	-28.57%	0033A	
9/22/1997	SEAD-12	E	Regional	742690.6	1013474	2.32	2.35	2.38	2.87	-18.12%	0033A	
9/22/1997	SEAD-12	E	Regional	742688.6	1013519	2.29	2.35	2.42	2.87	-18.12%	0033A	
9/22/1997	SEAD-12	E	Regional	742686.7	1013564	1.88	2.28	2.35	2.87	-20.56%	0033A	
9/22/1997	SEAD-12	E	Regional	742687.6	1013474	1.97	2.1	2.16	2.62	-19.85%	0034A	
9/22/1997	SEAD-12	E	Regional	742685.6	1013519	2.07	2.24	2.3	2.62	-14.50%	0034A	
9/22/1997	SEAD-12	E	Regional	742683.7	1013564	2	2.25	2.35	2.62	-14.12%	0034A	
9/22/1997	SEAD-12	E	Regional	742684.6	1013474	1.97	2.1	2.16	2.62	-19.85%	0034A	
9/22/1997	SEAD-12	E	Regional	742682.6	1013519	2.45	2.52	2.6	2.62	-3.82%	0034A	
9/22/1997	SEAD-12	E	Regional	742680.7	1013564	2.06	2.28	2.48	2.62	-12.98%	0034A	
9/24/1997	SEAD-12	E	Regional	742681.8	1013470	1.76	2.18	2.24	2.67	-18.35%	0034A	
9/24/1997	SEAD-12	E	Regional	742679.6	1013519	2.13	2.18	2.24	2.67	-18.35%	0034A	
9/24/1997	SEAD-12	E	Regional	742677.9	1013559	1.97	2.2	2.22	2.67	-17.60%	0034A	
9/24/1997	SEAD-12	E	Regional	742678.8	1013469	1.93	2.38	2.44	2.67	-10.86%	0034A	

Appendix F
Area E Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	% +/- Backround	Instrument	Comments
				easting	northing		(kcpm)				(s/n)	
9/24/1997	SEAD-12	E	Regional	742676.6	1013518	2.35	2.42	2.5	2.67	-9.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742674.9	1013558	1.69	2.2	2.3	2.67	-17.60%	0034A	
9/24/1997	SEAD-12	E	Regional	742675.8	1013469	1.76	2.3	2.41	2.67	-13.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742673.7	1013518	2.41	2.57	2.7	2.67	-3.75%	0034A	
9/24/1997	SEAD-12	E	Regional	742671.9	1013558	2	2.3	2.58	2.67	-13.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742672.8	1013469	2	2.42	2.5	2.67	-9.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742670.7	1013518	2.47	2.61	2.75	2.67	-2.25%	0034A	
9/24/1997	SEAD-12	E	Regional	742668.9	1013558	1.97	2.42	2.67	2.67	-9.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742669.8	1013469	1.96	2.38	2.52	2.67	-10.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742667.7	1013518	2.37	2.52	2.68	2.67	-5.62%	0034A	
9/24/1997	SEAD-12	E	Regional	742665.9	1013558	1.95	2.48	2.68	2.67	-7.12%	0034A	
9/24/1997	SEAD-12	E	Regional	742667.7	1013449		2.42		2.67	-9.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742667.8	1013447		9.07		2.67	239.70%	0034A	
9/24/1997	SEAD-12	E	Regional	742667.8	1013446		2.7		2.67	1.12%	0034A	
9/24/1997	SEAD-12	E	Regional	742666.8	1013469	1.88	2.5	2.7	2.67	-6.37%	0034A	
9/24/1997	SEAD-12	E	Regional	742664.7	1013518	2.46	2.52	2.57	2.67	-5.62%	0034A	
9/24/1997	SEAD-12	E	Regional	742662.9	1013558	1.92	2.34	2.49	2.67	-12.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742663.8	1013469	1.95	2.3	2.5	2.67	-13.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742661.7	1013518	2.24	2.6	2.71	2.67	-2.62%	0034A	
9/24/1997	SEAD-12	E	Regional	742659.9	1013558	1.87	2.53	2.65	2.67	-5.24%	0034A	
9/24/1997	SEAD-12	E	Regional	742660.8	1013469	1.9	2.41	2.49	2.67	-9.74%	0034A	
9/24/1997	SEAD-12	E	Regional	742658.7	1013518	2.5	2.55	2.6	2.67	-4.49%	0034A	
9/24/1997	SEAD-12	E	Regional	742656.9	1013558	1.83	2.48	2.56	2.67	-7.12%	0034A	
9/24/1997	SEAD-12	E	Regional	742657.8	1013469	1.88	2.4	2.51	3.12	-23.08%	0033A	
9/24/1997	SEAD-12	E	Regional	742655.7	1013518	2.4	2.54	2.68	3.12	-18.59%	0033A	
9/24/1997	SEAD-12	E	Regional	742653.9	1013557	1.91	2.68	2.73	3.12	-14.10%	0033A	
9/24/1997	SEAD-12	E	Regional	742654.8	1013468	1.91	2.41	2.56	3.12	-22.76%	0033A	
9/24/1997	SEAD-12	E	Regional	742652.7	1013517	2.48	2.5	2.77	3.12	-19.87%	0033A	
9/24/1997	SEAD-12	E	Regional	742650.9	1013557	1.85	2.63	2.72	3.12	-15.71%	0033A	
9/24/1997	SEAD-12	E	Regional	742651.8	1013468	1.87	2.45	2.54	3.12	-21.47%	0033A	
9/24/1997	SEAD-12	E	Regional	742649.7	1013517	2.57	2.78	2.85	3.12	-10.90%	0033A	
9/24/1997	SEAD-12	E	Regional	742647.9	1013557	1.94	2.72	2.8	3.12	-12.82%	0033A	
9/24/1997	SEAD-12	E	Regional	742648.8	1013468	2	2.6	2.72	3.12	-16.67%	0033A	
9/24/1997	SEAD-12	E	Regional	742646.7	1013517	2.69	2.73	2.77	3.12	-12.50%	0033A	
9/24/1997	SEAD-12	E	Regional	742644.9	1013557	1.78	2.72	2.76	3.12	-12.82%	0033A	
9/24/1997	SEAD-12	E	Regional	742645.8	1013468	2	2.34	2.5	2.67	-12.36%	0034A	
9/24/1997	SEAD-12	E	Regional	742643.7	1013517	2.55	2.62	2.65	2.67	-1.87%	0034A	
9/24/1997	SEAD-12	E	Regional	742641.9	1013557	1.83	2.5	2.6	2.67	-6.37%	0034A	
9/24/1997	SEAD-12	E	Regional	742642.8	1013468	1.94	2.64	2.66	2.67	-1.12%	0034A	
9/24/1997	SEAD-12	E	Regional	742640.7	1013517	2.59	2.64	2.68	2.67	-1.12%	0034A	
9/24/1997	SEAD-12	E	Regional	742638.9	1013557	1.87	2.38	2.56	2.67	-10.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742639.8	1013468	1.9	2.36	2.44	2.67	-11.61%	0034A	
9/24/1997	SEAD-12	E	Regional	742637.7	1013517	2.3	2.38	2.45	2.67	-10.86%	0034A	
9/24/1997	SEAD-12	E	Regional	742635.9	1013557	2.01	2.22	2.3	2.67	-16.85%	0034A	
9/24/1997	SEAD-12	E	Regional	742636.7	1013472	1.9	2.36	2.44	2.67	-11.61%	0034A	
9/24/1997	SEAD-12	E	Regional	742634.7	1013517	2.19	2.24	2.29	2.67	-16.10%	0034A	
9/24/1997	SEAD-12	E	Regional	742632.9	1013557	1.83	2.18	2.21	2.67	-18.35%	0034A	
9/24/1997	SEAD-12	E	Regional	742633.4	1013477	1.78	1.95	2.01	2.67	-26.97%	0034A	
9/24/1997	SEAD-12	E	Regional	742631.7	1013516	1.94	1.95	1.98	2.67	-26.97%	0034A	
9/24/1997	SEAD-12	E	Regional	742629.9	1013556	1.74	1.95	1.96	2.67	-26.97%	0034A	
9/24/1997	SEAD-12	E	Regional	742630.1	1013483	1.8	2	2.04	2.67	-25.09%	0034A	
9/24/1997	SEAD-12	E	Regional	742628.7	1013516	1.98	2.01	2.05	2.67	-24.72%	0034A	
9/24/1997	SEAD-12	E	Regional	742626.9	1013556	1.78	1.83	1.86	2.67	-31.46%	0034A	
				742618.7	1013516					1.12%		
				742616.9	1013556					-31.46%		
										-12.00%		

Appendix F
Area F Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	Line	NAD-27		Min	Mean	Max	Background	Instument	% +/- BKG	Comments
					Easting	Northing			(kcpm)		(s/n)		
9/23/1997	SEAD-12	Area-F	Local	F-0	742165.2	1012170	2.79	2.84	2.9	2.7	0034A	5.19%	
9/23/1997	SEAD-12	Area-F	Local	F-0	742085.3	1012166	2.83	2.98	2.99	2.7	0034A	10.37%	
9/23/1997	SEAD-12	Area-F	Local	F-2	742164.9	1012176	2.89	2.95	3.02	2.7	0034A	9.26%	
9/23/1997	SEAD-12	Area-F	Local	F-2	742085	1012172	2.91	3.03	3.15	2.7	0034A	12.22%	
9/23/1997	SEAD-12	Area-F	Local	F-4	742164.6	1012182	3.33	3.38	3.44	3.1	0033A	9.03%	
9/23/1997	SEAD-12	Area-F	Local	F-4	742084.7	1012178	3.39	3.48	3.56	3.1	0033A	12.26%	
9/23/1997	SEAD-12	Area-F	Local	F-6	742164.4	1012188	3.35	3.47	3.54	3.1	0033A	11.94%	
9/23/1997	SEAD-12	Area-F	Local	F-6	742084.4	1012184	3.35	3.5	3.63	3.1	0033A	12.90%	
9/23/1997	SEAD-12	Area-F	Local	F-8	742164.1	1012194	2.6	2.73	2.8	2.7	0034A	1.11%	
9/23/1997	SEAD-12	Area-F	Local	F-8	742084.2	1012190	2.59	2.72	2.83	2.7	0034A	0.74%	
9/23/1997	SEAD-12	Area-F	Local	F-10	742163.9	1012200	2.65	2.71	2.77	2.7	0034A	0.37%	
9/23/1997	SEAD-12	Area-F	Local	F-10	742083.9	1012196	2.72	2.77	2.89	2.7	0034A	2.59%	
9/23/1997	SEAD-12	Area-F	Local	F-12	742163.6	1012206	2.69	2.85	2.99	3.1	0033A	-8.06%	
9/23/1997	SEAD-12	Area-F	Local	F-12	742083.7	1012202	2.85	2.94	3.01	3.1	0033A	-5.16%	
9/23/1997	SEAD-12	Area-F	Local	F-14	742163.3	1012212	2.79	2.82	3.01	3.1	0033A	-9.03%	
9/23/1997	SEAD-12	Area-F	Local	F-14	742083.4	1012208	2.89	2.99	3.08	3.1	0033A	-3.55%	
9/23/1997	SEAD-12	Area-F	Local	F-16	742163.1	1012218	2.69	2.74	2.87	2.7	0034A	1.48%	
9/23/1997	SEAD-12	Area-F	Local	F-16	742083.1	1012214	2.68	2.77	2.86	2.7	0034A	2.59%	
9/23/1997	SEAD-12	Area-F	Local	F-18	742162.8	1012224	2.62	2.78	2.91	2.7	0034A	2.96%	
9/23/1997	SEAD-12	Area-F	Local	F-18	742082.9	1012220	2.79	2.87	2.95	2.7	0034A	6.30%	
9/23/1997	SEAD-12	Area-F	Local	F-20	742162.6	1012230	2.76	2.8	3.01	3.1	0033A	-9.68%	
9/23/1997	SEAD-12	Area-F	Local	F-20	742082.6	1012226	2.86	2.92	2.98	3.1	0033A	-5.81%	
9/23/1997	SEAD-12	Area-F	Local	F-22	742162.3	1012236	2.83	2.9	3.01	3.1	0033A	-6.45%	
9/23/1997	SEAD-12	Area-F	Local	F-22	742082.4	1012232	2.92	3	3.09	3.1	0033A	-3.23%	
9/23/1997	SEAD-12	Area-F	Local	F-24	742162	1012242	2.85	2.9	3.12	2.7	0034A	7.41%	
9/23/1997	SEAD-12	Area-F	Local	F-24	742082.1	1012238	2.89	2.93	3.04	2.7	0034A	8.52%	
9/23/1997	SEAD-12	Area-F	Local	F-26	742161.8	1012248	2.82	2.9	3.08	2.7	0034A	7.41%	
9/23/1997	SEAD-12	Area-F	Local	F-26	742081.8	1012244	2.87	2.92	3.14	2.7	0034A	8.15%	
9/23/1997	SEAD-12	Area-F	Local	F-28	742161.5	1012254	2.63	2.76	2.89	3.1	0033A	-10.97%	
9/23/1997	SEAD-12	Area-F	Local	F-28	742081.6	1012250	2.77	2.85	2.84	3.1	0033A	-8.06%	
9/23/1997	SEAD-12	Area-F	Local	F-30	742161.3	1012260	2.69	2.79	2.85	3.1	0033A	-10.00%	
9/23/1997	SEAD-12	Area-F	Local	F-30	742081.3	1012256	2.82	2.9	2.94	3.1	0033A	-6.45%	
9/23/1997	SEAD-12	Area-F	Local	F-32	742160.9	1012266	2.88	2.95	2.14	2.7	0034A	9.26%	
9/23/1997	SEAD-12	Area-F	Local	F-32	742081.1	1012262	2.82	2.9	2.98	2.7	0034A	7.41%	
9/23/1997	SEAD-12	Area-F	Local	F-34	742160.7	1012272	2.75	2.84	2.93	2.7	0034A	5.19%	
9/23/1997	SEAD-12	Area-F	Local	F-34	742080.8	1012268	2.76	2.85	2.94	2.7	0034A	5.56%	
9/23/1997	SEAD-12	Area-F	Local	F-36	742160.4	1012278	2.7	2.79	2.88	3.1	0033A	-10.00%	
9/23/1997	SEAD-12	Area-F	Local	F-36	742080.5	1012274	2.7	2.82	2.93	3.1	0033A	-9.03%	
9/23/1997	SEAD-12	Area-F	Local	F-38	742160.2	1012284	2.64	2.78	2.9	3.1	0033A	-10.32%	
9/23/1997	SEAD-12	Area-F	Local	F-38	742080.3	1012280	2.62	2.7	2.78	3.1	0033A	-12.90%	
												0.79%	
												12.90%	

Appendix F
Area H Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		line	min	mean	max	background	% +/- BKG	Instruments	Comments
				easting	northing				(kcpm)			(s/n)	
10/3/1997	SEAD-12	Area-H	Local	741347.60	1013581.00	H-0	9	9.4	10.4	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741397.50	1013584.00	H-0	8.8	9.4	9.8	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741347.30	1013587.00	H-2	8.4	9.5	10.2	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741397.30	1013590.00	H-2	8.5	9.4	10.1	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741347.10	1013593.00	H-4	7.2	9.5	11.5	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741397.00	1013596.00	H-4	7.2	9.4	11.2	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741346.80	1013599.00	H-6	6.8	9.5	12.2	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741396.80	1013602.00	H-6	7.2	9.4	11.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741346.50	1013605.00	H-8	8.5	9.5	10.4	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741396.50	1013608.00	H-8	9	9.6	10.5	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741346.30	1013611.00	H-10	9.3	10.1	11	9.72	3.91%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741396.20	1013614.00	H-10	9	9.5	10.3	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741346.00	1013617.00	H-12	7	10.1	13	9.59	5.32%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741395.90	1013620.00	H-12	7.8	9.8	13	9.59	2.19%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741345.80	1013623.00	H-14	7.5	9.9	12.2	9.59	3.23%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741395.70	1013626.00	H-14	7.8	9.7	12.2	9.59	1.15%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741345.50	1013629.00	H-16	9.5	9.9	11.2	9.72	1.85%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741395.40	1013632.00	H-16	8.8	9.6	10.5	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741345.20	1013635.00	H-18	8.5	9.4	11.2	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741395.20	1013637.00	H-18	9	9.6	10.5	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741344.90	1013641.00	H-20	6.8	9.5	12.5	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741394.90	1013643.00	H-20	6.5	9.7	12.5	9.59	1.15%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741344.70	1013647.00	H-22	7.8	9.4	12.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741394.60	1013649.00	H-22	7.8	9.9	13	9.59	3.23%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741344.40	1013653.00	H-24	8	9.6	11	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741394.40	1013655.00	H-24	8.4	10	11.4	9.72	2.88%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741344.20	1013659.00	H-26	8.5	9.6	11	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741394.10	1013661.00	H-26	8.8	9.8	11	9.72	0.82%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741343.90	1013665.00	H-28	6.5	9.4	12.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741393.90	1013667.00	H-28	8.2	9.5	12.5	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741343.60	1013671.00	H-30	7.5	9.5	11.5	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741393.60	1013673.00	H-30	7.2	9.5	12	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741343.40	1013677.00	H-32	8.4	9.6	11.4	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741393.30	1013679.00	H-32	8	9.6	10.8	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741343.10	1013683.00	H-34	8.5	9.5	10.8	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741393.10	1013685.00	H-34	8.8	9.8	11	9.72	0.82%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741342.90	1013689.00	H-36	7	9.4	12.2	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741392.80	1013691.00	H-36	6.8	9.6	12.5	9.59	0.10%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741342.60	1013695.00	H-38	7.2	9.4	12.2	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741392.60	1013697.00	H-38	8	9.8	12	9.59	2.19%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741342.30	1013701.00	H-40	8.5	9.3	10.4	9.72	-4.32%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741392.30	1013703.00	H-40	8.8	9.5	11.3	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741342.10	1013707.00	H-42	8.8	9.9	11	9.72	1.85%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741392.00	1013709.00	H-42	8.8	8.9	11	9.72	-8.44%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741341.80	1013713.00	H-44	6.2	9.6	12.5	9.59	0.10%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741391.80	1013715.00	H-44	8	9.7	12	9.59	1.15%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741341.60	1013719.00	H-46	6.5	9.5	10.8	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741391.50	1013721.00	H-46	5.5	9.6	11.5	9.59	0.10%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741341.30	1013725.00	H-48	8.8	9.7	11.2	9.72	-0.21%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741391.30	1013727.00	H-48	8	9.3	10.5	9.72	-4.32%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741341.00	1013731.00	H-50	9	10	11.4	9.72	2.88%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741390.90	1013733.00	H-50	8.2	9.2	10.4	9.72	-5.35%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741340.80	1013737.00	H-52	8	9.8	12.5	9.59	2.19%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741390.70	1013739.00	H-52	6.8	9.2	11.5	9.59	-4.07%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741340.50	1013743.00	H-54	7.5	10.7	13.1	9.59	11.57%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741390.40	1013745.00	H-54	5.8	9.3	11.8	9.59	-3.02%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741340.30	1013749.00	H-56	9.8	11	13	9.72	13.17%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741390.20	1013751.00	H-56	8.8	9.4	11	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741339.90	1013755.00	H-58	9	9.8	12	9.72	0.82%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741389.90	1013757.00	H-58	8	9	10.5	9.72	-7.41%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741339.70	1013761.00	H-60	6.8	9.7	12.2	9.59	1.15%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741389.60	1013763.00	H-60	6.2	9.3	12.2	9.59	-3.02%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741339.40	1013767.00	H-62	6.5	9.5	12.5	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741389.40	1013769.00	H-62	6.8	9.4	11.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741339.20	1013773.00	H-64	8.7	9.7	12	9.72	-0.21%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741389.10	1013775.00	H-64	8.5	9.8	11.2	9.72	0.82%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741338.90	1013779.00	H-66	8.5	9.3	11.2	9.72	-4.32%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741388.90	1013781.00	H-66	8.8	9.5	10.4	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741338.60	1013785.00	H-68	6.8	9.4	10.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741388.60	1013787.00	H-68	6.5	9.2	12.5	9.59	-4.07%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741338.40	1013791.00	H-70	7	9.1	11.5	9.59	-5.11%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741388.30	1013793.00	H-70	9.8	9.5	11.2	9.59	-0.94%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741338.10	1013797.00	H-72	8	9.5	11	9.72	-2.26%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741388.10	1013799.00	H-72	8.9	9.6	10.9	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741337.90	1013803.00	H-74	8.8	9.4	10.8	9.72	-3.29%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741387.80	1013805.00	H-74	9	9.6	11.5	9.72	-1.23%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741337.60	1013809.00	H-76	9.8	9.3	10.8	9.59	-3.02%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741387.60	1013811.00	H-76	6.8	9.4	11.8	9.59	-1.98%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741337.30	1013815.00	H-78	6.8	9	11	9.59	-6.15%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741387.30	1013817.00	H-78	8.8	9.2	11.5	9.59	-4.07%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741337.10	1013821.00	H-80	8	9.3	10.5	9.72	-4.32%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741387.00	1013823.00	H-80	7.8	9	11	9.72	-7.41%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741336.80	1013827.00	H-82	8.4	9	10.3	9.72	-7.41%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741386.80	1013829.00	H-82	8.5	9.2	10.5	9.72	-5.35%	A984P	
10/3/1997	SEAD-12	Area-H	Local	741336.60	1013833.00	H-84	7	9.1	10.8	9.59	-5.11%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741386.50	1013835.00	H-84	7.7	9.3	11.5	9.59	-3.02%	A945P	
10/3/1997	SEAD-12	Area-H	Local	741336.30	1013839.00	H-86	6.8	9.2	10.8	9.72	-5.35%	A984P	

Appendix F
Area H Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		line	min	mean	max	background	% +/- BKG	Instruments	Comments
				easting	northing				(kcpm)			(s/n)	
10/3/1997	SEAD-12	Area-H	Local	741386.30	1013841.00	H-86	7 2	9 1	10 5	9 72	-6 38%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741336 00	1013845.00	H-88	7 8	9 6	11 5	9 41	2 02%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741385 90	1013847 00	H-88	8 9	9 3	11 2	9 41	-1 17%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741335.80	1013851 00	H-90	7 8	9 4	11	9 41	-0 11%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741385 70	1013853 00	H-90	8	9 4	10	9 41	-0 11%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741335.50	1013857 00	H-92	7 5	9 4	11 5	9 41	-0 11%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741385.40	1013859 00	H-92	8 2	9 3	12 2	9 41	-1 17%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741335.30	1013863 00	H-94	7 8	9 4	11 5	9 43	-0 32%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741385.20	1013865.00	H-94	7 8	9 4	11.8	9 43	-0 32%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741334 90	1013869.00	H-96	8.5	9 5	11	9 41	0 96%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741384.90	1013871.00	H-96	8 5	9 5	10 5	9 41	0 96%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741334.70	1013875.00	H-98	8 8	9.6	11 8	9 41	2 02%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741384.60	1013877.00	H-98	8 8	9.7	11.5	9 41	3 08%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741334.40	1013881.00	H-100	7 8	9 6	12 2	9 43	1 80%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741384.40	1013883.00	H-100	7 2	9 7	11 8	9 43	2 86%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741334.20	1013887.00	H-102	7 2	9 6	11 8	9 43	1 80%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741384.10	1013889.00	H-102	6	9.6	11.5	9 43	1.80%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741333.90	1013893.00	H-104	8 5	9.7	11.5	9 41	3.08%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741383.90	1013895.00	H-104	8	9 5	11	9 41	0 96%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741333.60	1013899.00	H-106	8	9 7	11 4	9 41	3 08%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741383.60	1013901.00	H-106	8 7	9.5	11	9 41	0 96%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741333.40	1013905.00	H-108	8	9 5	11 2	9 43	0 74%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741383 30	1013907 00	H-108	8	9 6	11 5	9 43	1 80%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741333.10	1013911.00	H-110	6 8	9 5	12 8	9 43	0 74%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741383 10	1013913.00	H-110	7 8	9.7	11 2	9 43	2 86%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741335 30	1013863 00	H-112	8 2	9 4	10 8	9 41	-0 11%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741385.20	1013865.00	H-112	9 2	10.3	12	9 41	9 46%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741332 60	1013923 00	H-114	9 2	9 7	10 8	9 41	3 08%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741382 60	1013925 00	H-114	9 5	10 2	12	9 41	8 40%	A984P	
10/6/1997	SEAD-12	Area-H	Local	741332.30	1013929 00	H-116	6 5	9 9	12 2	9 43	4 98%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741382.30	1013931 00	H-116	9 2	10 2	12 2	9 43	8 17%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741332.10	1013935.00	H-118	7 5	9 6	11 8	9 43	1 80%	A945P	
10/6/1997	SEAD-12	Area-H	Local	741382.00	1013937.00	H-118	8	9 8	11 5	9 43	3 92%	A945P	
											-0 43%		
											13 17%		

Appendix F
Area I Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	Line	NAD-27 Easting	NAD-27 Northing	Min	Mean	Max (kcpm)	Background	Instrument (s/n)	% +/- Background	Comments
10/6/1997	SEAD-12	Area-I	Local	I-0	742924.80	1013564.00	5.8	9.7	11.2	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-1	742927.80	1013565.00	6.8	9.6	12.8	9.43	A945P	1.80%	
10/6/1997	SEAD-12	Area-I	Local	I-2	742930.80	1013565.00	9	9.7	11	9.41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-3	742933.80	1013565.00	8.5	9.6	10	9.41	A984P	2.02%	
10/6/1997	SEAD-12	Area-I	Local	I-4	742936.80	1013565.00	7	9.7	12	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-5	742939.80	1013565.00	7.5	9.7	12.2	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-6	742942.80	1013565.00	85	9.8	10.8	9.41	A984P	4.14%	
10/6/1997	SEAD-12	Area-I	Local	I-7	742945.80	1013565.00	8.8	9.8	10 8	9.41	A984P	4 14%	
10/6/1997	SEAD-12	Area-I	Local	I-8	742948.80	1013565.00	6.8	9.7	11.5	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-9	742951.80	1013566.00	7.5	9.9	12.5	9.43	A945P	4.98%	
10/6/1997	SEAD-12	Area-I	Local	I-10	742954.80	1013566.00	8.7	9.9	10.8	9.41	A984P	5.21%	
10/6/1997	SEAD-12	Area-I	Local	I-11	742957.80	1013566.00	9	9.7	11.2	9.41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-12	742960.80	1013566.00	7.8	9.6	12 5	9 43	A945P	1.80%	
10/6/1997	SEAD-12	Area-I	Local	I-13	742963.80	1013566.00	6.8	9.5	11.2	9 43	A945P	0.74%	
10/6/1997	SEAD-12	Area-I	Local	I-14	742966.80	1013566.00	8.2	9.8	10.5	9.41	A984P	4.14%	
10/6/1997	SEAD-12	Area-I	Local	I-15	742969.80	1013566.00	9	9.7	10.8	9.41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-16	742972.80	1013567.00	6.8	9.7	12	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-17	742975.80	1013567.00	7 5	9.6	11.8	9.43	A945P	1.80%	
10/6/1997	SEAD-12	Area-I	Local	I-18	742978.80	1013567.00	8.9	9.9	10.4	9.41	A984P	5.21%	
10/6/1997	SEAD-12	Area-I	Local	I-19	742981.80	1013567.00	8.5	9.7	11	9.41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-20	742984.80	1013567.00	6.5	9.6	12.2	9.43	A945P	1.80%	
10/6/1997	SEAD-12	Area-I	Local	I-21	742987.80	1013567.00	6.5	9.7	10.8	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-22	742990.80	1013567.00	8.5	9.6	10.4	9.41	A984P	2.02%	
10/6/1997	SEAD-12	Area-I	Local	I-23	742993.80	1013567.00	8.2	9.7	11	9.41	A984P	3 08%	
10/6/1997	SEAD-12	Area-I	Local	I-24	742996.80	1013568.00	7.8	9.7	11.8	9.43	A945P	2.86%	
10/6/1997	SEAD-12	Area-I	Local	I-25	742999.80	1013568.00	6 8	9.6	11.5	9 43	A945P	1.80%	
10/6/1997	SEAD-12	Area-I	Local	I-26	743002.80	1013568.00	8.4	9.7	10.8	9.41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-27	743005 80	1013568 00	8 5	9.7	11.5	9 41	A984P	3.08%	
10/6/1997	SEAD-12	Area-I	Local	I-28	743008 80	1013568.00	6 5	9.7	11.2	9 43	A945P	2.86%	
												0 74%	
												5.21%	
												2 97%	

Appendix F
Area J Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	% +/- BKG	Instumen	Comments
				easting	northing			(kcpm)			(s/n)	
	SEAD-12	Area-J	Local	744382.70	1014194.00	7	8.8	10.4	9.41	-6.48%	A984Q	
	SEAD-12	Area-J	Local	744378.30	1014294.00	7.5	11.4	13.5	9.41	21.15%	A984Q	
	SEAD-12	Area-J	Local	744373.90	1014394.00	8.5	11.3	13	9.41	20.09%	A984Q	
	SEAD-12	Area-J	Local	744369.60	1014494.00	9	10	12	9.41	6.27%	A984Q	
	SEAD-12	Area-J	Local	744365.10	1014593.00	7	9.9	11.2	9.41	5.21%	A984Q	
	SEAD-12	Area-J	Local	744360.80	1014693.00	8.5	10.1	11.5	9.41	7.33%	A984Q	
	SEAD-12	Area-J	Local	744356.40	1014793.00	8	9.9	11.5	9.41	5.21%	A984Q	
	SEAD-12	Area-J	Local	744352.00	1014893.00	7.5	9.4	10.8	9.41	-0.11%	A984Q	
	SEAD-12	Area-J	Local	744347.60	1014993.00	8.5	9.7	11.2	9.41	3.08%	A984Q	
	SEAD-12	Area-J	Local	744343.30	1015093.00	9.1	10.7	12	9.41	13.71%	A984Q	
	SEAD-12	Area-J	Local	743201.30	1015363.00	7.5	9.4	10.5	9.67	-2.79%	A945Q	
	SEAD-12	Area-J	Local	743145.80	1015374.00	7.8	9.4	10.8	9.67	-2.79%	A945Q	
	SEAD-12	Area-J	Local	743072.30	1015338.00	8.2	9.9	10.5	9.67	2.38%	A945Q	
	SEAD-12	Area-J	Local	743074.80	1015283.00	7.2	10	11.8	9.67	3.41%	A945Q	
	SEAD-12	Area-J	Local	743028.60	1015170.00	5	6.7	8.5	9.67	-30.71%	A945Q	
	SEAD-12	Area-J	Local	743391.60	1015362.00	7	8.9	10	9.62	-7.48%	A984Q	
	SEAD-12	Area-J	Local	743496.40	1015368.00	8.5	9.1	10.5	9.62	-5.41%	A984Q	
	SEAD-12	Area-J	Local	743566.30	1015371.00	8.5	9.9	11	9.62	2.91%	A984Q	
	SEAD-12	Area-J	Local	743674.60	1015369.00	8.5	9.9	11.5	9.62	2.91%	A984Q	
	SEAD-12	Area-J	Local	743766.70	1015368.00	8.5	10.2	12	9.62	6.03%	A984Q	
	SEAD-12	Area-J	Local	743866.70	1015369.00	9	11.1	13	9.62	15.38%	A984Q	
	SEAD-12	Area-J	Local	743956.80	1015368.00	9	10.9	12	9.62	13.31%	A984Q	
	SEAD-12	Area-J	Local	744025.80	1015164.00	9	11.2	13	9.62	16.42%	A984Q	
	SEAD-12	Area-J	Local	744113.80	1015326.00	9.5	11.6	13	9.62	20.58%	A984Q	
	SEAD-12	Area-J	Local	744175.30	1015296.00	10.5	12.6	13.8	9.62	30.98%	A984Q	
	SEAD-12	Area-J	Local	744261.40	1015225.00	9	11	12	9.62	14.35%	A984Q	
	SEAD-12	Area-J	Local	744286.30	1015161.00	8.5	10.8	11.8	9.62	12.27%	A984Q	
										6.19%		
										30.98%		

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/7/1997	SEAD-12	1	Regional	741163	1013797	8	9.4	10	9.5	A984P/A398Q	-1.05%	other: A945P/A378Q
10/7/1997	SEAD-12	1	Regional	741167.4	1013698	8.8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741171.8	1013598	10.3	11.7	13.5	9.5	A984P/A398Q	23.16%	
10/7/1997	SEAD-12	1	Regional	741176.1	1013498	10.5	11.7	13.7	9.5	A984P/A398Q	23.16%	
10/7/1997	SEAD-12	1	Regional	741180.5	1013398	6.8	9.4	12.4	9.5	A984P/A398Q	-1.05%	
10/7/1997	SEAD-12	1	Regional	741184.9	1013298	7.5	8.9	10.8	9.5	A984P/A398Q	-6.32%	
10/7/1997	SEAD-12	1	Regional	741189.3	1013198	8.9	10.8	12	9.5	A984P/A398Q	13.68%	
10/7/1997	SEAD-12	1	Regional	741193.6	1013098	8.7	10.4	11.2	9.5	A984P/A398Q	9.47%	
10/7/1997	SEAD-12	1	Regional	741198	1012998	7.8	9.9	12	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741202.4	1012898	8.8	10.3	12.2	9.5	A984P/A398Q	8.42%	
10/7/1997	SEAD-12	1	Regional	741206.8	1012798	8.7	9.9	11.4	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741259.2	1013887	8	9.3	10	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741262.9	1013802	8.2	9.3	10	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741267.3	1013702	8.5	9.6	10.2	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741271.6	1013602	8	9.2	10.2	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741276	1013502	8.2	9.6	11	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741280.4	1013402	8.8	9.7	11	9.5	A984P/A398Q	2.11%	
10/7/1997	SEAD-12	1	Regional	741284.8	1013302	8.9	12	13.9	9.5	A984P/A398Q	26.32%	
10/7/1997	SEAD-12	1	Regional	741289.1	1013202	10	11.7	12.8	9.5	A984P/A398Q	23.16%	
10/7/1997	SEAD-12	1	Regional	741293.5	1013103	9.7	12	13.2	9.5	A984P/A398Q	26.32%	
10/7/1997	SEAD-12	1	Regional	741297.9	1013003	9.5	12.2	13.8	9.5	A984P/A398Q	28.42%	
10/7/1997	SEAD-12	1	Regional	741302.3	1012903	9.8	12	12.9	9.5	A984P/A398Q	26.32%	
10/7/1997	SEAD-12	1	Regional	741306.7	1012803	10.8	12.3	13.5	9.5	A984P/A398Q	29.47%	
10/7/1997	SEAD-12	1	Regional	741208.6	1013900	4.8	7.7	10	9.4	***A945P/A378Q***	-18.09%	
10/7/1997	SEAD-12	1	Regional	741212.9	1013800	6.8	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741217.3	1013700	7.2	9.4	10.2	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741221.7	1013600	6.5	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741226.1	1013500	7.5	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741230.4	1013400	7.2	10	11.8	9.4	***A945P/A378Q***	6.38%	
10/7/1997	SEAD-12	1	Regional	741234.8	1013300	6.2	10.5	13.5	9.4	***A945P/A378Q***	11.70%	
10/7/1997	SEAD-12	1	Regional	741239.2	1013200	8.2	11.7	13.8	9.4	***A945P/A378Q***	24.47%	
10/7/1997	SEAD-12	1	Regional	741243.6	1013100	9.2	12	14	9.4	***A945P/A378Q***	27.66%	
10/7/1997	SEAD-12	1	Regional	741247.9	1013000	9.8	12.1	14.2	9.4	***A945P/A378Q***	28.72%	
10/7/1997	SEAD-12	1	Regional	741252.3	1012901	9.5	11.4	14	9.4	***A945P/A378Q***	21.28%	
10/7/1997	SEAD-12	1	Regional	741256.7	1012801	7.8	11.4	12.5	9.4	***A945P/A378Q***	21.28%	
10/7/1997	SEAD-12	1	Regional	741309.1	1013889	7.2	9.5	10.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741312.9	1013804	7.5	9.6	10.8	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741317.3	1013704	7.8	9.8	11.5	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741321.6	1013604	7.2	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741326	1013504	6.8	9.5	11.8	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741330.4	1013404	5.8	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741334.8	1013305	8.5	11.5	13.5	9.4	***A945P/A378Q***	22.34%	
10/7/1997	SEAD-12	1	Regional	741339.1	1013205	8.8	11.4	13.8	9.4	***A945P/A378Q***	21.28%	
10/7/1997	SEAD-12	1	Regional	741343.5	1013105	9.5	11.8	13.8	9.4	***A945P/A378Q***	25.53%	
10/7/1997	SEAD-12	1	Regional	741347.9	1013005	9.8	12.3	14.2	9.4	***A945P/A378Q***	30.85%	
10/7/1997	SEAD-12	1	Regional	741352.3	1012905	9.8	12.3	14.5	9.4	***A945P/A378Q***	30.85%	
10/7/1997	SEAD-12	1	Regional	741356.6	1012805	7.2	11.3	13	9.4	***A945P/A378Q***	20.21%	
10/7/1997	SEAD-12	1	Regional	741358.4	1013906	8.5	9.5	11	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741362.8	1013806	8.5	9.8	10.4	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741367.2	1013706	9	10	11.5	9.5	A984P/A398Q	5.26%	
10/7/1997	SEAD-12	1	Regional	741371.6	1013606	8	9.9	10.5	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741375.9	1013507	8.7	9.6	10.8	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741380.3	1013407	8.9	9.5	10.4	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741384.7	1013307	8.5	9.9	12	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741389.1	1013207	9	10.8	12.4	9.5	A984P/A398Q	13.68%	
10/7/1997	SEAD-12	1	Regional	741393.4	1013107	10	11.1	13	9.5	A984P/A398Q	16.84%	
10/7/1997	SEAD-12	1	Regional	741397.8	1013007	9.6	10.3	12.5	9.5	A984P/A398Q	6.42%	
10/7/1997	SEAD-12	1	Regional	741402.2	1012907	9.8	10.9	13	9.5	A984P/A398Q	14.74%	
10/7/1997	SEAD-12	1	Regional	741406.6	1012807	8.5	10.9	12.8	9.5	A984P/A398Q	14.74%	
10/7/1997	SEAD-12	1	Regional	741458.3	1013911	8	9.8	12	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741462.7	1013811	8	9.2	10	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741467.1	1013711	8.9	10	12	9.5	A984P/A398Q	5.26%	
10/7/1997	SEAD-12	1	Regional	741471.4	1013611	9	9.5	11	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741475.8	1013511	8.8	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741480.2	1013411	8.2	9.3	10	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741484.6	1013311	7.5	9.4	10.3	9.5	A984P/A398Q	-1.05%	
10/7/1997	SEAD-12	1	Regional	741488.9	1013211	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741493.3	1013111	8.5	9.7	11	9.5	A984P/A398Q	2.11%	
10/7/1997	SEAD-12	1	Regional	741497.7	1013011	8.9	9.9	11.4	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741502.1	1012911	9	10.1	11.4	9.5	A984P/A398Q	6.32%	
10/7/1997	SEAD-12	1	Regional	741506.4	1012812	8.8	9.8	11.2	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741408.4	1013908	6.5	9.8	11.2	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741412.8	1013808	6.8	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741417.1	1013709	6.8	10	11.2	9.4	***A945P/A378Q***	6.38%	
10/7/1997	SEAD-12	1	Regional	741421.5	1013609	8.2	9.4	11.5	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741425.9	1013509	7.8	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741430.3	1013409	5.2	9.3	10.8	9.4	***A945P/A378Q***	-1.06%	
10/7/1997	SEAD-12	1	Regional	741434.6	1013309	5.8	9.6	12.5	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741439	1013209	7.5	9.7	12.2	9.4	***A945P/A378Q***	3.19%	
10/7/1997	SEAD-12	1	Regional	741443.4	1013109	6.8	9.9	12.2	9.4	***A945P/A378Q***	5.32%	
10/7/1997	SEAD-12	1	Regional	741447.8	1013009	8.5	10	13.8	9.4	***A945P/A378Q***	6.38%	
10/7/1997	SEAD-12	1	Regional	741452.1	1012909	9.2	10.2	13.5	9.4	***A945P/A378Q***	8.51%	
10/7/1997	SEAD-12	1	Regional	741456.5	1012809	8.2	10.4	12.2	9.4	***A945P/A378Q***	10.64%	
10/7/1997	SEAD-12	1	Regional	741508.3	1013913	7.2	10.1	12.5	9.4	***A945P/A378Q***	7.45%	
10/7/1997	SEAD-12	1	Regional	741512.7	1013813	8.2	9.4	11.8	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741517.1	1013713	6.5	9.3	11.2	9.4	***A945P/A378Q***	-1.06%	
10/7/1997	SEAD-12	1	Regional	741521.4	1013613	6.2	9.5	12	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741525.8	1013513	6.5	9.4	10.8	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741530.2	1013413	5.8	9.1	10.8	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741534.6	1013313	8.8	9.8	11.8	9.4	***A945P/A378Q***	4.26%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/7/1997	SEAD-12	1	Regional	741538.9	1013213	8.5	9.6	11.2	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741543.3	1013113	7.2	9.5	12	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741547.7	1013014	7.8	9.8	11.8	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741552.1	1012914	8.2	10	11.5	9.4	***A945P/A378Q***	6.38%	
10/7/1997	SEAD-12	1	Regional	741556.4	1012814	8	9.8	11.2	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741558.3	1013915	10	10.8	12.8	9.5	A984P/A398Q	13.68%	
10/7/1997	SEAD-12	1	Regional	741562.6	1013815	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741567	1013715	8.4	9.3	11.2	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741571.4	1013615	8.6	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741575.8	1013515	8	9.2	10	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741580.1	1013415	8	9	10	9.5	A984P/A398Q	-5.26%	
10/7/1997	SEAD-12	1	Regional	741584.5	1013315	8.4	9.3	9.8	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741588.9	1013216	8.5	9.6	10.5	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741593.3	1013116	9	10.1	11.8	9.5	A984P/A398Q	6.32%	
10/7/1997	SEAD-12	1	Regional	741597.6	1013016	9.1	10	11.2	9.5	A984P/A398Q	5.26%	
10/7/1997	SEAD-12	1	Regional	741602	1012916	9	10.1	10.6	9.5	A984P/A398Q	6.32%	
10/7/1997	SEAD-12	1	Regional	741606.4	1012816	9	9.8	10.4	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741658.1	1013919	7.5	9.8	10.8	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741662.5	1013819	7.7	9	10.5	9.5	A984P/A398Q	-5.26%	
10/7/1997	SEAD-12	1	Regional	741666.9	1013719	7.5	8.6	9.9	9.5	A984P/A398Q	-9.47%	
10/7/1997	SEAD-12	1	Regional	741671.3	1013620	8	8.8	10	9.5	A984P/A398Q	-7.37%	
10/7/1997	SEAD-12	1	Regional	741675.6	1013520	7.8	8.9	10	9.5	A984P/A398Q	-6.32%	
10/7/1997	SEAD-12	1	Regional	741680	1013420	7.5	9	9.7	9.5	A984P/A398Q	-5.26%	
10/7/1997	SEAD-12	1	Regional	741684.4	1013320	8.5	9.3	10.1	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741688.8	1013220	8.7	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/7/1997	SEAD-12	1	Regional	741693.1	1013120	9	10	11.2	9.5	A984P/A398Q	5.26%	
10/7/1997	SEAD-12	1	Regional	741697.5	1013020	9.9	10.7	12.4	9.5	A984P/A398Q	12.63%	
10/7/1997	SEAD-12	1	Regional	741701.9	1012920	9.2	10.5	11.2	9.5	A984P/A398Q	10.53%	
10/7/1997	SEAD-12	1	Regional	741706.3	1012820	9	10.1	11.6	9.5	A984P/A398Q	6.32%	
10/7/1997	SEAD-12	1	Regional	741608.2	1013917	7.2	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741612.6	1013817	8.2	9.2	12	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741616.9	1013717	7.8	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741621.3	1013617	8	9.5	10.8	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741625.7	1013517	6.8	9.4	11	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741630.1	1013418	5.8	9.2	10.2	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741634.4	1013318	6	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741638.8	1013218	6.8	9.5	10.8	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741643.2	1013118	6.5	9.5	11.2	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741647.6	1013018	8	10	12	9.4	***A945P/A378Q***	6.38%	
10/7/1997	SEAD-12	1	Regional	741651.9	1012918	7.2	9.8	11	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741656.3	1012818	5.5	10.4	11.5	9.4	***A945P/A378Q***	10.64%	
10/7/1997	SEAD-12	1	Regional	741708.1	1013921	6	9.7	11.5	9.4	***A945P/A378Q***	3.19%	
10/7/1997	SEAD-12	1	Regional	741712.4	1013822	8	9.2	11	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741716.8	1013722	8.2	9.1	10.5	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741721.3	1013622	7.2	8.9	10.5	9.4	***A945P/A378Q***	-5.32%	
10/7/1997	SEAD-12	1	Regional	741725.6	1013522	6.8	8.8	10.8	9.4	***A945P/A378Q***	-6.38%	
10/7/1997	SEAD-12	1	Regional	741730	1013422	6.2	9.1	11	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741734.4	1013322	6.2	8.9	108	9.4	***A945P/A378Q***	-5.32%	
10/7/1997	SEAD-12	1	Regional	741738.8	1013222	8	9.3	11.8	9.4	***A945P/A378Q***	-1.06%	
10/7/1997	SEAD-12	1	Regional	741743.1	1013122	8	9.4	11.8	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741747.5	1013022	7.2	9.6	11.5	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741751.9	1012922	6.8	9.9	12.2	9.4	***A945P/A378Q***	5.32%	
10/7/1997	SEAD-12	1	Regional	741756.3	1012823	6.5	9.6	11.8	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741758.1	1013924	8.9	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/7/1997	SEAD-12	1	Regional	741762.4	1013824	8	8.7	10	9.5	A984P/A398Q	-8.42%	
10/7/1997	SEAD-12	1	Regional	741766.8	1013724	7.5	9.3	9.8	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741771.2	1013624	7.5	8.6	9.2	9.5	A984P/A398Q	-9.47%	
10/7/1997	SEAD-12	1	Regional	741775.6	1013524	7.8	8.5	9.8	9.5	A984P/A398Q	-10.53%	
10/7/1997	SEAD-12	1	Regional	741779.9	1013424	8	9.4	10.8	9.5	A984P/A398Q	-1.05%	
10/7/1997	SEAD-12	1	Regional	741784.3	1013324	7.5	8.2	9.4	9.5	A984P/A398Q	-13.68%	
10/7/1997	SEAD-12	1	Regional	741788.7	1013224	8.4	9.3	10.4	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741793.1	1013124	8.9	9.3	9.3	9.5	A984P/A398Q	-2.11%	
10/7/1997	SEAD-12	1	Regional	741797.4	1013025	7.7	9.1	10.2	9.5	A984P/A398Q	-4.21%	
10/7/1997	SEAD-12	1	Regional	741801.8	1012925	8.9	9.8	11.2	9.5	A984P/A398Q	3.16%	
10/7/1997	SEAD-12	1	Regional	741806.2	1012825	8.5	9.5	11	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741857.9	1013928	9	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/7/1997	SEAD-12	1	Regional	741862.3	1013828	8.5	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741866.7	1013728	8.5	9.2	10.2	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741871.1	1013628	8.4	9.4	10	9.5	A984P/A398Q	-1.05%	
10/7/1997	SEAD-12	1	Regional	741875.4	1013528	8.3	9	9.5	9.5	A984P/A398Q	-5.26%	
10/7/1997	SEAD-12	1	Regional	741879.8	1013428	8	9	9.5	9.5	A984P/A398Q	-5.26%	
10/7/1997	SEAD-12	1	Regional	741884.2	1013329	8.4	9.2	9.9	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741888.6	1013229	8.8	9.7	10.8	9.5	A984P/A398Q	2.11%	
10/7/1997	SEAD-12	1	Regional	741892.9	1013129	8.5	9.5	10.4	9.5	A984P/A398Q	0.00%	
10/7/1997	SEAD-12	1	Regional	741897.3	1013029	8.9	9.2	9.8	9.5	A984P/A398Q	-3.16%	
10/7/1997	SEAD-12	1	Regional	741901.7	1012929	8.4	9.6	10	9.5	A984P/A398Q	1.05%	
10/7/1997	SEAD-12	1	Regional	741906.1	1012829	8.5	9.4	10.2	9.5	A984P/A398Q	-1.05%	
10/7/1997	SEAD-12	1	Regional	741808	1013926	5.8	9.9	13.1	9.4	***A945P/A378Q***	5.32%	
10/7/1997	SEAD-12	1	Regional	741812.4	1013826	8.9	9.2	12.2	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741816.8	1013726	7.5	9	12.2	9.4	***A945P/A378Q***	-4.26%	
10/7/1997	SEAD-12	1	Regional	741821.1	1013626	7.2	9.3	10.5	9.4	***A945P/A378Q***	-1.06%	
10/7/1997	SEAD-12	1	Regional	741825.5	1013526	6.5	9	10.2	9.4	***A945P/A378Q***	-4.26%	
10/7/1997	SEAD-12	1	Regional	741829.9	1013426	7.2	8.8	10	9.4	***A945P/A378Q***	-6.38%	
10/7/1997	SEAD-12	1	Regional	741834.3	1013326	6.2	9.2	10.8	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741838.6	1013227	7	9.4	11.5	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741843	1013127	7	9.1	11.2	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741847.4	1013027	7.2	9.1	11.5	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741851.8	1012927	6.8	9.2	10.5	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741856.1	1012827	5.8	9.6	11	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741907.9	1013930	7.2	9.7	12	9.4	***A945P/A378Q***	3.19%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing		(kcpm)			(s/n)		
10/7/1997	SEAD-12	1	Regional	741912.3	1013830	7.2	9.6	11.2	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741916.6	1013730	7.5	9.2	12	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741921	1013630	7.2	9.5	11	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741925.4	1013531	7.5	9.2	10.8	9.4	***A945P/A378Q***	-2.13%	
10/7/1997	SEAD-12	1	Regional	741929.8	1013431	5.2	9.1	12	9.4	***A945P/A378Q***	-3.19%	
10/7/1997	SEAD-12	1	Regional	741934.1	1013331	5.4	9.6	10.2	9.4	***A945P/A378Q***	2.13%	
10/7/1997	SEAD-12	1	Regional	741938.6	1013231	6.8	9.4	10.5	9.4	***A945P/A378Q***	0.00%	
10/7/1997	SEAD-12	1	Regional	741942.9	1013131	7.2	9.8	11.5	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741947.3	1013031	6.5	9.5	10.8	9.4	***A945P/A378Q***	1.06%	
10/7/1997	SEAD-12	1	Regional	741951.7	1012931	7	9.8	11.5	9.4	***A945P/A378Q***	4.26%	
10/7/1997	SEAD-12	1	Regional	741956.1	1012831	4.8	8.8	10.2	9.4	***A945P/A378Q***	-6.38%	
10/8/1997	SEAD-12	1	Regional	741957.9	1013932	9	10	11.4	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742058.2	1013937	9	10	11.4	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	741962.3	1013832	8.4	9.4	11.2	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	741966.6	1013733	8.2	9.2	10.7	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	741971	1013633	7.8	9.5	11.5	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	741975.4	1013533	8.7	9.7	10.8	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	741979.8	1013433	8.3	9.6	10.4	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	741984.1	1013333	8.8	9.7	11	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	741988.5	1013233	8.8	9.8	10.8	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	741992.9	1013133	8	9.5	10.8	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	741997.3	1013033	9	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742001.6	1012933	9.2	10.1	12	9.6	A984P/A398Q	5.21%	
10/8/1997	SEAD-12	1	Regional	742006	1012833	9.3	10.3	11.2	9.6	A984P/A398Q	7.29%	
10/8/1997	SEAD-12	1	Regional	741957.9	1013932	8	9.8	11.4	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742062.1	1013837	8.2	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742066.5	1013737	8.3	9.5	10.4	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742070.9	1013637	8	9	10.2	9.6	A984P/A398Q	-6.25%	
10/8/1997	SEAD-12	1	Regional	742075.3	1013537	8.3	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742079.6	1013437	8	9.4	10.3	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742084	1013337	8.5	9.4	10.4	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742088.4	1013237	8.5	9.7	11.2	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	742092.8	1013138	8.5	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742097.1	1013038	9	10.6	11.8	9.6	A984P/A398Q	10.42%	
10/8/1997	SEAD-12	1	Regional	742101.5	1012938	8.8	10.2	11.5	9.6	A984P/A398Q	6.25%	
10/8/1997	SEAD-12	1	Regional	742105.9	1012838	9	9.8	11.2	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742007.8	1013935	5.8	9.4	12	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742012.2	1013835	6.5	9.2	11.8	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742016.6	1013735	6.5	9.4	11.2	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742020.9	1013635	7.8	9.5	12.2	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742025.3	1013535	7.2	9.2	11.5	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742029.7	1013435	6.2	9.5	12.2	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742034.1	1013335	5.2	9.4	11.8	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742038.4	1013235	7.5	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742042.8	1013135	6.8	9.8	11.8	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	742047.2	1013035	7.2	10.1	12.5	9.5	***A945P/A378Q***	6.32%	
10/8/1997	SEAD-12	1	Regional	742051.6	1012936	6.8	10.3	12.8	9.5	***A945P/A378Q***	8.42%	
10/8/1997	SEAD-12	1	Regional	742055.9	1012836	5.8	10.1	12.2	9.5	***A945P/A378Q***	6.32%	
10/8/1997	SEAD-12	1	Regional	742107.7	1013939	6.8	9.8	11.5	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	742112.1	1013839	7.8	9.7	12.2	9.5	***A945P/A378Q***	2.11%	
10/8/1997	SEAD-12	1	Regional	742116.4	1013739	8	9.7	11.5	9.5	***A945P/A378Q***	2.11%	
10/8/1997	SEAD-12	1	Regional	742120.8	1013639	6	9.4	11.2	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742125.2	1013539	7.8	9.5	11.2	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742129.6	1013439	4.8	9.2	11.5	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742133.9	1013340	5.8	9.7	12.2	9.5	***A945P/A378Q***	2.11%	
10/8/1997	SEAD-12	1	Regional	742138.3	1013240	6.5	9.4	11.5	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742142.7	1013140	6.8	10	11	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742147.1	1013040	7	10	12.2	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742151.4	1012940	7.2	10.2	12.5	9.5	***A945P/A378Q***	7.37%	
10/8/1997	SEAD-12	1	Regional	742155.8	1012840	7	9.5	11.5	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742157.7	1013941	8.8	9.7	10.5	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	742162.1	1013841	9.2	9.8	10.5	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742166.4	1013741	9.1	9.7	10.5	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	742170.8	1013641	8.8	9.8	11	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742175.2	1013542	8.5	9.4	10.6	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742179.6	1013442	7.8	9.5	10.5	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742183.9	1013342	8.2	9.6	10.4	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742188.3	1013242	8.5	9.5	10.2	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742192.7	1013142	8.8	9.9	11	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	742197.1	1013042	8.5	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742201.4	1012942	8.5	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742205.8	1012842	8.8	10.1	11.8	9.6	A984P/A398Q	5.21%	
10/8/1997	SEAD-12	1	Regional	742257.6	1013946	8.5	9.6	10.3	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742261.9	1013846	8.4	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742266.3	1013746	8.7	9.4	10.3	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742270.7	1013646	8.6	9.6	10.6	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742275.1	1013546	8.4	9.5	10.2	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742279.4	1013446	8	9.2	10	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742283.8	1013346	7.7	8.7	9.9	9.6	A984P/A398Q	-9.38%	
10/8/1997	SEAD-12	1	Regional	742288.2	1013246	7.5	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742292.6	1013146	8.5	10	10.8	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742296.9	1013046	9	10.2	11.8	9.6	A984P/A398Q	6.25%	
10/8/1997	SEAD-12	1	Regional	742301.3	1012946	8.5	10	11.5	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742305.7	1012847	10	11	12.6	9.6	A984P/A398Q	14.58%	
10/8/1997	SEAD-12	1	Regional	742207.6	1013943	6.8	9.3	10.8	9.5	***A945P/A378Q***	-2.11%	
10/8/1997	SEAD-12	1	Regional	742212	1013843	7.8	9.6	12	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742216.4	1013744	8	9.7	12	9.5	***A945P/A378Q***	2.11%	
10/8/1997	SEAD-12	1	Regional	742220.8	1013644	7.5	9.6	12.2	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742225.1	1013544	7.8	9.6	11.8	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742229.5	1013444	6.2	9.8	12.2	9.5	***A945P/A378Q***	3.16%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/8/1997	SEAD-12	1	Regional	742233.9	1013344	5.5	10	13	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742238.3	1013244	7.8	10	11.5	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742242.6	1013144	7.5	10.1	11.8	9.5	***A945P/A378Q***	6.32%	
10/8/1997	SEAD-12	1	Regional	742247	1013044	8	10.7	12.5	9.5	***A945P/A378Q***	12.63%	
10/8/1997	SEAD-12	1	Regional	742251.4	1012944	8.8	10.1	12.2	9.5	***A945P/A378Q***	6.32%	
10/8/1997	SEAD-12	1	Regional	742255.8	1012844	6.8	10.4	12.5	9.5	***A945P/A378Q***	9.47%	
10/8/1997	SEAD-12	1	Regional	742307.5	1013948	5.8	9.4	11.5	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742311.9	1013848	6.2	9	11.8	9.5	***A945P/A378Q***	-5.26%	
10/8/1997	SEAD-12	1	Regional	742316.3	1013748	7	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742320.6	1013648	6.8	9.5	11.2	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742325	1013548	6.5	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742329.4	1013448	5.2	9.3	12	9.5	***A945P/A378Q***	-2.11%	
10/8/1997	SEAD-12	1	Regional	742333.8	1013348	6.2	8.9	11.2	9.5	***A945P/A378Q***	-6.32%	
10/8/1997	SEAD-12	1	Regional	742338.1	1013248	6.8	9.1	11.5	9.5	***A945P/A378Q***	-4.21%	
10/8/1997	SEAD-12	1	Regional	742342.5	1013148	7.2	10.4	12.5	9.5	***A945P/A378Q***	9.47%	
10/8/1997	SEAD-12	1	Regional	742346.9	1013049	7.5	10.7	12.8	9.5	***A945P/A378Q***	12.63%	
10/8/1997	SEAD-12	1	Regional	742351.3	1012949	7.8	10.9	13.5	9.5	***A945P/A378Q***	14.74%	
10/8/1997	SEAD-12	1	Regional	742355.6	1012849	5.5	9.9	12.5	9.5	***A945P/A378Q***	4.21%	
10/8/1997	SEAD-12	1	Regional	742357.5	1013950	8.5	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742361.9	1013850	7.7	8.6	9.2	9.6	A984P/A398Q	-10.42%	
10/8/1997	SEAD-12	1	Regional	742366.3	1013750	8.5	9.4	10	9.6	A984P/A398Q	-2.08%	
10/8/1997	SEAD-12	1	Regional	742370.6	1013650	8.8	9.6	10.2	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742375	1013550	8.5	9.2	10	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742379.4	1013450	8.8	9.5	10.4	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742457.4	1013954	9	9.9	11	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	742461.8	1013854	8.8	9.5	10	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742466.1	1013754	8.8	9.8	10.4	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742470.5	1013655	7.5	9.2	9.8	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742474.9	1013555	8	9.3	10	9.6	A984P/A398Q	-3.12%	
10/8/1997	SEAD-12	1	Regional	742479.3	1013455	8	9.2	9.8	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742407.4	1013952	5.2	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742411.8	1013852	7.2	8.8	11.2	9.5	***A945P/A378Q***	-7.37%	
10/8/1997	SEAD-12	1	Regional	742416.2	1013752	7.8	9.5	10.5	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742420.6	1013652	7.8	9.4	11.2	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742424.9	1013552	6.5	9.6	10.8	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742429.3	1013453	6.5	9.5	10.5	9.5	***A945P/A378Q***	0.00%	
10/8/1997	SEAD-12	1	Regional	742507.3	1013956	5.8	10.2	12.2	9.5	***A945P/A378Q***	7.37%	
10/8/1997	SEAD-12	1	Regional	742511.7	1013857	7.8	9.4	10.5	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742516.1	1013757	7.2	9.2	11.2	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742520.4	1013657	7.8	9.2	10.5	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742524.8	1013557	5.8	9.3	10.8	9.5	***A945P/A378Q***	-2.11%	
10/8/1997	SEAD-12	1	Regional	742529.2	1013457	5.2	9.1	11.5	9.5	***A945P/A378Q***	-4.21%	
10/8/1997	SEAD-12	1	Regional	742607.3	1013961	5.5	9.2	11.5	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742611.6	1013861	6.8	9.4	10.8	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742616	1013761	7.2	9.2	10.5	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742620.4	1013661	6.2	9.2	11	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742624.8	1013561	5.2	9	10.2	9.5	***A945P/A378Q***	-5.26%	
10/8/1997	SEAD-12	1	Regional	742707.1	1013965	5.8	9.2	11	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742711.5	1013865	6.8	9.3	11.2	9.5	***A945P/A378Q***	-2.11%	
10/8/1997	SEAD-12	1	Regional	742715.9	1013765	7.2	9.8	11.8	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	742720.3	1013666	6.2	10	11.8	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742724.6	1013566	3.8	7.9	9.2	9.5	***A945P/A378Q***	-16.84%	
10/8/1997	SEAD-12	1	Regional	742557.3	1013959	8.5	9.6	10.4	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742561.6	1013859	7.2	9.5	10.4	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742566	1013759	8.5	9.2	9.8	9.6	A984P/A398Q	-4.17%	
10/8/1997	SEAD-12	1	Regional	742570.4	1013659	8.5	9	9.5	9.6	A984P/A398Q	-6.25%	
10/8/1997	SEAD-12	1	Regional	742574.8	1013559	7.2	9.3	10.2	9.6	A984P/A398Q	-3.12%	
10/8/1997	SEAD-12	1	Regional	742579.2	1013459	9	9.9	11.4	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	742657.2	1013963	7.5	8.5	9.8	9.6	A984P/A398Q	-11.46%	
10/8/1997	SEAD-12	1	Regional	742661.6	1013863	10	10.1	11.3	9.6	A984P/A398Q	5.21%	
10/8/1997	SEAD-12	1	Regional	742665.9	1013763	6	7	8	9.6	A984P/A398Q	-27.08%	
10/8/1997	SEAD-12	1	Regional	742670.3	1013663	5.5	6.7	8.5	9.6	A984P/A398Q	-30.21%	
10/8/1997	SEAD-12	1	Regional	742674.7	1013563	7.2	9.5	10.2	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742679.1	1013464	7.2	9.5	10	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742757.1	1013967	8.4	10.2	11	9.6	A984P/A398Q	6.25%	
10/8/1997	SEAD-12	1	Regional	742761.4	1013867	7.5	9.6	11.1	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742765.8	1013768	8	10	11.5	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742770.2	1013668	9	9.6	11.5	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742857	1013972	8.5	9.6	11	9.6	A984P/A398Q	0.00%	
10/8/1997	SEAD-12	1	Regional	742861.4	1013872	9	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742865.8	1013772	9	10.3	11.5	9.6	A984P/A398Q	7.29%	
10/8/1997	SEAD-12	1	Regional	742870.1	1013672	8.5	9	9.9	9.6	A984P/A398Q	-6.25%	
10/8/1997	SEAD-12	1	Regional	742874.5	1013572	9	9.9	11	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	742878.9	1013472	8	8.9	10.2	9.6	A984P/A398Q	-7.29%	
10/8/1997	SEAD-12	1	Regional	742956.9	1013976	8.5	9.5	11	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742961.3	1013876	8.4	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742965.6	1013776	9	10.6	12	9.6	A984P/A398Q	10.42%	
10/8/1997	SEAD-12	1	Regional	742970	1013676	8.5	9.8	11	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742974.4	1013577	8.5	9.5	11.8	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742978.8	1013477	8.4	9.7	11	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	743056.8	1013981	8.5	9.9	11	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	743061.2	1013881	9	9.7	10.8	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	743065.6	1013781	9.5	11	12.5	9.6	A984P/A398Q	14.58%	
10/8/1997	SEAD-12	1	Regional	743069.9	1013681	7.5	9.5	11	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	743074.3	1013581	8.8	10	10.8	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	743078.7	1013481	8.5	9.5	10.4	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742807.1	1013970	4.8	9.2	11.2	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	742811.4	1013870	6.5	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/8/1997	SEAD-12	1	Regional	742815.8	1013770	7.8	10	10.8	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742820.2	1013670	6.2	9.8	12.2	9.5	***A945P/A378Q***	3.16%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background	Instrument (s/n)	% +/- Background	Comments
10/8/1997	SEAD-12	1	Regional	742906.9	1013974	4.8	9.7	12	9.5	***A945P/A378Q***	2.11%	
10/8/1997	SEAD-12	1	Regional	742911.3	1013874	8.5	9.8	12.5	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	742915.7	1013774	7.2	10.1	12.8	9.5	***A945P/A378Q***	6.32%	
10/8/1997	SEAD-12	1	Regional	742920.1	1013674	7.5	9.4	11.2	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	742924.4	1013574	5.2	8.6	10.5	9.5	***A945P/A378Q***	-9.47%	
10/8/1997	SEAD-12	1	Regional	742928.8	1013474	4.5	6.9	8.2	9.5	***A945P/A378Q***	-27.37%	
10/8/1997	SEAD-12	1	Regional	743006.9	1013978	4.8	9.2	11.2	9.5	***A945P/A378Q***	-3.16%	
10/8/1997	SEAD-12	1	Regional	743011.3	1013878	7.8	9.4	10.8	9.5	***A945P/A378Q***	-1.05%	
10/8/1997	SEAD-12	1	Regional	743015.6	1013779	7.2	10.7	12.2	9.5	***A945P/A378Q***	12.63%	
10/8/1997	SEAD-12	1	Regional	743020	1013679	7.2	9.8	11.5	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	743024.4	1013579	6.8	9.8	11.5	9.5	***A945P/A378Q***	3.16%	
10/8/1997	SEAD-12	1	Regional	743028.8	1013479	4.8	10	11.5	9.5	***A945P/A378Q***	5.26%	
10/8/1997	SEAD-12	1	Regional	742956.9	1013976	8.5	9.5	11.9	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742961.3	1013876	8.4	10	11	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	742965.6	1013776	9	10.6	12	9.6	A984P/A398Q	10.42%	
10/8/1997	SEAD-12	1	Regional	742970	1013676	8.5	9.8	11	9.6	A984P/A398Q	2.08%	
10/8/1997	SEAD-12	1	Regional	742974.4	1013577	8.5	9.5	11.8	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	742978.8	1013477	8.4	9.7	11	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	743056.8	1013981	8.5	9.9	11	9.6	A984P/A398Q	3.13%	
10/8/1997	SEAD-12	1	Regional	743061.2	1013881	9	9.7	10.8	9.6	A984P/A398Q	1.04%	
10/8/1997	SEAD-12	1	Regional	743065.6	1013781	9.5	11	12.5	9.6	A984P/A398Q	14.58%	
10/8/1997	SEAD-12	1	Regional	743069.9	1013681	7.5	9.5	11	9.6	A984P/A398Q	-1.04%	
10/8/1997	SEAD-12	1	Regional	743074.3	1013581	8.8	10	10.8	9.6	A984P/A398Q	4.17%	
10/8/1997	SEAD-12	1	Regional	743078.7	1013481	8.5	9.5	10.4	9.6	A984P/A398Q	-1.04%	
10/9/1997	SEAD-12	2	Regional	741210.3	1012719	8.8	10.5	12.2	9.9	A984P/A398Q	6.06%	
10/9/1997	SEAD-12	2	Regional	741214.6	1012619	9	10.9	12	9.9	A984P/A398Q	10.10%	
10/9/1997	SEAD-12	2	Regional	741219	1012519	9	10.6	12.2	9.9	A984P/A398Q	7.07%	
10/9/1997	SEAD-12	2	Regional	741223.4	1012419	9.8	11.3	13	9.9	A984P/A398Q	14.14%	
10/9/1997	SEAD-12	2	Regional	741227.8	1012319	9.8	11.4	13.2	9.9	A984P/A398Q	15.15%	
10/9/1997	SEAD-12	2	Regional	741232.1	1012219	10	11.6	13.2	9.9	A984P/A398Q	17.17%	
10/9/1997	SEAD-12	2	Regional	741236.5	1012119	9.5	11.1	13	9.9	A984P/A398Q	12.12%	
10/9/1997	SEAD-12	2	Regional	741240.9	1012019	9	11.2	12.5	9.9	A984P/A398Q	13.13%	drain @760'
10/9/1997	SEAD-12	2	Regional	741245.3	1011919	8.8	10.4	11.5	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741249.6	1011819	8.5	10	11	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741254	1011719	8	10	10.8	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741258.4	1011620	8.8	10.4	11.5	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741260.6	1011570	8.5	9.8	10.5	9.9	A984P/A398Q	-1.01%	12" Inlet Drain 1230'/26"Outlet Drain 1295'
10/9/1997	SEAD-12	2	Regional	741310.2	1012723	8	10	12	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741314.6	1012623	8	9.8	10.8	9.9	A984P/A398Q	-1.01%	
10/9/1997	SEAD-12	2	Regional	741318.9	1012523	8	9.8	10.5	9.9	A984P/A398Q	-1.01%	
10/9/1997	SEAD-12	2	Regional	741323.3	1012423	8.2	10	11	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741327.7	1012323	8.5	9.9	10.8	9.9	A984P/A398Q	0.00%	
10/9/1997	SEAD-12	2	Regional	741332.1	1012223	9.2	10.6	12.5	9.9	A984P/A398Q	7.07%	
10/9/1997	SEAD-12	2	Regional	741336.4	1012123	9.8	10.8	12	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741340.8	1012024	9.5	10.8	12.5	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741345.2	1011924	9	10.4	11.8	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741349.6	1011824	9.5	10.8	12.5	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741353.9	1011724	9.4	10.4	12.8	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741358.3	1011624	8.8	10.4	11.5	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741360.5	1011574	8.5	10.4	11.2	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741260.2	1012721	6.8	10	12	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741264.6	1012621	6.8	9.5	11.8	9.7	***A945P/A378Q***	-2.06%	
10/9/1997	SEAD-12	2	Regional	741268.9	1012521	8.2	10.3	13	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741273.3	1012421	7.8	10.2	12.8	9.7	***A945P/A378Q***	5.15%	
10/9/1997	SEAD-12	2	Regional	741277.7	1012321	7.5	10	13.2	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741282.1	1012221	8	9.8	12.2	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741286.4	1012121	7.2	10.6	13.5	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741290.8	1012021	7	10.4	13	9.7	***A945P/A378Q***	7.22%	
10/9/2007	SEAD-12	2	Regional	741295.2	1011921	8.5	10.8	13.2	9.7	***A945P/A378Q***	11.34%	
10/9/1997	SEAD-12	2	Regional	741299.6	1011822	7.8	10.4	12.5	9.7	***A945P/A378Q***	7.22%	
10/9/1997	SEAD-12	2	Regional	741303.9	1011722	8.2	10.5	13.2	9.7	***A945P/A378Q***	8.25%	
10/9/1997	SEAD-12	2	Regional	741308.3	1011622	6.8	9.8	12.2	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741310.5	1011572	8.5	10.2	12.5	9.7	***A945P/A378Q***	5.15%	
10/9/1997	SEAD-12	2	Regional	741360.1	1012725	6.2	9.8	13	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741364.5	1012625	7.8	9.5	12	9.7	***A945P/A378Q***	-2.06%	
10/9/1997	SEAD-12	2	Regional	741368.9	1012525	8.2	9.8	11.8	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741373.3	1012425	8.2	10.3	13.5	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741377.6	1012325	8.5	10.5	12.2	9.7	***A945P/A378Q***	8.25%	
10/9/1997	SEAD-12	2	Regional	741382	1012226	8.2	10.9	12.8	9.7	***A945P/A378Q***	12.37%	
10/9/1997	SEAD-12	2	Regional	741386.4	1012126	8.2	10.8	12.5	9.7	***A945P/A378Q***	11.34%	
10/9/1997	SEAD-12	2	Regional	741390.8	1012026	8.5	10.8	13.5	9.7	***A945P/A378Q***	11.34%	
10/9/1997	SEAD-12	2	Regional	741395.1	1011926	8.5	10.7	13.2	9.7	***A945P/A378Q***	10.31%	
10/9/1997	SEAD-12	2	Regional	741399.5	1011826	7.5	10.5	13.5	9.7	***A945P/A378Q***	8.25%	
10/9/1997	SEAD-12	2	Regional	741403.9	1011726	6.5	10.3	12.5	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741408.3	1011626	7.8	10.6	12.2	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741410.4	1011576	8.2	10.8	13.5	9.7	***A945P/A378Q***	11.34%	
10/9/1997	SEAD-12	2	Regional	741509.9	1012732	8.5	9.7	11	9.7	***A945P/A378Q***	0.00%	
10/9/1997	SEAD-12	2	Regional	741514.3	1012632	8	10.1	11.2	9.7	***A945P/A378Q***	4.12%	
10/9/1997	SEAD-12	2	Regional	741518.7	1012532	8.5	10	11	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741523.1	1012432	8	10	11	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741527.5	1012332	8.5	9.7	10.5	9.7	***A945P/A378Q***	0.00%	
10/9/1997	SEAD-12	2	Regional	741531.9	1012232	9	10.1	11	9.7	***A945P/A378Q***	4.12%	
10/9/1997	SEAD-12	2	Regional	741536.3	1012132	8.8	10.9	11.8	9.7	***A945P/A378Q***	12.37%	
10/9/1997	SEAD-12	2	Regional	741540.6	1012032	9.4	11.3	12.5	9.7	***A945P/A378Q***	16.49%	
10/9/1997	SEAD-12	2	Regional	741545	1011932	9	10.5	11.8	9.7	***A945P/A378Q***	8.25%	
10/9/1997	SEAD-12	2	Regional	741549.4	1011833	9.5	10.4	12	9.7	***A945P/A378Q***	7.22%	
10/9/1997	SEAD-12	2	Regional	741553.8	1011733	8.5	10.3	11.5	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741558.1	1011633	8.8	10.7	11.8	9.7	***A945P/A378Q***	10.31%	
10/9/1997	SEAD-12	2	Regional	741560.3	1011583	9	11.5	12.5	9.7	***A945P/A378Q***	18.56%	
10/9/1997	SEAD-12	2	Regional	741410.1	1012727	8.5	9.5	12	9.9	A984P/A398Q	-4.04%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/9/1997	SEAD-12	2	Regional	741414.4	1012627	8	9.4	10	9.9	A984P/A398Q	-5.05%	
10/9/1997	SEAD-12	2	Regional	741418.8	1012527	8.5	9.7	11	9.9	A984P/A398Q	-2.02%	
10/9/1997	SEAD-12	2	Regional	741423.2	1012428	9.5	10.2	11.5	9.9	A984P/A398Q	3.03%	
10/9/1997	SEAD-12	2	Regional	741427.6	1012328	9	11	12.2	9.9	A984P/A398Q	11.11%	
10/9/1997	SEAD-12	2	Regional	741431.9	1012228	9.8	11.3	13	9.9	A984P/A398Q	14.14%	
10/9/1997	SEAD-12	2	Regional	741436.3	1012128	8.5	10.4	12	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741440.7	1012028	9	10.8	12.5	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741445.1	1011928	8.5	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/9/1997	SEAD-12	2	Regional	741449.4	1011828	7.5	10.4	12	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741453.8	1011728	8.5	10.5	12	9.9	A984P/A398Q	6.06%	
10/9/1997	SEAD-12	2	Regional	741458.2	1011628	8.5	10.5	11.5	9.9	A984P/A398Q	6.06%	
10/9/1997	SEAD-12	2	Regional	741460.4	1011578	8.5	10.2	11.2	9.9	A984P/A398Q	3.03%	
10/9/1997	SEAD-12	2	Regional	741460	1012729	8.2	9.8	13.2	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741464.4	1012630	7.5	9.8	12.5	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741468.8	1012530	7.8	10	11.5	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741473.1	1012430	7.5	10.1	12	9.7	***A945P/A378Q***	4.12%	
10/9/1997	SEAD-12	2	Regional	741477.5	1012330	8.5	10.6	11.8	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741481.9	1012230	8.5	11.3	12.8	9.7	***A945P/A378Q***	16.49%	
10/9/1997	SEAD-12	2	Regional	741486.3	1012130	8.8	11.1	13.5	9.7	***A945P/A378Q***	14.43%	
10/9/1997	SEAD-12	2	Regional	741490.6	1012030	7.8	10.6	12.5	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741495	1011930	7.5	10.6	13.2	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741499.4	1011830	8.2	10.3	12.2	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741503.8	1011730	7.2	10.4	13.5	9.7	***A945P/A378Q***	7.22%	
10/9/1997	SEAD-12	2	Regional	741508.1	1011631	7.8	10.5	12.2	9.7	***A945P/A378Q***	8.25%	
10/9/1997	SEAD-12	2	Regional	741510.3	1011581	8.5	11.3	12	9.7	***A945P/A378Q***	16.49%	
10/9/1997	SEAD-12	2	Regional	741559.9	1012734	6.8	9.9	10.8	9.7	***A945P/A378Q***	2.06%	
10/9/1997	SEAD-12	2	Regional	741564.3	1012634	7.8	9.5	11.5	9.7	***A945P/A378Q***	-2.06%	
10/9/1997	SEAD-12	2	Regional	741568.7	1012534	8	9.6	11.8	9.7	***A945P/A378Q***	-1.03%	
10/9/1997	SEAD-12	2	Regional	741573.1	1012434	7.5	10	12.2	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741577.4	1012334	8	9.6	11.8	9.7	***A945P/A378Q***	-1.03%	600n @ 650'
10/9/1997	SEAD-12	2	Regional	741581.8	1012234	8.2	9.7	11.2	9.7	***A945P/A378Q***	0.00%	
10/9/1997	SEAD-12	2	Regional	741586.2	1012134	7.8	9.8	11.8	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741590.6	1012035	8	10.2	12	9.7	***A945P/A378Q***	5.15%	
10/9/1997	SEAD-12	2	Regional	741594.9	1011935	8.2	10.3	12.2	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741599.3	1011835	7.8	10.3	12	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741603.7	1011735	8	9.9	11.8	9.7	***A945P/A378Q***	2.06%	
10/9/1997	SEAD-12	2	Regional	741608.1	1011635	7.8	10.3	13.8	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741610.3	1011585	8.2	12.1	13.2	9.7	***A945P/A378Q***	24.74%	good bare to sparse vegitation
10/9/1997	SEAD-12	2	Regional	741609.9	1012736	8.5	10	12.2	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741614.3	1012636	8	9.3	10.8	9.9	A984P/A398Q	-6.06%	
10/9/1997	SEAD-12	2	Regional	741618.6	1012536	9	9.6	10.5	9.9	A984P/A398Q	-3.03%	
10/9/1997	SEAD-12	2	Regional	741623	1012436	9	9.7	10.5	9.9	A984P/A398Q	-2.02%	
10/9/1997	SEAD-12	2	Regional	741627.4	1012336	9	9.7	10.5	9.9	A984P/A398Q	-2.02%	
10/9/1997	SEAD-12	2	Regional	741631.8	1012236	8.8	10.1	11	9.9	A984P/A398Q	2.02%	
10/9/1997	SEAD-12	2	Regional	741636.1	1012137	9	10.3	11.2	9.9	A984P/A398Q	4.04%	
10/9/1997	SEAD-12	2	Regional	741640.5	1012037	9.5	11.4	12.5	9.9	A984P/A398Q	15.15%	
10/9/1997	SEAD-12	2	Regional	741644.9	1011937	9	10.7	12	9.9	A984P/A398Q	8.08%	
10/9/1997	SEAD-12	2	Regional	741649.3	1011837	8.5	10.2	11.5	9.9	A984P/A398Q	3.03%	
10/9/1997	SEAD-12	2	Regional	741653.6	1011737	8.4	10.1	11.2	9.9	A984P/A398Q	2.02%	
10/9/1997	SEAD-12	2	Regional	741658	1011637	8.8	10.7	12	9.9	A984P/A398Q	8.08%	
10/9/1997	SEAD-12	2	Regional	741660.2	1011587	10	11.7	12.5	9.9	A984P/A398Q	18.18%	
10/9/1997	SEAD-12	2	Regional	741709.8	1012740	8	10	11.2	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741714.1	1012640	8.2	9.6	10.5	9.9	A984P/A398Q	-3.03%	
10/9/1997	SEAD-12	2	Regional	741718.5	1012541	8	10	10.8	9.9	A984P/A398Q	1.01%	
10/9/1997	SEAD-12	2	Regional	741722.9	1012441	8	9.6	10.5	9.9	A984P/A398Q	-3.03%	
10/9/1997	SEAD-12	2	Regional	741727.3	1012341	8.5	9.6	10.5	9.9	A984P/A398Q	-3.03%	
10/9/1997	SEAD-12	2	Regional	741731.6	1012241	9.5	10.8	12.2	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741736	1012141	10.5	12	13.2	9.9	A984P/A398Q	21.21%	
10/9/1997	SEAD-12	2	Regional	741740.4	1012041	9.8	10.8	13	9.9	A984P/A398Q	9.09%	
10/9/1997	SEAD-12	2	Regional	741744.8	1011941	9.5	10.4	12	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741749.2	1011841	9	10.7	12	9.9	A984P/A398Q	8.08%	
10/9/1997	SEAD-12	2	Regional	741753.6	1011741	8	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/9/1997	SEAD-12	2	Regional	741757.9	1011641	8.5	10.4	11	9.9	A984P/A398Q	5.05%	
10/9/1997	SEAD-12	2	Regional	741760.1	1011591	11	11.9	13	9.9	A984P/A398Q	20.20%	
10/9/1997	SEAD-12	2	Regional	741659.8	1012738	8	9.7	12.5	9.7	***A945P/A378Q***	0.00%	11' concrete culvert and
10/9/1997	SEAD-12	2	Regional	741664.2	1012638	7.5	9.9	11.8	9.7	***A945P/A378Q***	2.06%	
10/9/1997	SEAD-12	2	Regional	741668.6	1012538	7.8	9.7	12.2	9.7	***A945P/A378Q***	0.00%	
10/9/1997	SEAD-12	2	Regional	741672.9	1012438	7.5	9.7	11.5	9.7	***A945P/A378Q***	0.00%	
10/9/1997	SEAD-12	2	Regional	741677.3	1012339	7.8	10	11.8	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741681.7	1012239	8.2	11.8	14	9.7	***A945P/A378Q***	21.65%	
10/9/1997	SEAD-12	2	Regional	741686.1	1012139	8.5	11.8	13.5	9.7	***A945P/A378Q***	21.65%	
10/9/1997	SEAD-12	2	Regional	741690.4	1012039	8.2	10.6	12	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741694.8	1011939	6.8	10.1	12.2	9.7	***A945P/A378Q***	4.12%	
10/9/1997	SEAD-12	2	Regional	741699.2	1011839	7.5	10.4	12.2	9.7	***A945P/A378Q***	7.22%	
10/9/1997	SEAD-12	2	Regional	741703.6	1011739	8.2	10	12.5	9.7	***A945P/A378Q***	3.09%	
10/9/1997	SEAD-12	2	Regional	741707.9	1011639	7.8	10.3	13	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741710.1	1011589	8	11.4	13.2	9.7	***A945P/A378Q***	17.53%	
10/9/1997	SEAD-12	2	Regional	741759.8	1012743	7	10.3	13	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741764.1	1012643	6.2	9.1	10.8	9.7	***A945P/A378Q***	-6.19%	
10/9/1997	SEAD-12	2	Regional	741768.5	1012543	6.5	9.8	13	9.7	***A945P/A378Q***	1.03%	
10/9/1997	SEAD-12	2	Regional	741772.9	1012443	8.5	10.4	11.8	9.7	***A945P/A378Q***	7.22%	
10/9/1997	SEAD-12	2	Regional	741777.3	1012343	9	11.1	13.5	9.7	***A945P/A378Q***	14.43%	
10/9/1997	SEAD-12	2	Regional	741781.6	1012243	9.2	11.8	13.8	9.7	***A945P/A378Q***	21.65%	
10/9/1997	SEAD-12	2	Regional	741786	1012143	7.8	10.7	13.2	9.7	***A945P/A378Q***	10.31%	
10/9/1997	SEAD-12	2	Regional	741790.4	1012043	8.5	10.6	13.5	9.7	***A945P/A378Q***	9.28%	
10/9/1997	SEAD-12	2	Regional	741794.8	1011943	8	10.3	12	9.7	***A945P/A378Q***	6.19%	
10/9/1997	SEAD-12	2	Regional	741799.1	1011843	8.2	10.2	12.2	9.7	***A945P/A378Q***	5.15%	
10/9/1997	SEAD-12	2	Regional	741803.5	1011744	7.8	9.6	11.5	9.7	***A945P/A378Q***	-1.03%	
10/9/1997	SEAD-12	2	Regional	741807.9	1011644	8.2	11.3	12.8	9.7	***A945P/A378Q***	16.49%	
10/9/1997	SEAD-12	2	Regional	741810.1	1011594	8	12.1	13.5	9.7	***A945P/A378Q***	24.74%	1150'-1250' moston above ground

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/10/1997	SEAD-12	2	Regional	741809.7	1012745	8	9.7	11	9.5	A984P/A39PQ	2.11%	
10/10/1997	SEAD-12	2	Regional	741814.1	1012645	8	9.4	11	9.5	A984P/A39PQ	-1.05%	
10/10/1997	SEAD-12	2	Regional	741818.4	1012545	8.5	10	11.5	9.5	A984P/A39PQ	5.26%	
10/10/1997	SEAD-12	2	Regional	741822.8	1012445	9	10.2	11.8	9.5	A984P/A39PQ	7.37%	
10/10/1997	SEAD-12	2	Regional	741827.2	1012345	8.5	9.9	11.8	9.5	A984P/A39PQ	4.21%	
10/10/1997	SEAD-12	2	Regional	741831.6	1012245	9	10.8	12	9.5	A984P/A39PQ	13.68%	
10/10/1997	SEAD-12	2	Regional	741835.9	1012145	8.5	10.2	12	9.5	A984P/A39PQ	7.37%	
10/10/1997	SEAD-12	2	Regional	741840.3	1012045	8	10.2	12	9.5	A984P/A39PQ	7.37%	
10/10/1997	SEAD-12	2	Regional	741844.7	1011946	8	9.4	10.8	9.5	A984P/A39PQ	-1.05%	
10/10/1997	SEAD-12	2	Regional	741849.1	1011846	8	9.9	12	9.5	A984P/A39PQ	4.21%	EM42@995'
10/10/1997	SEAD-12	2	Regional	741853.4	1011746	8.4	9.8	11.5	9.5	A984P/A39PQ	3.16%	
10/10/1997	SEAD-12	2	Regional	741857.8	1011646	9	11.2	13	9.5	A984P/A39PQ	17.89%	
10/10/1997	SEAD-12	2	Regional	741860	1011596	8.5	10.5	12	9.5	A984P/A39PQ	10.53%	
10/10/1997	SEAD-12	2	Regional	741909.6	1012749	8	9.3	10	9.5	A984P/A39PQ	-2.11%	
10/10/1997	SEAD-12	2	Regional	741913.9	1012649	8.5	9.8	11	9.5	A984P/A39PQ	3.16%	
10/10/1997	SEAD-12	2	Regional	741918.3	1012549	8.5	9.8	11	9.5	A984P/A39PQ	3.16%	
10/10/1997	SEAD-12	2	Regional	741922.7	1012449	8.5	9.5	11.2	9.5	A984P/A39PQ	0.00%	
10/10/1997	SEAD-12	2	Regional	741927.1	1012350	8.5	9.6	11	9.5	A984P/A39PQ	1.05%	
10/10/1997	SEAD-12	2	Regional	741931.4	1012250	9	10.8	12	9.5	A984P/A39PQ	13.68%	
10/10/1997	SEAD-12	2	Regional	741935.8	1012150	8.5	10.9	13	9.5	A984P/A39PQ	14.74%	
10/10/1997	SEAD-12	2	Regional	741940.2	1012050	9	10.5	13	9.5	A984P/A39PQ	10.53%	
10/10/1997	SEAD-12	2	Regional	741944.6	1011950	7.5	9.2	10.2	9.5	A984P/A39PQ	-3.16%	
10/10/1997	SEAD-12	2	Regional	741948.9	1011850	8.5	9.6	11	9.5	A984P/A39PQ	1.05%	
10/10/1997	SEAD-12	2	Regional	741953.3	1011750	8.5	9.6	10.5	9.5	A984P/A39PQ	1.05%	
10/10/1997	SEAD-12	2	Regional	741957.7	1011650	9	9.7	11.5	9.5	A984P/A39PQ	2.11%	
10/10/1997	SEAD-12	2	Regional	741959.9	1011600	8.5	10.7	11.8	9.5	A984P/A39PQ	12.63%	
10/10/1997	SEAD-12	2	Regional	741859.6	1012747	7.5	9.8	13.5	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	741864	1012647	7.8	9.7	12.2	9.6	***A945P/A378Q***	1.04%	
10/10/1997	SEAD-12	2	Regional	741868.4	1012547	7.5	10	11.8	9.6	***A945P/A378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	741872.8	1012447	8.2	9.6	12.6	9.6	***A945P/A378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	741877.1	1012347	7.8	9.5	12.5	9.6	***A945P/A378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	741881.5	1012247	8.5	10.5	13	9.6	***A945P/A378Q***	9.38%	
10/10/1997	SEAD-12	2	Regional	741885.9	1012148	7.5	10.5	12.5	9.6	***A945P/A378Q***	9.38%	
10/10/1997	SEAD-12	2	Regional	741890.3	1012048	7	10.3	13.2	9.6	***A945P/A378Q***	7.29%	
10/10/1997	SEAD-12	2	Regional	741894.6	1011948	7.8	9.4	12.2	9.6	***A945P/A378Q***	-2.08%	
10/10/1997	SEAD-12	2	Regional	741899	1011848	7.5	9.3	10.5	9.6	***A945P/A378Q***	-3.12%	
10/10/1997	SEAD-12	2	Regional	741903.4	1011748	7.2	9.4	10.8	9.6	***A945P/A378Q***	-2.08%	
10/10/1997	SEAD-12	2	Regional	741907.8	1011648	6.8	10.7	13	9.6	***A945P/A378Q***	11.46%	
10/10/1997	SEAD-12	2	Regional	741909.9	1011598	8.2	11.4	12.8	9.6	***A945P/A378Q***	18.75%	
10/10/1997	SEAD-12	2	Regional	741959.6	1012751	6.8	9.7	12.5	9.6	***A945P/A378Q***	1.04%	
10/10/1997	SEAD-12	2	Regional	741963.9	1012651	7.2	9.6	12	9.6	***A945P/A378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	741968.3	1012552	7.5	9.9	11.2	9.6	***A945P/A378Q***	3.13%	
10/10/1997	SEAD-12	2	Regional	741972.7	1012452	7.2	9.8	11.2	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	741977.1	1012352	7.8	9.7	11.5	9.6	***A945P/A378Q***	1.04%	
10/10/1997	SEAD-12	2	Regional	741981.4	1012252	7	10.8	12.5	9.6	***A945P/A378Q***	12.50%	
10/10/1997	SEAD-12	2	Regional	741985.8	1012152	7.5	10.4	12.2	9.6	***A945P/A378Q***	8.33%	
10/10/1997	SEAD-12	2	Regional	741990.2	1012052	8.2	10.3	11.5	9.6	***A945P/A378Q***	7.29%	
10/10/1997	SEAD-12	2	Regional	741994.6	1011952	6.8	9.7	11.2	9.6	***A945P/A378Q***	1.04%	
10/10/1997	SEAD-12	2	Regional	741998.9	1011852	8	9.5	10.8	9.6	***A945P/A378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	742003.3	1011752	7.8	9.4	11.5	9.6	***A945P/A378Q***	-2.08%	
10/10/1997	SEAD-12	2	Regional	742007.7	1011652	8.2	9.8	13	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742009.9	1011602	8	10.3	12.5	9.6	***A945P/A378Q***	7.29%	
10/10/1997	SEAD-12	2	Regional	742009.5	1012754	7.8	9.5	10.2	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742013.9	1012654	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742018.3	1012554	8.5	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/10/1997	SEAD-12	2	Regional	742022.6	1012454	9	10.6	12.4	9.5	A984P/A398Q	11.58%	
10/10/1997	SEAD-12	2	Regional	742027	1012354	8.5	10.1	11.5	9.5	A984P/A398Q	6.32%	
10/10/1997	SEAD-12	2	Regional	742031.4	1012254	9	10.6	12.2	9.5	A984P/A398Q	11.58%	
10/10/1997	SEAD-12	2	Regional	742035.8	1012154	7.5	9.7	11	9.5	A984P/A398Q	2.11%	
10/10/1997	SEAD-12	2	Regional	742040.1	1012054	6	9.3	11	9.5	A984P/A398Q	-2.11%	
10/10/1997	SEAD-12	2	Regional	742044.5	1011954	9	10	11	9.5	A984P/A398Q	5.26%	
10/10/1997	SEAD-12	2	Regional	742048.9	1011854	8.5	9.6	10.4	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742053.3	1011754	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742057.6	1011655	7.5	9.4	10	9.5	A984P/A398Q	-1.05%	
10/10/1997	SEAD-12	2	Regional	742059.8	1011605	8.5	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742109.4	1012758	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742113.8	1012658	8	9.8	10.5	9.5	A984P/A398Q	3.16%	
10/10/1997	SEAD-12	2	Regional	742118.1	1012558	9	10.3	12	9.5	A984P/A398Q	8.42%	
10/10/1997	SEAD-12	2	Regional	742122.5	1012458	8	10	11.5	9.5	A984P/A398Q	5.26%	
10/10/1997	SEAD-12	2	Regional	742126.9	1012358	8.5	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/10/1997	SEAD-12	2	Regional	742131.3	1012258	9.5	11	13	9.5	A984P/A398Q	15.79%	
10/10/1997	SEAD-12	2	Regional	742135.6	1012158	9	10.3	11.5	9.5	A984P/A398Q	8.42%	
10/10/1997	SEAD-12	2	Regional	742140	1012059	6	10.1	12	9.5	A984P/A398Q	6.32%	
10/10/1997	SEAD-12	2	Regional	742144.4	1011959	8.5	9.9	11.2	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742148.8	1011859	8.5	10	11	9.5	A984P/A398Q	5.26%	
10/10/1997	SEAD-12	2	Regional	742153.1	1011759	8	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742157.5	1011659	8	9.6	10.2	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742159.7	1011609	8.5	9.8	10.5	9.5	A984P/A398Q	3.16%	
10/10/1997	SEAD-12	2	Regional	742059.4	1012756	7.5	9	11.8	9.6	***A945P/A378Q***	-6.25%	
10/10/1997	SEAD-12	2	Regional	742063.8	1012656	8.2	9.8	12	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742068.2	1012556	7.8	10.3	12.2	9.6	***A945P/A378Q***	7.29%	
10/10/1997	SEAD-12	2	Regional	742072.6	1012456	6.8	9.6	11.8	9.6	***A945P/A378Q***	0.00%	em - 7 390'
10/10/1997	SEAD-12	2	Regional	742076.9	1012356	7.5	10.3	12.2	9.6	***A945P/A378Q***	7.29%	
10/10/1997	SEAD-12	2	Regional	742081.3	1012256	7.8	10.4	12.5	9.6	***A945P/A378Q***	8.33%	NW CORNER AREA F @ 535'
10/10/1997	SEAD-12	2	Regional	742085.7	1012156	7.5	10	12.5	9.6	***A945P/A378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742090.1	1012056	7.2	9.6	13.5	9.6	***A945P/A378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	742094.4	1011956	7.8	9.8	11.2	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742098.8	1011857	8	10	12	9.6	***A945P/A378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742103.2	1011757	7.8	9.5	11.8	9.6	***A945P/A378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	742107.6	1011657	7.5	9.5	15	9.6	***A945P/A378Q***	-1.04%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background (kcpm)	Instrument (s/n)	% +/- Background	Comments
10/10/1997	SEAD-12	2	Regional	742109.8	1011607	7.8	10	10.8	9.6	***A945P/A378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742159.4	1012760	8	9.8	11.8	9.6	***A945P/A378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742163.8	1012660	7.8	9.9	12.2	9.6	***A945P/A378Q***	3.13%	
10/10/1997	SEAD-12	2	Regional	742168.1	1012560	7.5	10.1	11.8	9.6	***A945P/A378Q***	5.21%	
10/10/1997	SEAD-12	2	Regional	742172.5	1012460	7.8	10.1	12.5	9.6	***A945P/A378Q***	5.21%	
10/10/1997	SEAD-12	2	Regional	742176.9	1012360	8.2	10.5	12.8	9.6	***A945P/A378Q***	9.38%	540'-680' EM6 (AREA F)
10/10/1997	SEAD-12	2	Regional	742181.3	1012261	8	11.6	13.5	9.6	***A945P/A378Q***	20.83%	
10/10/1997	SEAD-12	2	Regional	742185.6	1012161	7.8	10.9	12.8	9.6	***A945P/A378Q***	13.54%	
10/10/1997	SEAD-12	2	Regional	742190	1012061	6.5	10.1	11.5	9.6	***A945P/A378Q***	5.21%	
10/10/1997	SEAD-12	2	Regional	742194.4	1011961	8.2	10.6	12.5	9.6	***A945P/A378Q***	10.42%	
10/10/1997	SEAD-12	2	Regional	742198.8	1011861	8	10.8	11.8	9.6	***A945P/A378Q***	12.50%	
10/10/1997	SEAD-12	2	Regional	742203.1	1011761	7.2	9.5	11.2	9.6	***A945P/A378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	742207.5	1011661	8.2	9.6	11.5	9.6	***A945P/A378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	742209.7	1011611	7.8	10.4	11.8	9.6	***A945P/A378Q***	8.33%	
10/10/1997	SEAD-12	2	Regional	742209.3	1012762	8.5	9.9	10.8	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742213.7	1012662	8.5	9.8	10.5	9.5	A984P/A398Q	3.16%	
10/10/1997	SEAD-12	2	Regional	742218.1	1012562	8	9.7	10.5	9.5	A984P/A398Q	2.11%	
10/10/1997	SEAD-12	2	Regional	742222.4	1012463	9	10.2	11	9.5	A984P/A398Q	7.37%	
10/10/1997	SEAD-12	2	Regional	742226.8	1012363	8.5	10	11.5	9.5	A984P/A398Q	5.26%	
10/10/1997	SEAD-12	2	Regional	742231.2	1012263	10	11.6	13.5	9.5	A984P/A398Q	22.11%	
10/10/1997	SEAD-12	2	Regional	742235.6	1012163	9	10.7	12.5	9.5	A984P/A398Q	12.63%	
10/10/1997	SEAD-12	2	Regional	742239.9	1012063	5.5	10.1	12	9.5	A984P/A398Q	6.32%	RRBED
10/10/1997	SEAD-12	2	Regional	742244.3	1011963	8.5	10.5	11.5	9.5	A984P/A398Q	10.53%	
10/10/1997	SEAD-12	2	Regional	742248.7	1011863	7.5	9.9	11	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742253.1	1011763	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742257.4	1011663	7.8	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/10/1997	SEAD-12	2	Regional	742259.6	1011613	9	10.3	11.2	9.5	A984P/A398Q	8.42%	
10/10/1997	SEAD-12	2	Regional	742309.2	1012767	7.8	9.9	13	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742313.6	1012667	9	10.7	11.5	9.5	A984P/A398Q	12.63%	
10/10/1997	SEAD-12	2	Regional	742317.9	1012567	9	10.2	11.7	9.5	A984P/A398Q	7.37%	
10/10/1997	SEAD-12	2	Regional	742322.3	1012467	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/10/1997	SEAD-12	2	Regional	742326.7	1012367	8.5	9.9	11.2	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742331.1	1012267	9.5	10.9	12.5	9.5	A984P/A398Q	14.74%	
10/10/1997	SEAD-12	2	Regional	742335.4	1012167	9	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/10/1997	SEAD-12	2	Regional	742339.8	1012067	6	10	11.5	9.5	A984P/A398Q	5.26%	
10/10/1997	SEAD-12	2	Regional	742344.2	1011967	9.5	10.5	11.8	9.5	A984P/A398Q	10.53%	
10/10/1997	SEAD-12	2	Regional	742348.6	1011868	7.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742352.9	1011768	8	9.4	11	9.5	A984P/A398Q	-1.05%	
10/10/1997	SEAD-12	2	Regional	742357.3	1011668	8.5	9.6	10.8	9.5	A984P/A398Q	1.05%	
10/10/1997	SEAD-12	2	Regional	742359.5	1011618	9	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/10/1997	SEAD-12	2	Regional	742259.3	1012764	7.8	9.8	12	9.6	***A945P/378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742263.6	1012665	8.2	9.8	11.8	9.6	***A945P/378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742268	1012565	6.8	10	12.2	9.6	***A945P/378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742272.4	1012465	8	10.2	11.8	9.6	***A945P/378Q***	6.25%	
10/10/1997	SEAD-12	2	Regional	742276.8	1012365	7.8	9.9	12.2	9.6	***A945P/378Q***	3.13%	
10/10/1997	SEAD-12	2	Regional	742281.1	1012265	8	10.8	13.5	9.6	***A945P/378Q***	12.50%	
10/10/1997	SEAD-12	2	Regional	742285.5	1012165	7.8	10.7	14	9.6	***A945P/378Q***	11.46%	
10/10/1997	SEAD-12	2	Regional	742289.9	1012065	5.5	10	12.2	9.6	***A945P/378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742294.3	1011965	7.5	10.4	12	9.6	***A945P/378Q***	8.33%	
10/10/1997	SEAD-12	2	Regional	742298.6	1011865	6.2	9.8	12.2	9.6	***A945P/378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742303	1011765	7.5	9.6	11.8	9.6	***A945P/378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	742307.4	1011666	8	9.4	11.2	9.6	***A945P/378Q***	-2.08%	
10/10/1997	SEAD-12	2	Regional	742309.6	1011616	7.8	10.2	11	9.6	***A945P/378Q***	6.25%	
10/10/1997	SEAD-12	2	Regional	742359.1	1012769	6.8	10	13.2	9.6	***A945P/378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742363.5	1012669	8.2	10.1	11.5	9.6	***A945P/378Q***	5.21%	
10/10/1997	SEAD-12	2	Regional	742367.9	1012569	8	9.7	10.8	9.6	***A945P/378Q***	1.04%	
10/10/1997	SEAD-12	2	Regional	742372.3	1012469	7.8	9.6	11.8	9.6	***A945P/378Q***	0.00%	
10/10/1997	SEAD-12	2	Regional	742376.6	1012369	7.5	9.8	11.2	9.6	***A945P/378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742381.1	1012269	8.2	10	11.2	9.6	***A945P/378Q***	4.17%	
10/10/1997	SEAD-12	2	Regional	742385.4	1012169	7.8	9.8	12.2	9.6	***A945P/378Q***	2.08%	
10/10/1997	SEAD-12	2	Regional	742389.8	1012070	5.2	9.5	12.8	9.6	***A945P/378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	742394.2	1011970	8.2	10.6	11.5	9.6	***A945P/378Q***	10.42%	
10/10/1997	SEAD-12	2	Regional	742398.6	1011870	7.2	9.4	11.2	9.6	***A945P/378Q***	-2.08%	
10/10/1997	SEAD-12	2	Regional	742402.9	1011770	7.5	9.3	12.5	9.6	***A945P/378Q***	-3.12%	
10/10/1997	SEAD-12	2	Regional	742407.3	1011670	7.2	9.5	12	9.6	***A945P/378Q***	-1.04%	
10/10/1997	SEAD-12	2	Regional	742409.5	1011620	7.5	9.7	11.2	9.6	***A945P/378Q***	1.04%	
10/11/1997	SEAD-12	2	Regional	742382.9	1013370	7.5	9.5	10.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742387.3	1013271	8.5	10.9	13.5	9.4	A984P/A398Q	15.96%	
10/11/1997	SEAD-12	2	Regional	742391.6	1013171	10	11.6	13.2	9.4	A984P/A398Q	23.40%	
10/11/1997	SEAD-12	2	Regional	742396	1013071	10.2	11.6	13	9.4	A984P/A398Q	23.40%	
10/11/1997	SEAD-12	2	Regional	742400.4	1012971	8.5	10.4	12.5	9.4	A984P/A398Q	10.64%	
10/11/1997	SEAD-12	2	Regional	742404.8	1012871	7.5	9	11.5	9.4	A984P/A398Q	-4.26%	
10/11/1997	SEAD-12	2	Regional	742409.1	1012771	8	10.1	11.2	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742413.5	1012671	8	9.8	11.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742417.9	1012571	8.2	9.6	11	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742422.3	1012471	8.5	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742426.6	1012371	8	9.7	10.8	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742431	1012272	8	9.7	11.2	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742435.4	1012172	8.2	9.8	11	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742439.8	1012072	6	10.5	11.5	9.4	A984P/A398Q	11.70%	
10/11/1997	SEAD-12	2	Regional	742444.1	1011972	8.5	10.4	11.5	9.4	A984P/A398Q	10.64%	
10/11/1997	SEAD-12	2	Regional	742448.5	1011872	8	9.4	11	9.4	A984P/A398Q	0.00%	
10/11/1997	SEAD-12	2	Regional	742452.9	1011772	8.2	9.6	11.5	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742457.3	1011672	8.5	9.7	11.5	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742459.4	1011622	8.8	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742482.8	1013375	8	9.6	12	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742487.1	1013275	10	11.2	13	9.4	A984P/A398Q	19.15%	
10/11/1997	SEAD-12	2	Regional	742491.5	1013175	10.5	11.3	12.5	9.4	A984P/A398Q	20.21%	
10/11/1997	SEAD-12	2	Regional	742495.9	1013075	10	11.3	13.5	9.4	A984P/A398Q	20.21%	
10/11/1997	SEAD-12	2	Regional	742500.3	1012975	9	11.2	13.2	9.4	A984P/A398Q	19.15%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/11/1997	SEAD-12	2	Regional	742504.6	1012875	9.5	10.7	13	9.4	A984P/A398Q	13.83%	
10/11/1997	SEAD-12	2	Regional	742509	1012775	9	10.1	12	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742513.4	1012675	9	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742517.8	1012576	8	9.5	10.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742522.1	1012476	8	9.2	10	9.4	A984P/A398Q	-2.13%	
10/11/1997	SEAD-12	2	Regional	742526.5	1012376	8.5	9.6	12	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742530.9	1012276	8.2	9.9	12	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742535.3	1012176	8	10.1	11.8	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742539.6	1012076	5.5	9.8	12	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742544	1011976	9	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742548.4	1011876	8.2	9.4	10	9.4	A984P/A398Q	0.00%	
10/11/1997	SEAD-12	2	Regional	742552.8	1011776	7.5	9.3	10.5	9.4	A984P/A398Q	-1.06%	
10/11/1997	SEAD-12	2	Regional	742557.1	1011676	8.2	9.6	11	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742559.3	1011627	8.5	10.4	11.2	9.4	A984P/A398Q	10.64%	
10/11/1997	SEAD-12	2	Regional	742432.8	1013373	6.2	9.6	11	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742437.2	1013273	7.8	10.1	12.2	9.5	***A945P/A378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742441.6	1013173	8.2	10.6	12	9.5	***A945P/A378Q***	11.58%	
10/11/1997	SEAD-12	2	Regional	742445.9	1013073	8	10.8	12.5	9.5	***A945P/A378Q***	13.68%	
10/11/1997	SEAD-12	2	Regional	742450.3	1012973	8.5	11.1	12.8	9.5	***A945P/A378Q***	16.84%	
10/11/1997	SEAD-12	2	Regional	742454.7	1012873	6.8	10.3	13.2	9.5	***A945P/A378Q***	8.42%	
10/11/1997	SEAD-12	2	Regional	742459.1	1012773	7.2	9.8	11.2	9.5	***A945P/A378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742463.4	1012673	6.8	9.7	11.5	9.5	***A945P/A378Q***	2.11%	
10/11/1997	SEAD-12	2	Regional	742467.8	1012573	7.5	9.3	11	9.5	***A945P/A378Q***	-2.11%	
10/11/1997	SEAD-12	2	Regional	742472.2	1012474	7.8	9.2	10.8	9.5	***A945P/A378Q***	-3.16%	
10/11/1997	SEAD-12	2	Regional	742476.6	1012374	7.5	9.8	11	9.5	***A945P/A378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742480.9	1012274	7.8	9.9	10.8	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742485.3	1012174	8.2	9.9	12	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742489.7	1012074	5.8	9.6	11.8	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742494.1	1011974	7.8	10.2	12.2	9.5	***A945P/A378Q***	7.37%	
10/11/1997	SEAD-12	2	Regional	742498.4	1011874	7.5	9.5	11.5	9.5	***A945P/A378Q***	0.00%	
10/11/1997	SEAD-12	2	Regional	742502.8	1011774	7.8	9.6	11.2	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742507.2	1011674	7.2	10.1	11	9.5	***A945P/A378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742509.4	1011624	8	10.4	11.5	9.5	***A945P/A378Q***	9.47%	
10/11/1997	SEAD-12	2	Regional	742532.7	1013377	58.8	10.6	12.8	9.5	***A945P/A378Q***	11.58%	
10/11/1997	SEAD-12	2	Regional	742537.1	1013277	8.8	11.1	13	9.5	***A945P/A378Q***	16.84%	
10/11/1997	SEAD-12	2	Regional	742541.4	1013177	9	11.4	13.2	9.5	***A945P/A378Q***	20.00%	
10/11/1997	SEAD-12	2	Regional	742545.8	1013077	8.5	11.2	12.8	9.5	***A945P/A378Q***	17.89%	
10/11/1997	SEAD-12	2	Regional	742550.2	1012977	8	11.3	13	9.5	***A945P/A378Q***	18.95%	
10/11/1997	SEAD-12	2	Regional	742554.6	1012877	8.2	10.9	12.8	9.5	***A945P/A378Q***	14.74%	
10/11/1997	SEAD-12	2	Regional	742558.9	1012778	8	10.9	13.2	9.5	***A945P/A378Q***	14.74%	
10/11/1997	SEAD-12	2	Regional	742563.3	1012678	8.2	9.9	11.5	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742567.7	1012578	8	9.8	12	9.5	***A945P/A378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742572.1	1012478	7.5	9.5	11.5	9.5	***A945P/A378Q***	0.00%	
10/11/1997	SEAD-12	2	Regional	742576.4	1012378	7.2	9.5	11.7	9.5	***A945P/A378Q***	0.00%	
10/11/1997	SEAD-12	2	Regional	742580.8	1012278	7.5	9.8	11.2	9.5	***A945P/A378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742585.2	1012178	7.8	9.7	10.8	9.5	***A945P/A378Q***	2.11%	
10/11/1997	SEAD-12	2	Regional	742589.6	1012078	6.2	9.6	11.8	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742593.9	1011978	8	10	10.8	9.5	***A945P/A378Q***	5.26%	
10/11/1997	SEAD-12	2	Regional	742598.4	1011878	7.8	9.6	11.2	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742602.8	1011779	7.5	9.7	12.2	9.5	***A945P/A378Q***	2.11%	
10/11/1997	SEAD-12	2	Regional	742607.1	1011679	8	9.7	11.5	9.5	***A945P/A378Q***	2.11%	
10/11/1997	SEAD-12	2	Regional	742609.3	1011629	8.2	10.1	11.2	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742632.6	1013381	6.2	9.9	12	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742637	1013281	7.2	10.6	12.8	9.4	A984P/A398Q	12.77%	
10/11/1997	SEAD-12	2	Regional	742641.4	1013182	7.5	11.2	13	9.4	A984P/A398Q	19.15%	
10/11/1997	SEAD-12	2	Regional	742645.8	1013082	8.2	11.3	13	9.4	A984P/A398Q	20.21%	
10/11/1997	SEAD-12	2	Regional	742650.1	1012982	8.2	11.1	13	9.4	A984P/A398Q	18.09%	
10/11/1997	SEAD-12	2	Regional	742654.5	1012882	8	10.6	12.5	9.4	A984P/A398Q	12.77%	
10/11/1997	SEAD-12	2	Regional	742658.9	1012782	8.2	10.5	12.8	9.4	A984P/A398Q	11.70%	
10/11/1997	SEAD-12	2	Regional	742663.3	1012682	7	10.1	12	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742667.6	1012582	8.2	10.1	11.8	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742672	1012482	7.8	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742676.4	1012382	8	10.5	11.8	9.4	A984P/A398Q	11.70%	
10/11/1997	SEAD-12	2	Regional	742680.8	1012282	8.5	10.1	11.5	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742685.1	1012183	8.2	9.509	12	9.4	A984P/A398Q	1.16%	
10/11/1997	SEAD-12	2	Regional	742689.5	1012083	5.8	9.8	11.8	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742693.9	1011983	7.8	9.8	12.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742698.3	1011883	8	9.3	12.2	9.4	A984P/A398Q	-1.06%	
10/11/1997	SEAD-12	2	Regional	742702.6	1011783	6.8	9.3	10.8	9.4	A984P/A398Q	-1.06%	
10/11/1997	SEAD-12	2	Regional	742707	1011683	7.2	9.6	11	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742709.2	1011633	7.8	9.9	10.8	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742582.7	1013379	8	10.1	11.5	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742587.1	1013279	8.5	10.7	13	9.4	A984P/A398Q	13.83%	
10/11/1997	SEAD-12	2	Regional	742591.4	1013179	9.5	11.2	13	9.4	A984P/A398Q	19.15%	
10/11/1997	SEAD-12	2	Regional	742595.8	1013079	9.5	11.2	13	9.4	A984P/A398Q	19.15%	
10/11/1997	SEAD-12	2	Regional	742600.2	1012980	9	11.2	12.5	9.4	A984P/A398Q	19.15%	
10/11/1997	SEAD-12	2	Regional	742604.6	1012880	8.8	10.9	13	9.4	A984P/A398Q	15.96%	
10/11/1997	SEAD-12	2	Regional	742608.9	1012780	8.5	10.5	12.5	9.4	A984P/A398Q	11.70%	
10/11/1997	SEAD-12	2	Regional	742613.3	1012680	8	10	10.8	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742617.7	1012580	8.5	9.8	10.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742622.1	1012480	8	9.8	10.8	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742626.4	1012380	8	9.8	10.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742630.8	1012280	7.5	9.5	10.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742635.2	1012180	7.5	9.6	11	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742639.6	1012080	6.5	9.9	11.5	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742643.9	1011981	8	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742648.3	1011881	8.2	9.7	11.2	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742652.7	1011781	7.8	9.5	11.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742657.1	1011681	8.2	9.9	11	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742659.3	1011631	8.5	10.4	11	9.4	A984P/A398Q	10.64%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/11/1997	SEAD-12	2	Regional	742682.6	1013384	7.5	9.7	11	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742686.9	1013284	8	10.2	11.5	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742691.3	1013184	8.5	10.1	11.5	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742695.7	1013084	9	10.9	12.5	9.4	A984P/A398Q	15.96%	
10/11/1997	SEAD-12	2	Regional	742700.1	1012984	9.5	11	13	9.4	A984P/A398Q	17.02%	
10/11/1997	SEAD-12	2	Regional	742704.4	1012884	9	10.4	12	9.4	A984P/A398Q	10.64%	
10/11/1997	SEAD-12	2	Regional	742708.8	1012784	9	10.7	12.8	9.4	A984P/A398Q	13.83%	
10/11/1997	SEAD-12	2	Regional	742713.2	1012684	8	10	12	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742717.6	1012584	9	10.1	11.2	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742721.9	1012484	8	9.6	11.5	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742726.3	1012385	8.5	10.1	12	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742730.7	1012285	8.5	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742735.1	1012185	9	10.2	12	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742739.4	1012085	8	10.1	12	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742743.8	1011985	9	9.8	11.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742748.2	1011885	8.5	9.5	10.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742752.6	1011785	8.5	9.5	11.5	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742756.9	1011685	8.5	9.7	11	9.4	A984P/A398Q	3.19%	
10/11/1997	SEAD-12	2	Regional	742759.1	1011635	9	9.9	11	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742732.5	1013386	6.5	9.8	12.5	9.5	***A945P/A378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742736.9	1013286	8.2	9.9	12.2	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742741.3	1013186	7.8	10.3	13	9.5	***A945P/A378Q***	8.42%	
10/11/1997	SEAD-12	2	Regional	742745.6	1013086	8.2	10.5	11.8	9.5	***A945P/A378Q***	10.53%	
10/11/1997	SEAD-12	2	Regional	742750	1012986	8	11	12.2	9.5	***A945P/A378Q***	15.79%	
10/11/1997	SEAD-12	2	Regional	742754.4	1012886	7.8	10.6	12	9.5	***A945P/A378Q***	11.58%	
10/11/1997	SEAD-12	2	Regional	742758.8	1012786	8.5	10.8	12.2	9.5	***A945P/A378Q***	13.68%	
10/11/1997	SEAD-12	2	Regional	742763.1	1012686	8	10	12.5	9.5	***A945P/A378Q***	5.26%	
10/11/1997	SEAD-12	2	Regional	742767.5	1012587	8	10.1	11.5	9.5	***A945P/A378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742771.9	1012487	7.8	10.1	12.2	9.5	***A945P/A378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742776.3	1012387	7.2	9.9	12	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742780.6	1012287	7.8	9.9	10.8	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742785	1012187	7	10.3	11.2	9.5	***A945P/A378Q***	8.42%	
10/11/1997	SEAD-12	2	Regional	742789.4	1012087	7.5	10.1	11.8	9.5	***A945P/A378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742793.8	1011987	8.2	10	11.5	9.5	***A945P/A378Q***	5.26%	
10/11/1997	SEAD-12	2	Regional	742798.1	1011887	8	9.6	11.8	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742802.5	1011787	7.8	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/11/1997	SEAD-12	2	Regional	742806.9	1011687	8	9.9	11.2	9.5	***A945P/A378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742809.1	1011637	8.2	10.4	12	9.4	***A945P/A378Q***	10.64%	
10/11/1997	SEAD-12	2	Regional	742782.4	1013388	7.5	10	11.5	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742786.8	1013288	8.5	10.1	11.5	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742791.2	1013188	8.5	10	11	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742795.6	1013088	9	10.2	12	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742800	1012988	9.5	11	13	9.4	A984P/A398Q	17.02%	
10/11/1997	SEAD-12	2	Regional	742804.4	1012888	8	10.6	12	9.4	A984P/A398Q	12.77%	
10/11/1997	SEAD-12	2	Regional	742808.8	1012789	8.5	10.3	12	9.4	A984P/A398Q	9.57%	
10/11/1997	SEAD-12	2	Regional	742813.1	1012689	8	9.8	11	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742817.5	1012589	9	10.2	11.5	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742821.9	1012489	8.5	10.1	11.2	9.4	A984P/A398Q	7.45%	
10/11/1997	SEAD-12	2	Regional	742826.3	1012389	8	9.9	11	9.4	A984P/A398Q	5.32%	
10/11/1997	SEAD-12	2	Regional	742830.6	1012289	8.5	9.8	11.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742835	1012189	8	9.8	11.5	9.4	A984P/A398Q	4.26%	
10/11/1997	SEAD-12	2	Regional	742839.4	1012089	8.5	10.2	11.5	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742843.8	1011989	8.5	10.2	11.5	9.4	A984P/A398Q	8.51%	
10/11/1997	SEAD-12	2	Regional	742848.1	1011889	8	9.6	11.5	9.4	A984P/A398Q	2.13%	
10/11/1997	SEAD-12	2	Regional	742852.5	1011789	8	9.5	11	9.4	A984P/A398Q	1.06%	
10/11/1997	SEAD-12	2	Regional	742856.9	1011690	8	10	11.2	9.4	A984P/A398Q	6.38%	
10/11/1997	SEAD-12	2	Regional	742859.1	1011640	9	10.1	12	9.5	A984P/A398Q	6.32%	
10/11/1997	SEAD-12	2	Regional	742832.4	1013390	6	9.8	13	9.5	***A945P/378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742836.8	1013290	6.8	10.2	12.8	9.5	***A945P/378Q***	7.37%	
10/11/1997	SEAD-12	2	Regional	742841.2	1013190	8.2	9.9	11.5	9.5	***A945P/378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742845.6	1013090	7.8	9.9	11.2	9.5	***A945P/378Q***	4.21%	
10/11/1997	SEAD-12	2	Regional	742849.9	1012991	7.5	10.1	12	9.5	***A945P/378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742854.3	1012891	7.2	10.6	11.5	9.5	***A945P/378Q***	11.58%	
10/11/1997	SEAD-12	2	Regional	742858.7	1012791	8	10.8	11.8	9.5	***A945P/378Q***	13.68%	
10/11/1997	SEAD-12	2	Regional	742863.1	1012691	7.8	10.3	11.5	9.5	***A945P/378Q***	8.42%	
10/11/1997	SEAD-12	2	Regional	742867.4	1012591	7.5	10	10.8	9.5	***A945P/378Q***	5.26%	
10/11/1997	SEAD-12	2	Regional	742871.8	1012491	6.8	9.8	11.2	9.5	***A945P/378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742876.2	1012391	7.2	9.8	10.8	9.5	***A945P/378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742880.6	1012291	7	9.7	11.2	9.5	***A945P/378Q***	2.11%	
10/11/1997	SEAD-12	2	Regional	742884.9	1012191	7.8	10	11	9.5	***A945P/378Q***	5.26%	
10/11/1997	SEAD-12	2	Regional	742889.3	1012091	6.2	10.1	12.2	9.5	***A945P/378Q***	6.32%	
10/11/1997	SEAD-12	2	Regional	742893.7	1011991	8.2	10.3	12	9.5	***A945P/378Q***	8.42%	
10/11/1997	SEAD-12	2	Regional	742898.1	1011892	7.8	9.8	11.5	9.5	***A945P/378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742902.4	1011792	8	9.8	11.2	9.5	***A945P/378Q***	3.16%	
10/11/1997	SEAD-12	2	Regional	742906.8	1011692	7.5	9.9	11.5	9.5	***A945P/378Q***	4.21%	
10/12/1997	SEAD-12	2	Regional	742909	1011642	7.8	10.5	11.8	9.7	***A945P/378Q***	8.25%	
10/12/1997	SEAD-12	2	Regional	742882.4	1013392	7.5	9.7	11	9.7	***A945P/378Q***	0.00%	
10/12/1997	SEAD-12	2	Regional	742886.8	1013292	9	10.3	11.5	9.7	***A945P/378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742891.1	1013193	9.5	10.5	12.5	9.7	***A945P/378Q***	8.25%	
10/12/1997	SEAD-12	2	Regional	742895.5	1013093	8.5	10.1	11	9.7	***A945P/378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	742899.9	1012993	9	10.2	11.5	9.7	***A945P/378Q***	5.15%	
10/12/1997	SEAD-12	2	Regional	742904.3	1012893	9.5	10.5	12	9.7	***A945P/378Q***	8.25%	
10/12/1997	SEAD-12	2	Regional	742908.6	1012793	9.5	10.5	12	9.7	***A945P/378Q***	8.25%	
10/12/1997	SEAD-12	2	Regional	742913	1012693	9.5	11	13	9.7	***A945P/378Q***	13.40%	
10/12/1997	SEAD-12	2	Regional	742917.4	1012593	9.5	10.2	12	9.7	***A945P/378Q***	5.15%	
10/12/1997	SEAD-12	2	Regional	742921.8	1012493	9	10.3	12	9.7	***A945P/378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742926.1	1012393	9	10.1	11.5	9.7	***A945P/378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	742930.5	1012293	8.5	10.5	12	9.7	***A945P/378Q***	8.25%	
10/12/1997	SEAD-12	2	Regional	742934.9	1012193	8.5	10.3	12.5	9.7	***A945P/378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742939.3	1012094	8	10.2	11.8	9.7	***A945P/378Q***	5.15%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/12/1997	SEAD-12	2	Regional	742943.6	1011994	9.5	10.4	11.5	9.7	***A945P/378Q***	7.22%	
10/12/1997	SEAD-12	2	Regional	742948	1011894	9.5	10.4	12	9.7	***A945P/378Q***	7.22%	
10/12/1997	SEAD-12	2	Regional	742952.4	1011794	9	10	11.5	9.7	***A945P/378Q***	3.09%	
10/12/1997	SEAD-12	2	Regional	742956.8	1011694	9	10	12	9.7	***A945P/378Q***	3.09%	
10/12/1997	SEAD-12	2	Regional	742958.9	1011644	9	10.8	12	9.6	***A945P/378Q***	12.50%	
10/12/1997	SEAD-12	2	Regional	742982.3	1013397	8	10.6	12	9.6	A984P/A398Q	10.42%	
10/12/1997	SEAD-12	2	Regional	742986.6	1013297	9.5	10.7	12	9.6	A984P/A398Q	11.46%	
10/12/1997	SEAD-12	2	Regional	742991	1013197	9.8	11	12	9.6	A984P/A398Q	14.58%	
10/12/1997	SEAD-12	2	Regional	742995.4	1013097	8.5	10.2	11	9.6	A984P/A398Q	6.25%	
10/12/1997	SEAD-12	2	Regional	742999.8	1012997	8.5	10.1	11	9.6	A984P/A398Q	5.21%	
10/12/1997	SEAD-12	2	Regional	743004.1	1012897	8.5	10	11.2	9.6	A984P/A398Q	4.17%	
10/12/1997	SEAD-12	2	Regional	743008.5	1012797	9	10.4	12	9.6	A984P/A398Q	8.33%	
10/12/1997	SEAD-12	2	Regional	743012.9	1012697	9.5	10.2	11.2	9.6	A984P/A398Q	6.25%	
10/12/1997	SEAD-12	2	Regional	743017.3	1012597	8.5	10	11.5	9.6	A984P/A398Q	4.17%	
10/12/1997	SEAD-12	2	Regional	743021.7	1012498	9	9.9	12	9.6	A984P/A398Q	3.13%	
10/12/1997	SEAD-12	2	Regional	743026.1	1012398	8	10.5	11	9.6	A984P/A398Q	9.38%	
10/12/1997	SEAD-12	2	Regional	743030.4	1012298	8	9.6	11	9.6	A984P/A398Q	0.00%	
10/12/1997	SEAD-12	2	Regional	743034.8	1012198	8.5	10.2	11.5	9.6	A984P/A398Q	6.25%	
10/12/1997	SEAD-12	2	Regional	743039.2	1012098	8.5	10.4	11.5	9.6	A984P/A398Q	8.33%	
10/12/1997	SEAD-12	2	Regional	743043.6	1011998	8	9.9	11	9.6	A984P/A398Q	3.13%	
10/12/1997	SEAD-12	2	Regional	743047.9	1011898	8.5	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743052.3	1011798	9	10.3	12	9.6	A984P/A398Q	7.29%	
10/12/1997	SEAD-12	2	Regional	743056.7	1011698	9	10	11.5	9.6	A984P/A398Q	4.17%	
10/12/1997	SEAD-12	2	Regional	743058.9	1011648	8.5	10.4	11.5	9.7	A984P/A398Q	7.22%	
10/12/1997	SEAD-12	2	Regional	742932.3	1013395	7.2	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/12/1997	SEAD-12	2	Regional	742936.7	1013295	8.2	9.8	11	9.7	***A945P/A378Q***	1.03%	
10/12/1997	SEAD-12	2	Regional	742941.1	1013195	8.5	10	11.2	9.7	***A945P/A378Q***	3.09%	
10/12/1997	SEAD-12	2	Regional	742945.4	1013095	8.2	9.8	12.2	9.7	***A945P/A378Q***	1.03%	
10/12/1997	SEAD-12	2	Regional	742949.8	1012995	7.8	9.4	11.5	9.7	***A945P/A378Q***	-3.09%	
10/12/1997	SEAD-12	2	Regional	742954.2	1012895	7.5	9.8	10.5	9.7	***A945P/A378Q***	1.03%	
10/12/1997	SEAD-12	2	Regional	742958.6	1012795	8	10.1	11	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	742962.9	1012695	7.8	10.8	11.2	9.7	***A945P/A378Q***	11.34%	
10/12/1997	SEAD-12	2	Regional	742967.3	1012595	8	10.3	11.8	9.7	***A945P/A378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742971.7	1012495	8.2	10.3	12.2	9.7	***A945P/A378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742976.1	1012395	7.5	10.3	12	9.7	***A945P/A378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742980.4	1012296	7.2	10.3	11.5	9.7	***A945P/A378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742984.8	1012196	7.8	10.2	11.2	9.7	***A945P/A378Q***	5.15%	
10/12/1997	SEAD-12	2	Regional	742989.2	1012096	7	10.3	11	9.7	***A945P/A378Q***	6.19%	
10/12/1997	SEAD-12	2	Regional	742993.6	1011996	8.2	10.4	11.5	9.7	***A945P/A378Q***	7.22%	
10/12/1997	SEAD-12	2	Regional	742997.9	1011896	8.5	10.2	11.2	9.7	***A945P/A378Q***	5.15%	
10/12/1997	SEAD-12	2	Regional	743002.3	1011796	8	10.1	11	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	743006.7	1011696	7.8	10.1	11.2	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	743008.9	1011646	8.2	10.6	11.5	9.7	***A945P/A378Q***	9.28%	
10/12/1997	SEAD-12	2	Regional	743032.3	1013399	6.2	10.7	13.2	9.7	***A945P/A378Q***	10.31%	
10/12/1997	SEAD-12	2	Regional	743036.6	1013299	8.2	11.3	13.8	9.7	***A945P/A378Q***	16.49%	
10/12/1997	SEAD-12	2	Regional	743041	1013199	7.8	11.8	14.2	9.7	***A945P/A378Q***	21.65%	
10/12/1997	SEAD-12	2	Regional	743045.4	1013099	6.5	10.2	11.2	9.7	***A945P/A378Q***	5.15%	
10/12/1997	SEAD-12	2	Regional	743049.8	1012999	7.8	9.9	11.5	9.7	***A945P/A378Q***	2.06%	
10/12/1997	SEAD-12	2	Regional	743054.1	1012899	8	9.7	11.8	9.7	***A945P/A378Q***	0.00%	
10/12/1997	SEAD-12	2	Regional	743058.5	1012799	7.8	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/12/1997	SEAD-12	2	Regional	743062.9	1012700	6.8	10.4	11.5	9.7	***A945P/A378Q***	7.22%	
10/12/1997	SEAD-12	2	Regional	743067.3	1012600	7.5	9.9	12.2	9.7	***A945P/A378Q***	2.06%	
10/12/1997	SEAD-12	2	Regional	743071.6	1012500	8.2	9.9	11	9.7	***A945P/A378Q***	2.06%	
10/12/1997	SEAD-12	2	Regional	743076	1012400	8	9.8	11.2	9.7	***A945P/A378Q***	1.03%	
10/12/1997	SEAD-12	2	Regional	743080.4	1012300	7.8	9.5	10.5	9.7	***A945P/A378Q***	-2.06%	
10/12/1997	SEAD-12	2	Regional	743084.8	1012200	8	10.1	12.8	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	743089.1	1012100	7	10.4	13	9.7	***A945P/A378Q***	7.22%	
10/12/1997	SEAD-12	2	Regional	743093.5	1012000	7.5	10.1	12.2	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	743097.9	1011900	8	10	11.8	9.7	***A945P/A378Q***	3.09%	
10/12/1997	SEAD-12	2	Regional	743102.3	1011800	8.2	10.1	11.2	9.7	***A945P/A378Q***	4.12%	
10/12/1997	SEAD-12	2	Regional	743106.6	1011701	7.5	9.8	11	9.7	***A945P/A378Q***	1.03%	
10/12/1997	SEAD-12	2	Regional	743108.8	1011651	7.8	10.4	11.8	9.6	***A945P/A378Q***	8.33%	
10/12/1997	SEAD-12	2	Regional	743082.2	1013401	7.5	10.4	13	9.6	A984P/A398Q	8.33%	
10/12/1997	SEAD-12	2	Regional	743086.6	1013301	9	10.3	12	9.6	A984P/A398Q	7.29%	
10/12/1997	SEAD-12	2	Regional	743090.9	1013201	10	11.3	13.2	9.6	A984P/A398Q	17.71%	
10/12/1997	SEAD-12	2	Regional	743095.3	1013101	8	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743099.7	1013001	8	9.4	11	9.6	A984P/A398Q	-2.08%	
10/12/1997	SEAD-12	2	Regional	743104.1	1012902	8	9.8	10.8	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743108.4	1012802	8	9.8	11	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743112.8	1012702	9	10.7	13.5	9.6	A984P/A398Q	11.46%	
10/12/1997	SEAD-12	2	Regional	743117.2	1012602	8.5	9.6	11.5	9.6	A984P/A398Q	0.00%	
10/12/1997	SEAD-12	2	Regional	743121.6	1012502	8	9.7	11.5	9.6	A984P/A398Q	1.04%	
10/12/1997	SEAD-12	2	Regional	743125.9	1012402	8	9.8	10.8	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743130.3	1012302	8	9.8	12	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743134.7	1012202	8.5	9.9	12	9.6	A984P/A398Q	3.13%	
10/12/1997	SEAD-12	2	Regional	743139.1	1012102	8.7	10.5	12	9.6	A984P/A398Q	9.38%	
10/12/1997	SEAD-12	2	Regional	743143.4	1012002	8	9.7	11.5	9.6	A984P/A398Q	1.04%	
10/12/1997	SEAD-12	2	Regional	743147.8	1011903	8	9.8	11.8	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743152.2	1011803	8	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743156.6	1011703	8.5	9.7	12	9.6	A984P/A398Q	1.04%	
10/12/1997	SEAD-12	2	Regional	743158.8	1011653	8.5	10.4	11.5	9.6	A984P/A398Q	8.33%	
10/12/1997	SEAD-12	2	Regional	743221.4	1012506	7.5	9.3	10.5	9.6	A984P/A398Q	-3.12%	
10/12/1997	SEAD-12	2	Regional	743225.8	1012406	8	9.4	11.5	9.6	A984P/A398Q	-2.08%	
10/12/1997	SEAD-12	2	Regional	743230.2	1012307	8.5	9.7	10.5	9.6	A984P/A398Q	1.04%	
10/12/1997	SEAD-12	2	Regional	743234.6	1012207	8.5	9.9	11.5	9.6	A984P/A398Q	3.13%	
10/12/1997	SEAD-12	2	Regional	743239	1012107	9	10.4	11.8	9.6	A984P/A398Q	8.33%	
10/12/1997	SEAD-12	2	Regional	743243.4	1012007	8.5	9.8	12.5	9.6	A984P/A398Q	2.08%	
10/12/1997	SEAD-12	2	Regional	743247.8	1011907	8	9.7	11.5	9.6	A984P/A398Q	1.04%	
10/12/1997	SEAD-12	2	Regional	743252.1	1011807	8	10	11.2	9.6	A984P/A398Q	4.17%	
10/12/1997	SEAD-12	2	Regional	743256.5	1011707	8	9.8	11	9.6	A984P/A398Q	2.08%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background	Instrument (s/n)	% +/- Background	Comments
10/12/1997	SEAD-12	2	Regional	743258 7	1011657	8	9 7	11	9.7	A984P/A398Q	0 00%	
10/12/1997	SEAD-12	2	Regional	743162 8	1012704	4 8	9.6	9 2	9 7	***A945P/A378Q***	-1 03%	
10/12/1997	SEAD-12	2	Regional	743167 1	1012604	8 2	9 6	10 8	9 7	***A945P/A378Q***	-1 03%	
10/12/1997	SEAD-12	2	Regional	743171 5	1012504	7 8	9 7	11 2	9 7	***A945P/A378Q***	0 00%	
10/12/1997	SEAD-12	2	Regional	743175 9	1012404	7 5	9 8	11	9 7	***A945P/A378Q***	1 03%	
10/12/1997	SEAD-12	2	Regional	743180 3	1012304	7 2	9 7	10 5	9 7	***A945P/A378Q***	0 00%	
10/12/1997	SEAD-12	2	Regional	743184 6	1012204	7 8	10 2	11	9 7	***A945P/A378Q***	5 15%	
10/12/1997	SEAD-12	2	Regional	743189	1012105	8 2	10 6	11 8	9 7	***A945P/A378Q***	9 28%	
10/12/1997	SEAD-12	2	Regional	743193 4	1012005	8 5	10 2	12	9 7	***A945P/A378Q***	5 15%	
10/12/1997	SEAD-12	2	Regional	743197 8	1011905	6 8	10 1	11 2	9.7	***A945P/A378Q***	4 12%	
10/12/1997	SEAD-12	2	Regional	743202 1	1011805	7 8	10 1	11	9 7	***A945P/A378Q***	4 12%	
10/12/1997	SEAD-12	2	Regional	743206 5	1011705	8 2	9 8	10 8	9 7	***A945P/A378Q***	1 03%	
10/12/1997	SEAD-12	2	Regional	743208 7	1011655	7 8	10 3	10 8	9 7	***A945P/A378Q***	6 19%	
10/12/1997	SEAD-12	2	Regional	743275 8	1012409	5 2	9 4	11	9 7	***A945P/A378Q***	-3 09%	
10/12/1997	SEAD-12	2	Regional	743280 2	1012309	7 5	9.7	10 8	9 7	***A945P/A378Q***	0 00%	
10/12/1997	SEAD-12	2	Regional	743284 6	1012209	7 8	10 7	12 5	9 7	***A945P/A378Q***	10 31%	
10/12/1997	SEAD-12	2	Regional	743288 9	1012109	8 2	10 6	13 2	9.7	***A945P/A378Q***	9 28%	
10/12/1997	SEAD-12	2	Regional	743293 3	1012009	7 2	10 3	12 8	9 7	***A945P/A378Q***	6 19%	
10/12/1997	SEAD-12	2	Regional	743297 7	1011909	7 8	10 2	11 2	9.7	***A945P/A378Q***	5 15%	
10/12/1997	SEAD-12	2	Regional	743302 1	1011809	7 5	10	10 8	9 7	***A945P/A378Q***	3 09%	
10/12/1997	SEAD-12	2	Regional	743306 4	1011709	8	10 1	11	9.7	***A945P/A378Q***	4 12%	
10/12/1997	SEAD-12	2	Regional	743308 6	1011659	7 2	9.6	10 8	9 7	***A945P/A378Q***	-1 03%	
10/12/1997	SEAD-12	2	Regional	743384 4	1012213	6 2	7 4	7 8	9 7	***A945P/A378Q***	-23 71%	PAVEMENT/OTHER AREA
10/12/1997	SEAD-12	2	Regional	743388 8	1012113	6	7	8 5	9 7	***A945P/A378Q***	-27 84%	NOTE line 200E is 5' west of pavement on mostly gravel
10/12/1997	SEAD-12	2	Regional	743393 2	1012013	4 8	7 1	9	9 7	***A945P/A378Q***	-26 80%	
10/12/1997	SEAD-12	2	Regional	743397 6	1011913	5	6 9	7 5	9.7	***A945P/A378Q***	-28 87%	
10/12/1997	SEAD-12	2	Regional	743401 9	1011814	5 2	7 1	8	9 7	***A945P/A378Q***	-26 80%	
10/12/1997	SEAD-12	2	Regional	743406 3	1011714	4 5	7 2	98 2	9 7	***A945P/A378Q***	-25 77%	
10/12/1997	SEAD-12	2	Regional	743408 5	1011664	4 8	7 1	8 8	9 7	***A945P/A378Q***	-26 80%	
10/13/1997	SEAD-12	3	Regional	743070 1	1015963	6 7	9 2	10 5	9.7	A984P/A398Q	-5 15%	
10/13/1997	SEAD-12	3	Regional	743074 4	1015863	7 5	9 3	10	9 7	A984P/A398Q	-4 12%	
10/13/1997	SEAD-12	3	Regional	743078 8	1015763	6 5	8 9	9 8	9 7	A984P/A398Q	-8 25%	
10/13/1997	SEAD-12	3	Regional	743082 6	1015678	5 5	8 5	9 8	9 7	A984P/A398Q	-12 37%	
10/13/1997	SEAD-12	3	Regional	743087 6	1015563	8 7	9 3	10 2	9 7	A984P/A398Q	-4 12%	
10/13/1997	SEAD-12	3	Regional	743091 9	1015463	7 5	9 8	11 5	9 7	A984P/A398Q	1 03%	
10/13/1997	SEAD-12	3	Regional	743096 3	1015364	8	10 1	11 5	9 7	A984P/A398Q	4 12%	
10/13/1997	SEAD-12	3	Regional	743100 7	1015264	8 5	9 7	11	9 7	A984P/A398Q	0 00%	
10/13/1997	SEAD-12	3	Regional	743105 1	1015164	8	10	11 5	9 7	A984P/A398Q	3 09%	
10/13/1997	SEAD-12	3	Regional	743109 4	1015064	7	8 9	10 5	9 7	A984P/A398Q	-8 25%	
10/13/1997	SEAD-12	3	Regional	743169 9	1015967	6 5	8 3	10	9.7	A984P/A398Q	-14 43%	Road 34 4 - 34 65
10/13/1997	SEAD-12	3	Regional	743174 3	1015867	8	9.6	11	9 7	A984P/A398Q	-1 03%	
10/13/1997	SEAD-12	3	Regional	743178 7	1015768	7 5	9 5	11	9 7	A984P/A398Q	-2 06%	
10/13/1997	SEAD-12	3	Regional	743182 4	1015683	8	9 9	11	9 7	A984P/A398Q	2 06%	
10/13/1997	SEAD-12	3	Regional	743187 4	1015568	7 5	9 2	10 5	9 7	A984P/A398Q	-5 15%	
10/13/1997	SEAD-12	3	Regional	743191 9	1015468	8	9 5	10 8	9 7	A984P/A398Q	-2 06%	Asphalt 4110 ro 4060
10/13/1997	SEAD-12	3	Regional	743196 3	1015368	8	9 6	11	9 7	A984P/A398Q	-1 03%	
10/13/1997	SEAD-12	3	Regional	743200 6	1015368	8	9 5	11	9 7	A984P/A398Q	-2 06%	
10/13/1997	SEAD-12	3	Regional	743209 4	1015068	6 5	9	12	9 7	A984P/A398Q	-7 22%	BLD812@3500
10/13/1997	SEAD-12	3	Regional	743117 6	1016021	5 2	8 9	10 8	9 9	***A945P/A378Q***	-10 10%	Asphalt 3415 to 3475
10/13/1997	SEAD-12	3	Regional	743120	1015965	7 5	9 4	10 2	9 9	***A945P/A378Q***	-5 05%	
10/13/1997	SEAD-12	3	Regional	743124 4	1015865	7 2	9 5	11 2	9 9	***A945P/A378Q***	-4 04%	
10/13/1997	SEAD-12	3	Regional	743128 8	1015765	5	9 1	10 5	9 9	***A945P/A378Q***	-8 08%	
10/13/1997	SEAD-12	3	Regional	743132 5	1015680	4 8	8 7	9.5	9 9	***A945P/A378Q***	-12 12%	4110' - 4080' pavement
10/13/1997	SEAD-12	3	Regional	743137 5	1015566	6 2	9.6	11 2	9 9	***A945P/A378Q***	-3 03%	4050' - 4000' pavement
10/13/1997	SEAD-12	3	Regional	743141 9	1015466	6.5	9 6	11 8	9 9	***A945P/A378Q***	-3 03%	
10/13/1997	SEAD-12	3	Regional	743146 3	1015366	8	10	11 5	9 9	***A945P/A378Q***	1 01%	
10/13/1997	SEAD-12	3	Regional	743150 6	1015266	4 8	9 6	10 8	9 9	***A945P/A378Q***	-3 03%	
10/13/1997	SEAD-12	3	Regional	743155	1015166	6 8	9 3	10 8	9 9	***A945P/A378Q***	-6 06%	3684 - 3688 pavement
10/13/1997	SEAD-12	3	Regional	743159 4	1015066	5 2	9 4	10 5	9 9	***A945P/A378Q***	-5 05%	3620 - 3590 pavement mixed with gravel/gras
10/13/1997	SEAD-12	3	Regional	743216 1	1016056	5 8	8	9 8	9 9	***A945P/A378Q***	-19 19%	3620-3480 line along cement wet
10/13/1997	SEAD-12	3	Regional	743219 9	1015970	7 8	9 6	10 8	9 9	***A945P/A378Q***	-3 03%	
10/13/1997	SEAD-12	3	Regional	743224 3	1015870	8	9 6	10 5	9 9	***A945P/A378Q***	-3 03%	
10/13/1997	SEAD-12	3	Regional	743233 1	1015670	6 2	9 2	10 8	9 9	***A945P/A378Q***	-7 07%	
10/13/1997	SEAD-12	3	Regional	743237 4	1015570	7 8	9 4	10 5	9 9	***A945P/A378Q***	-5 05%	
10/13/1997	SEAD-12	3	Regional	743241 8	1015470	7 5	9 7	12	9 9	***A945P/A378Q***	-2 02%	
10/13/1997	SEAD-12	3	Regional	743246 2	1015370	7	9 5	10 2	9 9	***A945P/A378Q***	-4 04%	
10/13/1997	SEAD-12	3	Regional	743250 3	1015275	5.2	8 8	10	9.9	***A945P/A378Q***	-11 11%	
10/13/1997	SEAD-12	3	Regional	743258 9	1015080	6	10 6	12 8	9 7	***A945P/A378Q***	9 28%	3520-3615 Building # 812
10/13/1997	SEAD-12	3	Regional	743266 9	1016040	2 5	9	9 8	9 7	A984P/A398Q	-7 22%	3450-3475 pavement
10/13/1997	SEAD-12	3	Regional	743269 9	1015972	8 5	9 6	10 5	9 7	A984P/A398Q	-1 03%	Asphalt 4436
10/13/1997	SEAD-12	3	Regional	743274 3	1015872	8	9 3	10	9.7	A984P/A398Q	-4 12%	
10/13/1997	SEAD-12	3	Regional	743278 6	1015772	7	8 8	9 5	9.7	A984P/A398Q	-9 28%	Machine gun 4258
10/13/1997	SEAD-12	3	Regional	743297 2	1015347	7	8 6	9 5	9.7	A984P/A398Q	-11 34%	Dlg 810 to 3800
10/13/1997	SEAD-12	3	Regional	743300 5	1015272	6	7 7	8 5	9 7	A984P/A398Q	-20 62%	Asphalt to 3750
10/13/1997	SEAD-12	3	Regional	743310 4	1015048	8	10 7	11 5	9.7	A984P/A398Q	10 31%	Asphalt to
10/13/1997	SEAD-12	3	Regional	743366 8	1016044	8	9 9	10	9.7	A984P/A398Q	2 06%	
10/13/1997	SEAD-12	3	Regional	743369 8	1015976	8	9 4	10	9.7	A984P/A398Q	-3 09%	
10/13/1997	SEAD-12	3	Regional	743373 9	1015981	8	9 3	10	9 7	A984P/A398Q	-4 12%	
10/13/1997	SEAD-12	3	Regional	743382 9	1015676	7 5	9 4	11	9.7	A984P/A398Q	-3 09%	Sidewalk @ 4140
10/13/1997	SEAD-12	3	Regional	743385 9	1015606	8 9	9 7	12	9 7	A984P/A398Q	0 00%	
10/13/1997	SEAD-12	3	Regional	743316 9	1016042	7 5	9 2	11 2	9 9	***A945P/A378Q***	-7 07%	Bldg 8105@
10/13/1997	SEAD-12	3	Regional	743319 8	1015974	8	9 4	10 5	9 9	***A945P/A378Q***	-5 05%	Asphalt @3750
10/13/1997	SEAD-12	3	Regional	743324 2	1015874	7 8	9 4	10 2	9 9	***A945P/A378Q***	-5 05%	
10/13/1997	SEAD-12	3	Regional	743333 4	1015664	6 2	8 4	9 5	9 9	***A945P/A378Q***	-15 15%	
10/13/1997	SEAD-12	3	Regional	743347 2	1015350	7 2	8 7	10 2	9 9	***A945P/A378Q***	-12 12%	
10/13/1997	SEAD-12	3	Regional	743349 1	1015305	7 5	8 9	9 8	9 9	***A945P/A378Q***	-10 10%	
10/13/1997	SEAD-12	3	Regional	743360 3	1015050	6 2	10 6	11 5	9 9	***A945P/A378Q***	7 07%	
10/13/1997	SEAD-12	3	Regional	743416 7	1016048	5 2	8 8	10 5	9 9	***A945P/A378Q***	-11 11%	
10/13/1997	SEAD-12	3	Regional	743419 8	1015978	7 8	9 6	11 5	9 9	***A945P/A378Q***	-3 03%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/13/1997	SEAD-12	3	Regional	743424.1	1015878	8.2	9.9	11.2	9.9	***A945P/A378Q***	0.00%	
10/13/1997	SEAD-12	3	Regional	743428.5	1015779	6.5	8.7	9.2	9.9	***A945P/A378Q***	-12.12%	
10/13/1997	SEAD-12	3	Regional	743447.1	1015354	5.5	8.8	9.8	9.9	***A945P/A378Q***	-11.11%	
10/13/1997	SEAD-12	3	Regional	743450.4	1015279	6.5	8.7	9.5	9.9	***A945P/A378Q***	-12.12%	3750-4110 pavement & bldg 810
10/13/1997	SEAD-12	3	Regional	743454.8	1015179	6.8	9	9.2	9.9	***A945P/A378Q***	-9.09%	
10/13/1997	SEAD-12	3	Regional	743459.1	1015079	5.2	9.1	10.8	9.7	***A945P/A378Q***	-6.19%	
10/13/1997	SEAD-12	3	Regional	743466.6	1016050	6.5	8	9.5	9.7	A984P/A398Q	-17.53%	
10/13/1997	SEAD-12	3	Regional	743469.7	1015981	8	9.6	11	9.7	A984P/A398Q	-1.03%	
10/13/1997	SEAD-12	3	Regional	743474.1	1015981	8.5	10.6	13	9.7	A984P/A398Q	9.28%	
10/13/1997	SEAD-12	3	Regional	743482.8	1015681	6.5	8.7	9.5	9.7	A984P/A398Q	-10.31%	
10/13/1997	SEAD-12	3	Regional	743495.9	1015381	8	8.9	9.8	9.7	A984P/A398Q	-8.25%	
10/13/1997	SEAD-12	3	Regional	743500.3	1015281	7.5	9.1	10	9.7	A984P/A398Q	-6.19%	
10/13/1997	SEAD-12	3	Regional	743504.7	1015181	7.5	9.1	10	9.7	A984P/A398Q	-6.19%	
10/13/1997	SEAD-12	3	Regional	743509.1	1015081	8	9.9	10	9.7	A984P/A398Q	2.06%	
10/13/1997	SEAD-12	3	Regional	743566.5	1016055	6	8	9	9.7	A984P/A398Q	-17.53%	
10/13/1997	SEAD-12	3	Regional	743569.6	1015985	8	9	10	9.7	A984P/A398Q	-7.22%	
10/13/1997	SEAD-12	3	Regional	743573.9	1015885	7	9.3	10.2	9.7	A984P/A398Q	-4.12%	
10/13/1997	SEAD-12	3	Regional	743578.3	1015785	7	9.2	10	9.7	A984P/A398Q	-5.15%	
10/13/1997	SEAD-12	3	Regional	743587.1	1015685	6.5	7.8	8.8	9.7	A984P/A398Q	-19.59%	Ashpalt
10/13/1997	SEAD-12	3	Regional	743591.4	1015485	6.5	7.6	8.3	9.7	A984P/A398Q	-21.65%	In grass adjacent to B 810's last line
10/13/1997	SEAD-12	3	Regional	743595.8	1015385	6	8.8	11	9.7	A984P/A398Q	-9.28%	Asphalt 3830-3855 adjacent to line
10/13/1997	SEAD-12	3	Regional	743600.2	1015286	8	9.3	10.2	9.7	A984P/A398Q	-4.12%	on asphalt from 3750
10/13/1997	SEAD-12	3	Regional	743604.6	1015186	8.4	9.4	10.5	9.7	A984P/A398Q	-3.09%	
10/13/1997	SEAD-12	3	Regional	743608.9	1015086	8.5	10	11.5	9.7	A984P/A398Q	3.09%	
10/13/1997	SEAD-12	3	Regional	743516.6	1016053	7.2	8.2	10	9.9	***A945P/A378Q***	-17.17%	
10/13/1997	SEAD-12	3	Regional	743519.6	1015983	7.8	9.7	11.2	9.9	***A945P/A378Q***	-2.02%	
10/13/1997	SEAD-12	3	Regional	743524	1015883	7.5	9.5	11.5	9.9	***A945P/A378Q***	-4.04%	
10/13/1997	SEAD-12	3	Regional	743528.2	1015788	5.8	9	10.2	9.9	***A945P/A378Q***	-9.09%	
10/13/1997	SEAD-12	3	Regional	743533.2	1015673	6	8.1	9.2	9.9	***A945P/A378Q***	-18.18%	4080-4110 Pavement
10/13/1997	SEAD-12	3	Regional	743535.6	1015718	4.8	8.2	9.5	9.9	***A945P/A378Q***	-17.17%	
10/13/1997	SEAD-12	3	Regional	743547	1015358	8	9.1	11	9.9	***A945P/A378Q***	-8.08%	
10/13/1997	SEAD-12	3	Regional	743550.3	1015283	7.2	9.1	10.2	9.9	***A945P/A378Q***	-8.08%	
10/13/1997	SEAD-12	3	Regional	743554.6	1015183	7.8	9.4	10.5	9.9	***A945P/A378Q***	-5.05%	
10/13/1997	SEAD-12	3	Regional	743559	1015084	8.2	9.5	11.8	9.9	***A945P/A378Q***	-4.04%	
10/13/1997	SEAD-12	3	Regional	743616.5	1016057	5.5	8.1	9.2	9.9	***A945P/A378Q***	-18.18%	
10/13/1997	SEAD-12	3	Regional	743619.6	1015987	6.2	8.6	9.8	9.9	***A945P/A378Q***	-13.13%	
10/13/1997	SEAD-12	3	Regional	743623.9	1015887	7.2	9.5	11	9.9	***A945P/A378Q***	-4.04%	
10/13/1997	SEAD-12	3	Regional	743628.3	1015787	5.2	9	12.2	9.9	***A945P/A378Q***	-9.09%	
10/13/1997	SEAD-12	3	Regional	743632.7	1015687	5	8.7	9.8	9.9	***A945P/A378Q***	-12.12%	4080-4110 Pavement
10/13/1997	SEAD-12	3	Regional	743642.8	1015458	4.8	8.2	9.8	9.9	***A945P/A378Q***	-17.17%	
10/13/1997	SEAD-12	3	Regional	743645.8	1015388	7.8	9.5	11.2	9.9	***A945P/A378Q***	-4.04%	3835-4000 Pavement
10/13/1997	SEAD-12	3	Regional	743650.2	1015288	8	9.7	10.5	9.9	***A945P/A378Q***	-2.02%	
10/13/1997	SEAD-12	3	Regional	743654.6	1015188	7.2	9.8	11.2	9.9	***A945P/A378Q***	-1.01%	
10/14/1997	SEAD-12	3	Regional	743658.9	1015088	7.8	9.8	10.8	9.6	***A945P/A378Q***	2.08%	
10/14/1997	SEAD-12	3	Regional	743666.4	1016059	6	8.2	9	9.6	A984P/A398Q	-14.58%	
10/14/1997	SEAD-12	3	Regional	743669.5	1015989	7.5	9.2	10.5	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	743673.9	1015889	7.5	9	9.8	9.6	A984P/A398Q	-6.25%	Machine Gun Bunker 4365'
10/14/1997	SEAD-12	3	Regional	743678.3	1015789	7.3	9.2	11	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	743683.3	1015675	7	8.7	10	9.6	A984P/A398Q	-9.38%	Asphalt Road @ 4100'
10/14/1997	SEAD-12	3	Regional	743692.9	1015455	7	8.9	11	9.6	A984P/A398Q	-7.29%	Bldg 807 & asphalt
10/14/1997	SEAD-12	3	Regional	743695.8	1015390	7	9.5	11	9.6	A984P/A398Q	-1.04%	tp 3835
10/14/1997	SEAD-12	3	Regional	743700.1	1015290	8	9.9	12	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743704.5	1015190	8.5	9.9	11	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743708.9	1015090	8.5	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/14/1997	SEAD-12	3	Regional	743766.3	1016064	5.5	8.9	10	9.6	A984P/A398Q	-7.29%	
10/14/1997	SEAD-12	3	Regional	743769.4	1015994	8.8	9.9	11.5	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743773.8	1015894	8.5	9.5	11	9.6	A984P/A398Q	-1.04%	
10/14/1997	SEAD-12	3	Regional	743778.1	1015794	7.5	8.8	9.5	9.6	A984P/A398Q	-8.33%	
10/14/1997	SEAD-12	3	Regional	743792.4	1015469	6.5	8.9	9.8	9.6	A984P/A398Q	-7.29%	
10/14/1997	SEAD-12	3	Regional	743795.6	1015394	9	10.1	11.5	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	743800	1015294	8.5	9.6	11	9.6	A984P/A398Q	0.00%	
10/14/1997	SEAD-12	3	Regional	743804.4	1015194	8.5	9.9	11	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743808.8	1015095	7.5	9.8	12.5	9.7	A984P/A398Q	1.03%	
10/14/1997	SEAD-12	3	Regional	743716.4	1016061	5.8	8.2	10.2	9.7	***A945P/A378Q***	-15.46%	
10/14/1997	SEAD-12	3	Regional	743719.4	1015991	7.8	9.3	12	9.7	***A945P/A378Q***	-4.12%	
10/14/1997	SEAD-12	3	Regional	743723.8	1015892	6.8	9.3	11.8	9.7	***A945P/A378Q***	-4.12%	
10/14/1997	SEAD-12	3	Regional	743728.2	1015792	5.2	8.8	10.2	9.7	***A945P/A378Q***	-9.28%	
10/14/1997	SEAD-12	3	Regional	743742.4	1015467	5.8	8	11.2	9.7	***A945P/A378Q***	-17.53%	
10/14/1997	SEAD-12	3	Regional	743745.7	1015392	8.5	10.4	12.8	9.7	***A945P/A378Q***	7.22%	3850-4100 pavement
10/14/1997	SEAD-12	3	Regional	743750.1	1015292	7.5	9.5	11.2	9.7	***A945P/A378Q***	-2.06%	
10/14/1997	SEAD-12	3	Regional	743754.4	1015192	7.8	9.9	11.5	9.7	***A945P/A378Q***	2.06%	
10/14/1997	SEAD-12	3	Regional	743758.8	1015092	8	9.7	11.2	9.7	***A945P/A378Q***	0.00%	
10/14/1997	SEAD-12	3	Regional	743816.3	1016066	5.5	9.2	10.8	9.7	***A945P/A378Q***	-5.15%	
10/14/1997	SEAD-12	3	Regional	743819.3	1015996	8	9.9	10.8	9.7	***A945P/A378Q***	2.06%	
10/14/1997	SEAD-12	3	Regional	743823.7	1015896	7.8	9.6	11	9.7	***A945P/A378Q***	-1.03%	
10/14/1997	SEAD-12	3	Regional	743828.1	1015796	5.5	8.9	9.7	9.7	***A945P/A378Q***	-8.25%	
10/14/1997	SEAD-12	3	Regional	743842	1015478	5.2	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	743845.6	1015396	7.5	9.9	10.5	9.7	***A945P/A378Q***	2.06%	3865-4100 pavement
10/14/1997	SEAD-12	3	Regional	743850	1015296	7.8	9.5	10.8	9.7	***A945P/A378Q***	-2.06%	
10/14/1997	SEAD-12	3	Regional	743854.4	1015197	7.5	9.8	11.5	9.7	***A945P/A378Q***	1.03%	
10/14/1997	SEAD-12	3	Regional	743858.8	1015097	7.8	10.1	12.5	9.6	***A945P/A378Q***	5.21%	
10/14/1997	SEAD-12	3	Regional	743866.3	1016068	7	8.5	10.5	9.6	A984P/A398Q	-11.46%	
10/14/1997	SEAD-12	3	Regional	743869.3	1015998	8	9.8	11	9.6	A984P/A398Q	2.08%	
10/14/1997	SEAD-12	3	Regional	743873.7	1015898	7	9.4	11.5	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	743878.1	1015798	6.5	9.7	11	9.6	A984P/A398Q	1.04%	
10/14/1997	SEAD-12	3	Regional	743882.4	1015698	7	9	11.5	9.6	A984P/A398Q	-6.25%	Asphalt Road 4100-4070
10/14/1997	SEAD-12	3	Regional	743891.2	1015498	8	9.3	10.2	9.6	A984P/A398Q	-3.12%	Bld #825 @ 4000
10/14/1997	SEAD-12	3	Regional	743895.6	1015399	8.5	9.9	11.5	9.6	A984P/A398Q	3.13%	Asphalt to 3880
10/14/1997	SEAD-12	3	Regional	743899.9	1015299	8	9.5	11	9.6	A984P/A398Q	-1.04%	
10/14/1997	SEAD-12	3	Regional	743904.3	1015199	8.5	10	11.5	9.6	A984P/A398Q	4.17%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing		(kcpm)			(s/n)		
10/14/1997	SEAD-12	3	Regional	743908.7	1015099	8.5	10.1	12	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	743966.1	1016072	7	9.5	10.5	9.6	A984P/A398Q	-1.04%	
10/14/1997	SEAD-12	3	Regional	743969.2	1016002	8	9.9	11	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743973.6	1015902	0.5	9.2	11.2	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	743977.9	1015803	7.5	9.4	11	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	743982.3	1015703	8	9.5	11.5	9.6	A984P/A398Q	-1.04%	
10/14/1997	SEAD-12	3	Regional	743986.7	1015603	8.5	9.6	11	9.6	A984P/A398Q	0.00%	
10/14/1997	SEAD-12	3	Regional	743991.1	1015503	8	9.8	11.5	9.6	A984P/A398Q	2.08%	
10/14/1997	SEAD-12	3	Regional	743995.4	1015403	9	9.9	12.5	9.6	A984P/A398Q	3.13%	
10/14/1997	SEAD-12	3	Regional	743999.8	1015303	8	10.1	12	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	744004.2	1015203	8.5	10.3	12	9.6	A984P/A398Q	7.29%	
10/14/1997	SEAD-12	3	Regional	744008.6	1015103	9	10.1	12	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	743916.2	1016070	6.2	8.5	10	9.7	***A945P/A378Q***	-12.37%	
10/14/1997	SEAD-12	3	Regional	743919.3	1016000	7.5	10.1	11.8	9.7	***A945P/A378Q***	4.12%	
10/14/1997	SEAD-12	3	Regional	743923.6	1015900	6.8	9.7	11.2	9.7	***A945P/A378Q***	0.00%	
10/14/1997	SEAD-12	3	Regional	743928	1015800	5.2	9.3	11.5	9.7	***A945P/A378Q***	-4.12%	
10/14/1997	SEAD-12	3	Regional	743932.4	1015700	5.2	9.1	12.2	9.7	***A945P/A378Q***	-6.19%	
10/14/1997	SEAD-12	3	Regional	743936.8	1015601	7.8	9.2	10.5	9.7	***A945P/A378Q***	-5.15%	4098-4068' Pavement
10/14/1997	SEAD-12	3	Regional	743941.1	1015501	7.8	9.2	10.2	9.7	***A945P/A378Q***	-5.15%	
10/14/1997	SEAD-12	3	Regional	743945.5	1015401	7.5	9.7	11.2	9.7	***A945P/A378Q***	0.00%	
10/14/1997	SEAD-12	3	Regional	743949.9	1015301	8	9.8	11	9.7	***A945P/A378Q***	1.03%	
10/14/1997	SEAD-12	3	Regional	743954.3	1015201	8	9.9	11.2	9.7	***A945P/A378Q***	2.06%	
10/14/1997	SEAD-12	3	Regional	743958.6	1015101	8.2	10	10.8	9.7	***A945P/A378Q***	3.09%	
10/14/1997	SEAD-12	3	Regional	744016.1	1016075	5.8	9.1	10.8	9.7	***A945P/A378Q***	-6.19%	
10/14/1997	SEAD-12	3	Regional	744019.1	1016005	7.8	9.6	11.5	9.7	***A945P/A378Q***	-1.03%	
10/14/1997	SEAD-12	3	Regional	744023.5	1015905	8.2	10.2	12	9.7	***A945P/A378Q***	5.15%	
10/14/1997	SEAD-12	3	Regional	744027.9	1015805	5.2	9.6	11	9.7	***A945P/A378Q***	-1.03%	
10/14/1997	SEAD-12	3	Regional	744032.3	1015705	5.5	9.4	10.5	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	744036.6	1015605	7.5	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	744041	1015505	8.2	9.7	11.2	9.7	***A945P/A378Q***	0.00%	
10/14/1997	SEAD-12	3	Regional	744045.4	1015405	7.8	9.6	10.8	9.7	***A945P/A378Q***	-1.03%	
10/14/1997	SEAD-12	3	Regional	744049.8	1015305	7.5	10	10.8	9.7	***A945P/A378Q***	3.09%	
10/14/1997	SEAD-12	3	Regional	744054.2	1015205	8.2	10.2	11.5	9.7	***A945P/A378Q***	5.15%	
10/14/1997	SEAD-12	3	Regional	744058.6	1015105	8.5	9.9	12	9.7	***A945P/A378Q***	2.06%	
10/14/1997	SEAD-12	3	Regional	743966.1	1016072	7	9.4	10.5	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	743969.2	1016002	8.5	9.7	11.5	9.7	***A945P/A378Q***	0.00%	
10/14/1997	SEAD-12	3	Regional	743973.6	1015902	8.8	9.8	12	9.7	***A945P/A378Q***	1.03%	
10/14/1997	SEAD-12	3	Regional	743977.9	1015803	9	10	12	9.7	***A945P/A378Q***	3.09%	
10/14/1997	SEAD-12	3	Regional	743982.3	1015703	6.5	8.5	10.5	9.7	***A945P/A378Q***	-12.37%	
10/14/1997	SEAD-12	3	Regional	743986.7	1015603	8.5	9.4	11	9.7	***A945P/A378Q***	-3.09%	Asphalt @4050 to 4020
10/14/1997	SEAD-12	3	Regional	743991.1	1015503	8	9.4	11	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	743995.4	1015403	7.5	9	9.8	9.7	***A945P/A378Q***	-7.22%	
10/14/1997	SEAD-12	3	Regional	743999.8	1015303	8	9.8	13.5	9.7	***A945P/A378Q***	1.03%	
10/14/1997	SEAD-12	3	Regional	744004.2	1015203	8.5	9.9	11.5	9.7	***A945P/A378Q***	2.06%	High 13500 in "J" area stream
10/14/1997	SEAD-12	3	Regional	744008.6	1015103	8	9.9	11.5	9.7	***A945P/A378Q***	2.06%	
10/14/1997	SEAD-12	3	Regional	744066.1	1016077	6.5	9.2	10	9.7	***A945P/A378Q***	-5.15%	
10/14/1997	SEAD-12	3	Regional	744069.1	1016007	8.5	9.4	11	9.7	***A945P/A378Q***	-3.09%	
10/14/1997	SEAD-12	3	Regional	744073.5	1015907	7.5	9.3	10.5	9.7	***A945P/A378Q***	-4.12%	
10/14/1997	SEAD-12	3	Regional	744077.9	1015807	8	9.2	10.2	9.7	***A945P/A378Q***	-5.15%	
10/14/1997	SEAD-12	3	Regional	744082.3	1015707	8	9.1	10.5	9.7	***A945P/A378Q***	-6.19%	
10/14/1997	SEAD-12	3	Regional	744086.6	1015607	6	8.7	9.8	9.7	***A945P/A378Q***	-10.31%	
10/14/1997	SEAD-12	3	Regional	744091	1015507	8.5	9.3	11	9.7	***A945P/A378Q***	-4.12%	3945' Asphalt to 3985
10/14/1997	SEAD-12	3	Regional	744095.4	1015407	8	9.5	11	9.7	***A945P/A378Q***	-2.06%	
10/14/1997	SEAD-12	3	Regional	744099.8	1015307	9	10	13	9.7	***A945P/A378Q***	3.09%	
10/14/1997	SEAD-12	3	Regional	744104.1	1015208	9	10.2	12	9.7	***A945P/A378Q***	5.15%	High in "J" stream
10/14/1997	SEAD-12	3	Regional	744108.5	1015108	8.5	9.8	11.5	9.6	***A945P/A378Q***	2.08%	
10/14/1997	SEAD-12	3	Regional	744116	1016079	7.2	8.6	10.5	9.6	A984P/A398Q	-10.42%	
10/14/1997	SEAD-12	3	Regional	744119.1	1016009	8	10.4	12.2	9.6	A984P/A398Q	8.33%	
10/14/1997	SEAD-12	3	Regional	744123.4	1015909	6.8	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744127.8	1015809	7.5	9.2	10.5	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744132.2	1015709	5.5	9	10.2	9.6	A984P/A398Q	-6.25%	
10/14/1997	SEAD-12	3	Regional	744136.6	1015609	5.8	8.9	11	9.6	A984P/A398Q	-7.29%	
10/14/1997	SEAD-12	3	Regional	744140.9	1015509	7.5	9.4	10.8	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	744145.3	1015410	8.2	9.2	11	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744149.7	1015310	7.8	9.7	11.8	9.6	A984P/A398Q	1.04%	
10/14/1997	SEAD-12	3	Regional	744154.1	1015210	8.5	10.1	10.8	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	744158.4	1015110	7.8	9.8	11.2	9.6	A984P/A398Q	2.08%	
10/14/1997	SEAD-12	3	Regional	744165.9	1016081	7.2	8.6	10.5	9.6	A984P/A398Q	-10.42%	
10/14/1997	SEAD-12	3	Regional	744169	1016011	8	10.4	12.2	9.6	A984P/A398Q	8.33%	
10/14/1997	SEAD-12	3	Regional	744173.4	1015911	6.8	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744177.8	1015811	7.5	9.2	10.5	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744182.1	1015711	5.5	9	10.2	9.6	A984P/A398Q	-6.25%	
10/14/1997	SEAD-12	3	Regional	744186.5	1015612	5.8	8.9	11	9.6	A984P/A398Q	-7.29%	4020-3985' Pavement
10/14/1997	SEAD-12	3	Regional	744190.9	1015512	7.5	9.4	10.8	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	744195.3	1015412	8.2	9.2	11	9.6	A984P/A398Q	-4.17%	
10/14/1997	SEAD-12	3	Regional	744199.6	1015312	7.8	9.7	11.8	9.6	A984P/A398Q	1.04%	
10/14/1997	SEAD-12	3	Regional	744204	1015212	8.5	10.1	10.8	9.6	A984P/A398Q	5.21%	
10/14/1997	SEAD-12	3	Regional	744208.4	1015112	7.8	9.8	11.2	9.6	A984P/A398Q	2.08%	
10/14/1997	SEAD-12	3	Regional	744215.9	1016083	5.2	9	10.2	9.6	A984P/A398Q	-6.25%	
10/14/1997	SEAD-12	3	Regional	744218.9	1016013	7.8	9.5	10.5	9.6	A984P/A398Q	-1.04%	
10/14/1997	SEAD-12	3	Regional	744223.3	1015913	8	9.4	11	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	744227.7	1015814	6.8	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	744232.1	1015714	7.5	9	10.5	9.6	A984P/A398Q	-6.25%	
10/14/1997	SEAD-12	3	Regional	744236.4	1015614	4.8	9.1	10.8	9.6	A984P/A398Q	-5.21%	
10/14/1997	SEAD-12	3	Regional	744240.8	1015514	5	9.3	10.2	9.6	A984P/A398Q	-3.12%	
10/14/1997	SEAD-12	3	Regional	744245.2	1015414	7.2	9.3	10	9.6	A984P/A398Q	-3.12%	3887-3932 pavement
10/14/1997	SEAD-12	3	Regional	744249.6	1015314	8.8	9.4	11	9.6	A984P/A398Q	-2.08%	
10/14/1997	SEAD-12	3	Regional	744253.9	1015214	8.2	10.1	10.8	9.6	A984P/A398Q	5.21%	
10/15/1997	SEAD-12	3	Regional	744258.3	1015114	7.8	9.8	11.2	9.6	A984P/A398Q	2.08%	
10/15/1997	SEAD-12	3	Regional	744265.9	1016085	6.5	9.1	10	9.6	A984P/A398Q	-5.21%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument	% +/- Background	Comments
							(kcpm)			(s/n)		
10/15/1997	SEAD-12	3	Regional	744268.9	1016016	8	9.6	11	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744273.3	1015916	8.5	9.4	11.2	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744277.7	1015816	8	9.6	11	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744282.1	1015716	8	9.4	10.8	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744286.4	1015616	7.8	9.3	10	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744290.8	1015516	6	8.3	10	9.6	A984P/A398Q	-13.54%	
10/15/1997	SEAD-12	3	Regional	744315.8	1016088	5.2	8.9	10.2	9.7	***A945P/A378Q***	-8.25%	Pavement
10/15/1997	SEAD-12	3	Regional	744318.9	1016018	7.5	9.3	11.5	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744323.3	1015918	7.8	9.3	11.2	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744327.6	1015818	7.2	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/15/1997	SEAD-12	3	Regional	744332	1015718	6.8	9.3	10.5	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744336.4	1015618	7	9.3	11	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744340.8	1015518	7.5	9.3	10.5	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744345.1	1015418	7.8	9.3	10.2	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744349.5	1015318	7.2	9.7	11	9.7	***A945P/A378Q***	0.00%	
10/15/1997	SEAD-12	3	Regional	744353.9	1015218	9.8	9.2	10.5	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744358.3	1015119	7.8	9.6	11.5	9.6	***A945P/A378Q***	0.00%	
10/15/1997	SEAD-12	3	Regional	744365.8	1016090	6.5	8.9	10	9.6	A984P/A398Q	-7.29%	
10/15/1997	SEAD-12	3	Regional	744368.8	1016020	7	8.9	9.8	9.6	A984P/A398Q	-7.29%	
10/15/1997	SEAD-12	3	Regional	744373.2	1015920	8.5	9.6	10.5	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744377.6	1015820	8	9.5	10.8	9.6	A984P/A398Q	-1.04%	
10/15/1997	SEAD-12	3	Regional	744381.9	1015720	8.5	9.3	11.2	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744386.3	1015620	8.5	9.6	11	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744390.7	1015520	7.5	9.1	10.5	9.6	A984P/A398Q	-5.21%	
10/15/1997	SEAD-12	3	Regional	744395.1	1015420	7.8	9.2	10	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744399.4	1015321	8	9.4	10.5	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744403.8	1015221	8	9.6	11	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744408.2	1015121	8.5	9.7	11	9.7	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744415.7	1016092	5.5	8.5	10	9.7	***A945P/A378Q***	-12.37%	
10/15/1997	SEAD-12	3	Regional	744418.8	1016022	7.8	9.2	11.2	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744423.1	1015922	7.2	9.3	10.2	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744427.5	1015822	7.5	9.6	11.5	9.7	***A945P/A378Q***	-1.03%	
10/15/1997	SEAD-12	3	Regional	744431.9	1015722	7.2	9.3	10.2	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744436.3	1015622	7.8	9.4	11	9.7	***A945P/A378Q***	-3.09%	
10/15/1997	SEAD-12	3	Regional	744440.6	1015523	7	9.2	10.2	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744445	1015423	8	9.2	10.5	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744449.4	1015323	7.5	9.5	11	9.7	***A945P/A378Q***	-2.06%	
10/15/1997	SEAD-12	3	Regional	744453.8	1015223	7	9.5	10.8	9.7	***A945P/A378Q***	-2.06%	
10/15/1997	SEAD-12	3	Regional	744458.1	1015123	7.8	9.5	10.2	9.6	***A945P/A378Q***	-1.04%	
10/15/1997	SEAD-12	3	Regional	744465.6	1016094	6.5	8.2	10	9.6	A984P/A398Q	-14.58%	
10/15/1997	SEAD-12	3	Regional	744468.8	1016024	8.5	9.6	10.5	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744473.1	1015924	7.5	9.3	10.5	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744477.5	1015824	8	9.5	10.5	9.6	A984P/A398Q	-1.04%	
10/15/1997	SEAD-12	3	Regional	744481.9	1015725	8	9.3	10	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744486.3	1015625	8	9.2	10	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744490.6	1015525	8	9.2	9.8	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744495	1015425	8.5	9.4	10.5	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744499.4	1015325	7.5	9.1	10	9.6	A984P/A398Q	-5.21%	
10/15/1997	SEAD-12	3	Regional	744503.8	1015225	8	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744508.1	1015125	8.5	9.7	10.5	9.7	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744515.6	1016096	5.8	8.8	10.2	9.7	***A945P/A378Q***	-9.28%	
10/15/1997	SEAD-12	3	Regional	744518.7	1016026	6.8	9.7	11	9.7	***A945P/A378Q***	0.00%	
10/15/1997	SEAD-12	3	Regional	744523.1	1015927	8	9.5	10.8	9.7	***A945P/A378Q***	-2.06%	
10/15/1997	SEAD-12	3	Regional	744527.4	1015827	7.8	9.5	10.8	9.7	***A945P/A378Q***	-2.06%	
10/15/1997	SEAD-12	3	Regional	744531.8	1015727	6.8	9.3	10.2	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744536.2	1015627	7.5	9.2	10.8	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744540.6	1015527	7.8	9.3	10.8	9.7	***A945P/A378Q***	-4.12%	
10/15/1997	SEAD-12	3	Regional	744544.9	1015427	8	9.4	11	9.7	***A945P/A378Q***	-3.09%	
10/15/1997	SEAD-12	3	Regional	744549.3	1015327	7.8	9.2	10	9.7	***A945P/A378Q***	-5.15%	
10/15/1997	SEAD-12	3	Regional	744553.7	1015227	8	9.4	10.8	9.7	***A945P/A378Q***	-3.09%	
10/15/1997	SEAD-12	3	Regional	744558.1	1015127	7.5	9.4	10.5	9.6	***A945P/A378Q***	-2.08%	
10/15/1997	SEAD-12	3	Regional	744565.6	1016099	8	9.1	10	9.6	A984P/A398Q	-5.21%	
10/15/1997	SEAD-12	3	Regional	744568.6	1016029	6	8.2	10	9.6	A984P/A398Q	-14.58%	
10/15/1997	SEAD-12	3	Regional	744573	1015929	8	9.9	11.5	9.6	A984P/A398Q	3.13%	
10/15/1997	SEAD-12	3	Regional	744577.4	1015829	8.5	9.5	10.5	9.6	A984P/A398Q	-1.04%	
10/15/1997	SEAD-12	3	Regional	744581.8	1015729	8	9.2	10	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744586.1	1015629	8	9.2	10	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744590.5	1015529	8.5	9.2	10.5	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744594.9	1015429	8.5	9.2	11.5	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744599.3	1015329	8	9.4	10.5	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744603.6	1015229	8	9.4	10	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744608	1015130	8	9.3	10	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744615.5	1016101	4.5	8.3	10.5	9.6	***A945P/A378Q***	-13.54%	
10/15/1997	SEAD-12	3	Regional	744618.6	1016031	5.5	8.1	9.5	9.6	***A945P/A378Q***	-15.63%	
10/15/1997	SEAD-12	3	Regional	744622.9	1015931	6.8	9.7	10.5	9.6	***A945P/A378Q***	1.04%	
10/15/1997	SEAD-12	3	Regional	744627.3	1015831	7.8	9.8	10.8	9.6	***A945P/A378Q***	2.08%	
10/15/1997	SEAD-12	3	Regional	744631.7	1015731	8	9.4	12	9.6	***A945P/A378Q***	-2.08%	
10/15/1997	SEAD-12	3	Regional	744636.1	1015631	7.8	9.3	10.5	9.6	***A945P/A378Q***	-3.12%	
10/15/1997	SEAD-12	3	Regional	744640.4	1015531	7.5	9.1	10.2	9.6	***A945P/A378Q***	-5.21%	
10/15/1997	SEAD-12	3	Regional	744644.8	1015431	7.8	9.5	10.8	9.6	***A945P/A378Q***	-1.04%	
10/15/1997	SEAD-12	3	Regional	744649.2	1015332	8	9.6	10.2	9.6	***A945P/A378Q***	0.00%	
10/15/1997	SEAD-12	3	Regional	744653.6	1015232	8	9.3	10.5	9.6	***A945P/A378Q***	-3.12%	
10/15/1997	SEAD-12	3	Regional	744657.9	1015132	7.8	9.4	10.2	9.6	***A945P/A378Q***	-2.08%	
10/15/1997	SEAD-12	3	Regional	744665.4	1016103	6	9.4	10.5	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744668.5	1016033	7	9.6	11.5	9.6	A984P/A398Q	0.00%	
10/15/1997	SEAD-12	3	Regional	744672.9	1015933	7	8.9	10	9.6	A984P/A398Q	-7.29%	
10/15/1997	SEAD-12	3	Regional	744677.3	1015833	7	9.2	10	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744681.6	1015733	8	9.4	10	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744686	1015633	8	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744690.4	1015534	7.5	9	10	9.6	A984P/A398Q	-6.25%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument	% +/- Background	Comments
							(kcpm)			(s/n)		
10/15/1997	SEAD-12	3	Regional	744694.8	1015434	7.5	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744699.2	1015334	8	9.3	10.5	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744703.6	1015234	7.8	9.4	10.5	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744707.9	1015134	7.5	9.4	10.2	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744765.4	1016107	6.5	9.3	10.5	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744768.4	1016037	8	9.8	11	9.6	A984P/A398Q	2.08%	
10/15/1997	SEAD-12	3	Regional	744772.8	1015937	6	8.1	9.4	9.6	A984P/A398Q	-15.63%	
10/15/1997	SEAD-12	3	Regional	744777.2	1015838	6	8	9	9.6	A984P/A398Q	-16.67%	
10/15/1997	SEAD-12	3	Regional	744781.6	1015738	6.5	8.3	9	9.6	A984P/A398Q	-13.54%	
10/15/1997	SEAD-12	3	Regional	744785.9	1015638	6.8	8.1	9	9.6	A984P/A398Q	-15.63%	
10/15/1997	SEAD-12	3	Regional	744790.3	1015538	7	8.5	9.5	9.6	A984P/A398Q	-11.46%	
10/15/1997	SEAD-12	3	Regional	744794.7	1015438	7	8.6	10	9.6	A984P/A398Q	-10.42%	
10/15/1997	SEAD-12	3	Regional	744799.1	1015338	8	9.3	10.2	9.6	A984P/A398Q	-3.12%	
10/15/1997	SEAD-12	3	Regional	744803.4	1015238	8	9.4	11	9.6	A984P/A398Q	-2.08%	
10/15/1997	SEAD-12	3	Regional	744807.8	1015138	7.5	9.2	10.2	9.6	A984P/A398Q	-4.17%	
10/15/1997	SEAD-12	3	Regional	744715.4	1016105	5.2	8.9	10.2	9.6	***A945P/A378Q***	-7.29%	
10/15/1997	SEAD-12	3	Regional	744718.5	1016035	7	9.8	11	9.6	***A945P/A378Q***	2.08%	
10/15/1997	SEAD-12	3	Regional	744722.9	1015935	5.2	8.4	9.5	9.6	***A945P/A378Q***	-12.50%	
10/15/1997	SEAD-12	3	Regional	744727.3	1015835	6.8	8	9.8	9.6	***A945P/A378Q***	-16.67%	
10/15/1997	SEAD-12	3	Regional	744731.6	1015735	7.2	8.7	11	9.6	***A945P/A378Q***	-9.38%	
10/15/1997	SEAD-12	3	Regional	744736	1015636	5.8	8.8	10	9.6	***A945P/A378Q***	-8.33%	
10/15/1997	SEAD-12	3	Regional	744740.4	1015536	6.5	8.2	9.8	9.6	***A945P/A378Q***	-14.58%	
10/15/1997	SEAD-12	3	Regional	744744.8	1015436	6.8	9	10.2	9.6	***A945P/A378Q***	-6.25%	
10/15/1997	SEAD-12	3	Regional	744749.1	1015336	7.2	9.3	10	9.6	***A945P/A378Q***	-3.12%	
10/15/1997	SEAD-12	3	Regional	744753.5	1015236	7	9.4	10.5	9.6	***A945P/A378Q***	-2.08%	
10/15/1997	SEAD-12	3	Regional	744757.9	1015136	6.5	8.9	10.5	9.6	***A945P/A378Q***	-7.29%	
10/15/1997	SEAD-12	3	Regional	744815.3	1016110	5.8	8.9	10.5	9.6	***A945P/A378Q***	-7.29%	
10/15/1997	SEAD-12	3	Regional	744818.4	1016040	7.8	9.7	11.8	9.6	***A945P/A378Q***	1.04%	
10/15/1997	SEAD-12	3	Regional	744822.8	1015940	8	10	12.2	9.6	***A945P/A378Q***	4.17%	
10/15/1997	SEAD-12	3	Regional	744827.1	1015840	8	10	11.8	9.6	***A945P/A378Q***	4.17%	
10/15/1997	SEAD-12	3	Regional	744831.5	1015740	7.2	9.4	11.5	9.6	***A945P/A378Q***	-2.08%	
10/15/1997	SEAD-12	3	Regional	744835.9	1015640	6.8	9.8	11.5	9.6	***A945P/A378Q***	2.08%	
10/15/1997	SEAD-12	3	Regional	744840.3	1015540	8	9.9	11	9.6	***A945P/A378Q***	3.13%	
10/15/1997	SEAD-12	3	Regional	744844.6	1015440	7.8	9.7	10.8	9.6	***A945P/A378Q***	1.04%	
10/15/1997	SEAD-12	3	Regional	744849	1015340	7	9.2	10.5	9.6	***A945P/A378Q***	-4.17%	
10/15/1997	SEAD-12	3	Regional	744853.4	1015240	6.8	9.3	10	9.6	***A945P/A378Q***	-3.12%	
10/15/1997	SEAD-12	3	Regional	744857.8	1015140	7.2	8.9	9.8	9.6	***A945P/A378Q***	-7.29%	
10/21/1997	SEAD-12	3	Regional	744865.3	1016112	6	8.5	9.5	9.5	A984P/A398Q	-10.53%	
10/21/1997	SEAD-12	3	Regional	744868.3	1016042	8	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744872.7	1015942	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/21/1997	SEAD-12	3	Regional	744877.1	1015842	8	9.4	11.2	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	3	Regional	744881.4	1015742	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	744885.8	1015642	8	9.3	11	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744890.2	1015542	8.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/21/1997	SEAD-12	3	Regional	744894.6	1015442	8.5	9.4	11	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	3	Regional	744898.9	1015342	8	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744903.3	1015243	8	9.3	11	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744907.8	1015143	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/21/1997	SEAD-12	3	Regional	744965.2	1016116	6.5	9.1	10.5	9.5	A984P/A398Q	-4.21%	
10/21/1997	SEAD-12	3	Regional	744968.3	1016046	8	9	11	9.5	A984P/A398Q	-5.26%	
10/21/1997	SEAD-12	3	Regional	744972.6	1015946	8	9.2	11	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	744977	1015846	8	9.3	11.5	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744981.4	1015746	8.5	9.3	11.5	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	744985.8	1015647	8	8.9	10.5	9.5	A984P/A398Q	-6.32%	
10/21/1997	SEAD-12	3	Regional	744990.1	1015547	7.8	9.1	11	9.5	A984P/A398Q	-4.21%	
10/21/1997	SEAD-12	3	Regional	744994.5	1015447	8	9	11	9.5	A984P/A398Q	-5.26%	
10/21/1997	SEAD-12	3	Regional	744998.9	1015347	8	8.9	10.5	9.5	A984P/A398Q	-6.32%	
10/21/1997	SEAD-12	3	Regional	745003.3	1015247	8	8.9	10.5	9.5	A984P/A398Q	-6.32%	
10/21/1997	SEAD-12	3	Regional	745007.6	1015147	8	8.9	10.5	9.5	A984P/A398Q	-6.32%	
10/21/1997	SEAD-12	3	Regional	744915.3	1016114	7.2	8.5	10	9.5	***A945P/A378Q***	-10.53%	
10/21/1997	SEAD-12	3	Regional	744918.3	1016044	7.8	9.4	11.2	9.5	***A945P/A378Q***	-1.05%	
10/21/1997	SEAD-12	3	Regional	744922.7	1015944	7.5	9.5	10.8	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	3	Regional	744927.1	1015844	8.2	9.5	12.5	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	3	Regional	744931.4	1015744	7.8	9.5	11.2	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	3	Regional	744935.8	1015644	6.8	9.2	10.5	9.5	***A945P/A378Q***	-3.16%	
10/21/1997	SEAD-12	3	Regional	744940.2	1015544	7.2	9	10.2	9.5	***A945P/A378Q***	-5.26%	
10/21/1997	SEAD-12	3	Regional	744944.6	1015445	6.5	8.9	10.2	9.5	***A945P/A378Q***	-6.32%	
10/21/1997	SEAD-12	3	Regional	744948.9	1015345	7.5	8.9	10.2	9.5	***A945P/A378Q***	-6.32%	
10/21/1997	SEAD-12	3	Regional	744953.3	1015245	6.8	9	10.5	9.5	***A945P/A378Q***	-5.26%	
10/21/1997	SEAD-12	3	Regional	744957.7	1015145	7.2	9.1	11	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745015.1	1016118	5	8.9	10.5	9.5	***A945P/A378Q***	-6.32%	
10/21/1997	SEAD-12	3	Regional	745018.2	1016048	7.5	9.3	10.2	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745022.6	1015948	7	9.3	10	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745026.9	1015849	7.5	9.3	10.2	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745031.3	1015749	6.8	9.1	10	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745035.7	1015649	7	9.1	10.5	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745040.1	1015549	6.5	9.3	10.8	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745044.4	1015449	6.8	9.1	11	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745048.8	1015349	7.2	9	10.5	9.5	***A945P/A378Q***	-5.26%	
10/21/1997	SEAD-12	3	Regional	745053.2	1015249	7.5	8.9	10.8	9.5	***A945P/A378Q***	-6.32%	
10/21/1997	SEAD-12	3	Regional	745057.6	1015149	6.8	9.1	11.5	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745068.1	1016051	7	9.1	11	9.5	A984P/A398Q	-4.21%	
10/21/1997	SEAD-12	3	Regional	745072.5	1015951	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745076.9	1015851	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745081.3	1015751	8.5	9.2	11	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745085.6	1015651	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745090	1015551	8.5	9.1	10.5	9.5	A984P/A398Q	-4.21%	
10/21/1997	SEAD-12	3	Regional	745094.4	1015451	7.5	9	10.5	9.5	A984P/A398Q	-5.26%	
10/21/1997	SEAD-12	3	Regional	745098.8	1015351	7.5	9	10.5	9.5	A984P/A398Q	-5.26%	
10/21/1997	SEAD-12	3	Regional	745103.1	1015251	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing		(kcpm)			(s/n)		
10/21/1997	SEAD-12	3	Regional	745107.5	1015151	8	8.8	10	9.5	A984P/A398Q	-7.37%	
10/21/1997	SEAD-12	3	Regional	745168.1	1016055	7	8.8	10.5	9.5	A984P/A398Q	-7.37%	
10/21/1997	SEAD-12	3	Regional	745172.4	1015955	8.5	9.4	11	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	3	Regional	745176.8	1015855	8.5	9.4	11.2	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	3	Regional	745181.2	1015755	8.5	9.4	11	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	3	Regional	745185.6	1015655	8.5	9.2	11	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745189.9	1015555	8	9.2	11	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	3	Regional	745194.3	1015455	8.5	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	745198.7	1015356	8.5	9.3	12	9.5	A984P/A398Q	-2.11%	
10/21/1997	SEAD-12	3	Regional	745203.1	1015256	8	9	11	9.5	A984P/A398Q	-5.26%	
10/21/1997	SEAD-12	3	Regional	745207.4	1015156	8	8.9	10	9.5	A984P/A398Q	-6.32%	
10/21/1997	SEAD-12	3	Regional	745115.7	1016108	5.2	8.8	10.2	9.5	***A945P/A378Q***	-7.37%	
10/21/1997	SEAD-12	3	Regional	745118.1	1016053	7	9.2	10.8	9.5	***A945P/A378Q***	-3.16%	
10/21/1997	SEAD-12	3	Regional	745122.5	1015953	7.5	9.3	11	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745126.9	1015853	7.8	9.5	10.8	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	3	Regional	745131.3	1015753	7	9.3	10.5	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745135.6	1015653	7	9.3	10.8	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745140	1015553	6.8	9.3	10.2	9.5	***A945P/A378Q***	-2.11%	
10/21/1997	SEAD-12	3	Regional	745144.4	1015453	7.2	9.1	10.8	9.5	***A945P/A378Q***	-4.21%	
10/21/1997	SEAD-12	3	Regional	745148.8	1015353	7	8.9	10	9.5	***A945P/A378Q***	-6.32%	
10/21/1997	SEAD-12	3	Regional	745153.1	1015253	7.2	10.6	13.8	9.5	***A945P/A378Q***	11.58%	
10/21/1997	SEAD-12	3	Regional	745157.5	1015154	6.5	8.8	10.2	9.5	***A945P/A378Q***	-7.37%	
10/21/1997	SEAD-12	3	Regional	745231.1	1015757	5.2	7	8.2	9.5	***A945P/A378Q***	-26.32%	
10/21/1997	SEAD-12	3	Regional	745235.5	1015657	5.8	6.9	8.5	9.5	***A945P/A378Q***	-27.37%	
10/21/1997	SEAD-12	3	Regional	745239.9	1015558	5.5	7	9.2	9.5	***A945P/A378Q***	-26.32%	
10/21/1997	SEAD-12	3	Regional	745244.3	1015458	5.8	6.8	8.8	9.5	***A945P/A378Q***	-28.42%	
10/21/1997	SEAD-12	3	Regional	745248.6	1015358	5.5	7.4	10	9.5	***A945P/A378Q***	-22.11%	
10/21/1997	SEAD-12	3	Regional	745253	1015258	5.2	6.8	9.2	9.5	***A945P/A378Q***	-28.42%	
10/21/1997	SEAD-12	3	Regional	745257.4	1015158	4.2	6.6	8	9.5	***A945P/A378Q***	-30.53%	
10/21/1997	SEAD-12	4	Regional	743113.8	1014964	9	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/21/1997	SEAD-12	4	Regional	743118.2	1014864	9	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/21/1997	SEAD-12	4	Regional	743122.6	1014764	9.5	10.5	12	9.5	A984P/A398Q	10.53%	
10/21/1997	SEAD-12	4	Regional	743126.9	1014664	8.5	10.3	11.5	9.5	A984P/A398Q	8.42%	
10/21/1997	SEAD-12	4	Regional	743131.3	1014564	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/21/1997	SEAD-12	4	Regional	743135.7	1014464	9	10.4	12	9.5	A984P/A398Q	9.47%	
10/21/1997	SEAD-12	4	Regional	743140.1	1014365	9	11.1	13	9.5	A984P/A398Q	16.84%	
10/21/1997	SEAD-12	4	Regional	743144.4	1014265	9	10.9	12.5	9.5	A984P/A398Q	14.74%	
10/21/1997	SEAD-12	4	Regional	743148.8	1014165	9	10.3	12.5	9.5	A984P/A398Q	8.42%	
10/21/1997	SEAD-12	4	Regional	743153.2	1014065	8	9.8	11	9.5	A984P/A398Q	3.16%	
10/21/1997	SEAD-12	4	Regional	743157.6	1013965	8	9.8	12	9.5	A984P/A398Q	3.16%	
10/21/1997	SEAD-12	4	Regional	743161.9	1013865	8	10.4	12	9.5	A984P/A398Q	9.47%	
10/21/1997	SEAD-12	4	Regional	743166.3	1013765	8.5	10.1	11.5	9.5	A984P/A398Q	6.32%	
10/21/1997	SEAD-12	4	Regional	743170.7	1013665	8.5	9.9	10.5	9.5	A984P/A398Q	4.21%	
10/21/1997	SEAD-12	4	Regional	743175.1	1013565	9	10.7	12	9.5	A984P/A398Q	12.63%	
10/21/1997	SEAD-12	4	Regional	743178.1	1013495	6.5	9.6	11.5	9.5	A984P/A398Q	1.05%	
10/21/1997	SEAD-12	4	Regional	743213.8	1014968	8.5	9.8	12	9.5	A984P/A398Q	3.16%	
10/21/1997	SEAD-12	4	Regional	743218.1	1014868	9	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/21/1997	SEAD-12	4	Regional	743222.5	1014769	8	9.7	10.5	9.5	A984P/A398Q	2.11%	
10/21/1997	SEAD-12	4	Regional	743226.9	1014669	8	9.5	10.5	9.5	A984P/A398Q	0.00%	
10/21/1997	SEAD-12	4	Regional	743231.3	1014569	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/21/1997	SEAD-12	4	Regional	743235.6	1014469	8.5	9.4	11	9.5	A984P/A398Q	-1.05%	
10/21/1997	SEAD-12	4	Regional	743240	1014369	8.5	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/21/1997	SEAD-12	4	Regional	743244.4	1014269	8.4	9.6	11	9.5	A984P/A398Q	1.05%	
10/21/1997	SEAD-12	4	Regional	743248.8	1014169	8.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/21/1997	SEAD-12	4	Regional	743253.1	1014069	6.5	9.2	11	9.5	A984P/A398Q	-3.16%	
10/21/1997	SEAD-12	4	Regional	743257.5	1013969	8.5	9.7	11.2	9.5	A984P/A398Q	2.11%	
10/21/1997	SEAD-12	4	Regional	743261.9	1013869	9	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/21/1997	SEAD-12	4	Regional	743266.3	1013769	8.5	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/21/1997	SEAD-12	4	Regional	743270.6	1013670	8.5	10.1	12	9.5	A984P/A398Q	6.32%	
10/21/1997	SEAD-12	4	Regional	743275	1013570	8.5	9.9	12	9.5	A984P/A398Q	4.21%	
10/21/1997	SEAD-12	4	Regional	743278.1	1013500	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/21/1997	SEAD-12	4	Regional	743163.8	1014966	8.2	10.2	11.8	9.5	***A945P/A378Q***	7.37%	
10/21/1997	SEAD-12	4	Regional	743168.1	1014866	8	10	11.5	9.5	***A945P/A378Q***	5.26%	
10/21/1997	SEAD-12	4	Regional	743172.5	1014766	7.8	9.7	11.8	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743176.9	1014666	7.5	9.7	11.8	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743181.3	1014567	7.2	9.6	12.2	9.5	***A945P/A378Q***	1.05%	
10/21/1997	SEAD-12	4	Regional	743185.6	1014467	7.8	9.7	11.2	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743190	1014367	8	10.2	11.8	9.5	***A945P/A378Q***	7.37%	
10/21/1997	SEAD-12	4	Regional	743194.4	1014267	8.2	10.4	13.2	9.5	***A945P/A378Q***	9.47%	
10/21/1997	SEAD-12	4	Regional	743198.8	1014167	8	10.3	12	9.5	***A945P/A378Q***	8.42%	
10/21/1997	SEAD-12	4	Regional	743203.1	1014067	6.2	10.1	11.5	9.5	***A945P/A378Q***	6.32%	
10/21/1997	SEAD-12	4	Regional	743207.5	1013967	8.2	10.2	11.5	9.5	***A945P/A378Q***	7.37%	
10/21/1997	SEAD-12	4	Regional	743211.9	1013867	8	9.8	12.2	9.5	***A945P/A378Q***	3.16%	
10/21/1997	SEAD-12	4	Regional	743216.3	1013767	8.5	9.8	11.5	9.5	***A945P/A378Q***	3.16%	
10/21/1997	SEAD-12	4	Regional	743220.7	1013667	7.8	9.9	10.8	9.5	***A945P/A378Q***	4.21%	
10/21/1997	SEAD-12	4	Regional	743225.1	1013567	7	9.6	11.5	9.5	***A945P/A378Q***	1.05%	
10/21/1997	SEAD-12	4	Regional	743229.4	1013468	5.8	9.5	10.8	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	4	Regional	743263.7	1014971	8	9.9	12.2	9.5	***A945P/A378Q***	4.21%	
10/21/1997	SEAD-12	4	Regional	743268.1	1014871	8.2	10.3	11.2	9.5	***A945P/A378Q***	8.42%	
10/21/1997	SEAD-12	4	Regional	743272.4	1014771	8	9.7	11.5	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743276.8	1014671	7.8	9.4	11.8	9.5	***A945P/A378Q***	-1.05%	
10/21/1997	SEAD-12	4	Regional	743281.2	1014571	7.2	9.7	11	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743285.6	1014471	7.5	9.5	11.2	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	4	Regional	743289.9	1014371	8	9.5	10.8	9.5	***A945P/A378Q***	0.00%	
10/21/1997	SEAD-12	4	Regional	743294.3	1014271	7.8	9.6	10.2	9.5	***A945P/A378Q***	1.05%	
10/21/1997	SEAD-12	4	Regional	743298.7	1014171	7.5	10.2	12.2	9.5	***A945P/A378Q***	7.37%	
10/21/1997	SEAD-12	4	Regional	743303.1	1014071	5.2	9.2	11.8	9.5	***A945P/A378Q***	-3.16%	
10/21/1997	SEAD-12	4	Regional	743307.4	1013971	8	9.7	10.8	9.5	***A945P/A378Q***	2.11%	
10/21/1997	SEAD-12	4	Regional	743311.8	1013872	8	10	11	9.5	***A945P/A378Q***	5.26%	
10/21/1997	SEAD-12	4	Regional	743316.2	1013772	7.8	9.8	11.2	9.5	***A945P/A378Q***	3.16%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background (kcpm)	Instrument (s/n)	% +/- Background	Comments
10/21/1997	SEAD-12	4	Regional	743320.6	1013672	8	9.9	12	9.5	***A945P/A378Q***	4.21%	
10/21/1997	SEAD-12	4	Regional	743324.9	1013572	6.8	10.1	11	9.5	***A945P/A378Q***	6.32%	
10/21/1997	SEAD-12	4	Regional	743328	1013502	5.5	9.3	11.2	9.5	***A945P/A378Q***	-2.11%	
10/22/1997	SEAD-12	4	Regional	743313.6	1014973	9.5	11	13.2	9.5	A984P/A398Q	15.79%	
10/22/1997	SEAD-12	4	Regional	743318	1014873	9	10.3	12.5	9.5	A984P/A398Q	8.42%	
10/22/1997	SEAD-12	4	Regional	743322.4	1014773	9	9.9	12	9.5	A984P/A398Q	4.21%	
10/22/1997	SEAD-12	4	Regional	743326.8	1014673	8.5	10	11.5	9.5	A984P/A398Q	5.26%	
10/22/1997	SEAD-12	4	Regional	743331.1	1014573	8.5	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743335.5	1014473	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743339.9	1014373	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743344.3	1014273	8	10.3	12	9.5	A984P/A398Q	8.42%	
10/22/1997	SEAD-12	4	Regional	743348.6	1014173	8	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743353	1014074	6.5	9.7	12	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743357.4	1013974	7.5	9.7	12	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743361.8	1013874	8	10	11.5	9.5	A984P/A398Q	5.26%	
10/22/1997	SEAD-12	4	Regional	743366.1	1013774	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743370.5	1013674	8.5	9.8	11	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743374.9	1013574	8	9.8	11	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743377.9	1013504	7.5	10.1	11.5	9.5	A984P/A398Q	6.32%	
10/22/1997	SEAD-12	4	Regional	743413.6	1014977	8	9.9	12	9.5	A984P/A398Q	4.21%	
10/22/1997	SEAD-12	4	Regional	743417.9	1014877	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/22/1997	SEAD-12	4	Regional	743422.3	1014777	8.5	9.5	11	9.5	A984P/A398Q	0.00%	
10/22/1997	SEAD-12	4	Regional	743426.7	1014677	8	9.3	10	9.5	A984P/A398Q	-2.11%	
10/22/1997	SEAD-12	4	Regional	743431.1	1014577	8.5	9.4	10.5	9.5	A984P/A398Q	-1.05%	
10/22/1997	SEAD-12	4	Regional	743435.4	1014478	8	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/22/1997	SEAD-12	4	Regional	743439.8	1014378	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/22/1997	SEAD-12	4	Regional	743444.2	1014278	8.5	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743448.6	1014178	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743452.9	1014078	7	9.5	11	9.5	A984P/A398Q	0.00%	
10/22/1997	SEAD-12	4	Regional	743457.3	1013978	8.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743461.7	1013878	8.5	9.8	12	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743466.1	1013778	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743470.4	1013678	8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/22/1997	SEAD-12	4	Regional	743474.8	1013578	8.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743477.9	1013509	8	9.6	10.5	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743363.6	1014975	8.2	10.6	12.5	9.3	***A945P/A378Q***	13.98%	
10/22/1997	SEAD-12	4	Regional	743367.9	1014875	7.8	9.8	11.5	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743372.3	1014775	8.2	10	12	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743376.7	1014675	8	9.3	11.5	9.3	***A945P/A378Q***	0.00%	
10/22/1997	SEAD-12	4	Regional	743381.1	1014575	7.5	9.5	11.2	9.3	***A945P/A378Q***	2.15%	
10/22/1997	SEAD-12	4	Regional	743385.4	1014475	8	9.6	10.8	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743389.8	1014375	7.8	9.7	11.5	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743394.2	1014276	8.2	9.7	12	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743398.6	1014176	8.2	10.2	11.8	9.3	***A945P/A378Q***	9.68%	
10/22/1997	SEAD-12	4	Regional	743402.9	1014076	5.8	9.8	11.5	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743407.3	1013976	8.2	9.4	10.8	9.3	***A945P/A378Q***	1.08%	
10/22/1997	SEAD-12	4	Regional	743411.7	1013876	8	9.6	11.8	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743416.1	1013776	7.8	9.9	11.2	9.3	***A945P/A378Q***	6.45%	
10/22/1997	SEAD-12	4	Regional	743420.4	1013676	7.8	9.7	11.5	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743424.8	1013576	8	9.5	11	9.3	***A945P/A378Q***	2.15%	
10/22/1997	SEAD-12	4	Regional	743427.9	1013506	5.8	10	12.2	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743463.5	1014979	7.5	9.7	12	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743467.9	1014879	7.2	9.3	11.5	9.3	***A945P/A378Q***	0.00%	
10/22/1997	SEAD-12	4	Regional	743472.3	1014779	8.2	9.6	11.8	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743476.6	1014680	7.5	9.5	11.2	9.3	***A945P/A378Q***	2.15%	
10/22/1997	SEAD-12	4	Regional	743481	1014580	7.8	9.2	10.5	9.3	***A945P/A378Q***	-1.08%	
10/22/1997	SEAD-12	4	Regional	743485.4	1014480	7.2	9.4	10.8	9.3	***A945P/A378Q***	1.08%	
10/22/1997	SEAD-12	4	Regional	743489.8	1014380	8.2	9.6	11.8	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743494.1	1014280	7.8	9.7	11.5	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743498.5	1014180	8.2	10.1	12.5	9.3	***A945P/A378Q***	8.60%	
10/22/1997	SEAD-12	4	Regional	743502.9	1014080	5.5	9.8	11.2	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743507.3	1013980	6.8	10	11.8	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743511.6	1013880	7.2	9.8	12.2	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743516	1013780	8.5	10.4	12	9.3	***A945P/A378Q***	11.83%	
10/22/1997	SEAD-12	4	Regional	743520.4	1013681	7.8	10	11.8	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743524.8	1013581	8.2	9.8	11.8	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743527.8	1013511	6	9.7	11.2	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743513.4	1014981	8.5	9.6	11.5	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743517.8	1014882	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743522.2	1014782	9	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743526.6	1014682	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743530.9	1014582	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
10/22/1997	SEAD-12	4	Regional	743535.3	1014482	7.5	9.3	10.2	9.5	A984P/A398Q	-2.11%	
10/22/1997	SEAD-12	4	Regional	743539.7	1014382	8	9.3	11.5	9.5	A984P/A398Q	-2.11%	
10/22/1997	SEAD-12	4	Regional	743544.1	1014282	8.5	9.7	10.8	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743548.4	1014182	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743552.8	1014082	7	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743557.2	1013982	8	10.3	12.5	9.5	A984P/A398Q	8.42%	
10/22/1997	SEAD-12	4	Regional	743561.6	1013883	9	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743565.9	1013783	9	10.5	11.5	9.5	A984P/A398Q	10.53%	
10/22/1997	SEAD-12	4	Regional	743570.3	1013683	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743574.7	1013583	8.5	10.4	12	9.5	A984P/A398Q	9.47%	
10/22/1997	SEAD-12	4	Regional	743577.8	1013513	7	10.1	12.2	9.5	A984P/A398Q	6.32%	
10/22/1997	SEAD-12	4	Regional	743613.3	1014986	8.5	10.1	11	9.5	A984P/A398Q	6.32%	
10/22/1997	SEAD-12	4	Regional	743617.7	1014886	8.5	9.8	11	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743622.1	1014786	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743626.4	1014686	8	9.5	10.8	9.5	A984P/A398Q	0.00%	
10/22/1997	SEAD-12	4	Regional	743630.8	1014586	8.5	9.6	11	9.5	A984P/A398Q	1.05%	
10/22/1997	SEAD-12	4	Regional	743635.3	1014486	8	9.7	11	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743639.6	1014386	8	9.6	11	9.5	A984P/A398Q	1.05%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/22/1997	SEAD-12	4	Regional	743644	1014287	8.5	9.7	11	9.5	A984P/A398Q	2.11%	
10/22/1997	SEAD-12	4	Regional	743648.4	1014187	9	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/22/1997	SEAD-12	4	Regional	743652.8	1014087	7	10	12.2	9.5	A984P/A398Q	5.26%	
10/22/1997	SEAD-12	4	Regional	743657.1	1013987	9	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743661.5	1013887	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743665.9	1013787	8.5	10	12	9.5	A984P/A398Q	5.26%	
10/22/1997	SEAD-12	4	Regional	743670.3	1013687	9	10.2	12	9.5	A984P/A398Q	7.37%	
10/22/1997	SEAD-12	4	Regional	743674.6	1013587	9	10.6	12.5	9.5	A984P/A398Q	11.58%	
10/22/1997	SEAD-12	4	Regional	743677.7	1013517	7.5	9.8	11	9.5	A984P/A398Q	3.16%	
10/22/1997	SEAD-12	4	Regional	743563.4	1014984	8.2	9.8	12	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743567.8	1014884	7.8	9.8	11.2	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743572.1	1014784	8.2	9.8	11.5	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743576.5	1014684	7.5	9.4	11.2	9.3	***A945P/A378Q***	1.08%	
10/22/1997	SEAD-12	4	Regional	743580.9	1014584	7.8	9.3	11.5	9.3	***A945P/A378Q***	0.00%	
10/22/1997	SEAD-12	4	Regional	743585.3	1014484	7.8	9.3	12	9.3	***A945P/A378Q***	0.00%	
10/22/1997	SEAD-12	4	Regional	743589.6	1014384	8	9.4	11.2	9.3	***A945P/A378Q***	1.08%	
10/22/1997	SEAD-12	4	Regional	743594	1014284	8.2	9.7	11.5	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743598.4	1014184	8.5	10.1	11.2	9.3	***A945P/A378Q***	8.60%	
10/22/1997	SEAD-12	4	Regional	743602.8	1014085	5.2	11	13.5	9.3	***A945P/A378Q***	18.28%	
10/22/1997	SEAD-12	4	Regional	743607.1	1013985	8	10.2	12.5	9.3	***A945P/A378Q***	9.68%	
10/22/1997	SEAD-12	4	Regional	743611.5	1013885	7.8	10.1	11.8	9.3	***A945P/A378Q***	8.60%	
10/22/1997	SEAD-12	4	Regional	743615.9	1013785	8.2	10	12.2	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743620.3	1013685	8	10.1	11.8	9.3	***A945P/A378Q***	8.60%	
10/22/1997	SEAD-12	4	Regional	743624.6	1013585	7.8	10.3	11.5	9.3	***A945P/A378Q***	10.75%	
10/22/1997	SEAD-12	4	Regional	743627.7	1013515	5.5	10.2	11.2	9.3	***A945P/A378Q***	9.68%	
10/22/1997	SEAD-12	4	Regional	743663.3	1014988	7.2	9.6	11	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743667.7	1014888	8	9.8	11.2	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743672.1	1014788	8.2	9.9	11.5	9.3	***A945P/A378Q***	6.45%	
10/22/1997	SEAD-12	4	Regional	743676.4	1014688	8	10	11.8	9.3	***A945P/A378Q***	7.53%	
10/22/1997	SEAD-12	4	Regional	743680.8	1014588	7.8	9.8	11.2	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743685.2	1014489	8.2	9.6	11	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743689.6	1014389	7.5	9.6	11.8	9.3	***A945P/A378Q***	3.23%	
10/22/1997	SEAD-12	4	Regional	743693.9	1014289	8	9.9	11.5	9.3	***A945P/A378Q***	6.45%	
10/22/1997	SEAD-12	4	Regional	743698.3	1014189	7.8	9.8	11.8	9.3	***A945P/A378Q***	5.38%	
10/22/1997	SEAD-12	4	Regional	743702.7	1014089	8.2	10.2	12.8	9.3	***A945P/A378Q***	9.68%	
10/22/1997	SEAD-12	4	Regional	743707.1	1013989	7.5	10.2	11.8	9.3	***A945P/A378Q***	9.68%	
10/22/1997	SEAD-12	4	Regional	743711.4	1013889	8.2	10.4	12.2	9.3	***A945P/A378Q***	11.83%	
10/22/1997	SEAD-12	4	Regional	743715.8	1013789	8.2	10.3	11.2	9.3	***A945P/A378Q***	10.75%	
10/22/1997	SEAD-12	4	Regional	743720.2	1013689	8	10.3	11.5	9.3	***A945P/A378Q***	10.75%	
10/22/1997	SEAD-12	4	Regional	743724.6	1013589	7.5	9.7	11.2	9.3	***A945P/A378Q***	4.30%	
10/22/1997	SEAD-12	4	Regional	743727.6	1013519	6.2	9.8	11.5	9.3	***A945P/A378Q***	5.38%	
10/23/1997	SEAD-12	4	Regional	743713.3	1014990	8.5	9.3	10.5	9.5	A984P/A398Q	-2.11%	
10/23/1997	SEAD-12	4	Regional	743717.6	1014890	8.5	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743722	1014790	8.5	10.2	12	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743726.4	1014691	8.8	9.9	12	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743730.8	1014591	8.5	10.2	11.8	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743735.1	1014491	8.5	10.1	12	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743739.5	1014391	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	743743.9	1014291	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	743748.3	1014191	8.5	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743752.6	1014091	8	10.6	13	9.5	A984P/A398Q	11.58%	
10/23/1997	SEAD-12	4	Regional	743757	1013991	8	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743761.4	1013891	9	10	12.8	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743765.8	1013791	9	10.5	12.5	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	743770.1	1013691	8.5	10.2	12.2	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743774.5	1013592	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	743777.6	1013522	6.5	9.9	12	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743813.1	1014995	8	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743817.5	1014895	8.5	10.3	12	9.5	A984P/A398Q	8.42%	
10/23/1997	SEAD-12	4	Regional	743821.9	1014795	8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743826.3	1014695	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	743830.6	1014595	8.5	10.5	11.8	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	743835	1014495	8.5	10.1	12	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743839.4	1014395	9	10.2	12	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743843.8	1014295	9.5	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743848.1	1014195	9	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743852.6	1014095	7.5	10.7	13	9.5	A984P/A398Q	12.63%	
10/23/1997	SEAD-12	4	Regional	743856.9	1013996	9.5	10.5	12.5	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	743861.3	1013896	10	11.4	14	9.5	A984P/A398Q	20.00%	
10/23/1997	SEAD-12	4	Regional	743865.7	1013796	9	10.1	12	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743870.1	1013696	9	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743874.4	1013596	7	9.7	12	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	743877.5	1013526	8	10.1	12	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743763.2	1014992	7.5	9.7	11.8	9.1	***A945P/A378Q***	6.59%	
10/23/1997	SEAD-12	4	Regional	743767.6	1014893	7.8	9.8	11.2	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743771.9	1014793	8	10.4	13.2	9.1	***A945P/A378Q***	14.29%	
10/23/1997	SEAD-12	4	Regional	743776.3	1014693	8.5	10.1	12.5	9.1	***A945P/A378Q***	10.99%	
10/23/1997	SEAD-12	4	Regional	743780.7	1014593	7.8	10.2	12.8	9.1	***A945P/A378Q***	12.09%	
10/23/1997	SEAD-12	4	Regional	743785.1	1014493	7.5	9.8	11.8	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743789.4	1014393	8	10.2	11.2	9.1	***A945P/A378Q***	12.09%	
10/23/1997	SEAD-12	4	Regional	743793.8	1014293	7.5	10.1	11.5	9.1	***A945P/A378Q***	10.99%	
10/23/1997	SEAD-12	4	Regional	743798.2	1014193	8.2	10	11.5	9.1	***A945P/A378Q***	9.89%	
10/23/1997	SEAD-12	4	Regional	743802.6	1014093	5.2	11.3	13.5	9.1	***A945P/A378Q***	24.18%	
10/23/1997	SEAD-12	4	Regional	743806.9	1013993	7.8	10.2	12	9.1	***A945P/A378Q***	12.09%	
10/23/1997	SEAD-12	4	Regional	743811.3	1013893	8.2	10.9	13.8	9.1	***A945P/A378Q***	19.78%	
10/23/1997	SEAD-12	4	Regional	743815.7	1013794	8	10.2	12.2	9.1	***A945P/A378Q***	12.09%	
10/23/1997	SEAD-12	4	Regional	743820.1	1013694	7.5	10.4	11.8	9.1	***A945P/A378Q***	14.29%	
10/23/1997	SEAD-12	4	Regional	743824.4	1013594	8.2	10.4	12	9.1	***A945P/A378Q***	14.29%	
10/23/1997	SEAD-12	4	Regional	743827.5	1013524	5.5	10	12.8	9.1	***A945P/A378Q***	9.89%	
10/23/1997	SEAD-12	4	Regional	743863.1	1014997	6.8	8.3	10.5	9.1	***A945P/A378Q***	-8.79%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background (kcpm)	Instrument (s/n)	% +/- Background	Comments
10/23/1997	SEAD-12	4	Regional	743867.5	1014897	7	8.5	10.8	9.1	***A945P/A378Q***	-6.59%	
10/23/1997	SEAD-12	4	Regional	743871.9	1014797	8	8.7	10.2	9.1	***A945P/A378Q***	-4.40%	
10/23/1997	SEAD-12	4	Regional	743876.3	1014697	7.8	9.5	10.8	9.1	***A945P/A378Q***	4.40%	
10/23/1997	SEAD-12	4	Regional	743880.6	1014597	8.5	9.4	11.8	9.1	***A945P/A378Q***	3.30%	
10/23/1997	SEAD-12	4	Regional	743885	1014497	7.8	9.7	11.2	9.1	***A945P/A378Q***	6.59%	
10/23/1997	SEAD-12	4	Regional	743889.4	1014397	8.2	9.8	11.5	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743893.8	1014297	7.5	9.8	12	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743898.1	1014198	8.2	9.9	11.5	9.1	***A945P/A378Q***	8.79%	
10/23/1997	SEAD-12	4	Regional	743902.5	1014098	5.2	10.6	13.2	9.1	***A945P/A378Q***	16.48%	
10/23/1997	SEAD-12	4	Regional	743906.9	1013998	7.5	10.5	12.8	9.1	***A945P/A378Q***	15.38%	
10/23/1997	SEAD-12	4	Regional	743911.3	1013898	8	11.2	14.5	9.1	***A945P/A378Q***	23.08%	
10/23/1997	SEAD-12	4	Regional	743915.6	1013798	8.2	10	12.2	9.1	***A945P/A378Q***	9.89%	
10/23/1997	SEAD-12	4	Regional	743920	1013698	8	10.1	11.8	9.1	***A945P/A378Q***	10.99%	
10/23/1997	SEAD-12	4	Regional	743924.4	1013598	6.8	8.6	11	9.1	***A945P/A378Q***	-5.49%	
10/23/1997	SEAD-12	4	Regional	743927.4	1013528	5	8.2	10.2	9.1	***A945P/A378Q***	-9.89%	
10/23/1997	SEAD-12	4	Regional	743913.1	1014999	8	9.4	10.5	9.5	A984P/A398Q	-1.05%	
10/23/1997	SEAD-12	4	Regional	743917.4	1014899	8.5	9.6	11.5	9.5	A984P/A398Q	1.05%	
10/23/1997	SEAD-12	4	Regional	743921.8	1014799	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	743926.2	1014699	8.5	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743930.6	1014599	8.5	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743934.9	1014499	8	10.1	12	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743939.3	1014400	8.5	10	12.5	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743943.7	1014300	8.5	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743948.1	1014200	8.5	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	743952.4	1014100	7.5	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743956.8	1014000	9	10.3	12.5	9.5	A984P/A398Q	8.42%	
10/23/1997	SEAD-12	4	Regional	743961.2	1013900	8.5	10	12.5	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	743965.6	1013800	8.8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	743969.9	1013700	8.5	10.3	11.5	9.5	A984P/A398Q	8.42%	
10/23/1997	SEAD-12	4	Regional	743974.3	1013600	9	10.5	13	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	743977.4	1013530	8	10.9	13.5	9.5	A984P/A398Q	14.74%	
10/23/1997	SEAD-12	4	Regional	744012.9	1015003	8.5	9.6	11.5	9.5	A984P/A398Q	1.05%	
10/23/1997	SEAD-12	4	Regional	744017.3	1014903	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	744021.7	1014804	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	744026.1	1014704	8.5	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744030.4	1014604	8.5	9.9	11.8	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744034.8	1014504	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	744039.2	1014404	8	9.7	11	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744043.6	1014304	8	9.5	11	9.5	A984P/A398Q	0.00%	
10/23/1997	SEAD-12	4	Regional	744047.9	1014204	8.5	9.4	11	9.5	A984P/A398Q	-1.05%	
10/23/1997	SEAD-12	4	Regional	744052.3	1014104	8	9.4	10	9.5	A984P/A398Q	-1.05%	
10/23/1997	SEAD-12	4	Regional	744056.7	1014004	7.5	8.9	10	9.5	A984P/A398Q	-6.32%	
10/23/1997	SEAD-12	4	Regional	744061.1	1013904	8	9.1	9.8	9.5	A984P/A398Q	-4.21%	
10/23/1997	SEAD-12	4	Regional	744065.4	1013804	8	9.2	10.2	9.5	A984P/A398Q	-3.16%	
10/23/1997	SEAD-12	4	Regional	744069.8	1013705	8	9.4	11	9.5	A984P/A398Q	-1.05%	
10/23/1997	SEAD-12	4	Regional	744074.3	1013605	9	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	744077.3	1013535	7.5	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	743963	1015001	7.2	10.1	11.8	9.1	***A945P/A378Q***	10.99%	
10/23/1997	SEAD-12	4	Regional	743967.4	1014901	7.8	9.7	12.2	9.1	***A945P/A378Q***	6.59%	
10/23/1997	SEAD-12	4	Regional	743971.8	1014801	7.5	10.1	12.8	9.1	***A945P/A378Q***	10.99%	
10/23/1997	SEAD-12	4	Regional	743976.1	1014701	8.2	9.7	11.8	9.1	***A945P/A378Q***	6.59%	
10/23/1997	SEAD-12	4	Regional	743980.5	1014602	7.5	9.8	11.5	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743984.9	1014502	7.8	9.6	11.2	9.1	***A945P/A378Q***	5.49%	
10/23/1997	SEAD-12	4	Regional	743989.3	1014402	8.2	9.8	12	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	743993.6	1014302	8	9.9	11.8	9.1	***A945P/A378Q***	8.79%	
10/23/1997	SEAD-12	4	Regional	743998	1014202	7.5	9.9	12.2	9.1	***A945P/A378Q***	8.79%	
10/23/1997	SEAD-12	4	Regional	744002.4	1014102	7.8	9.5	9.5	9.1	***A945P/A378Q***	4.40%	
10/23/1997	SEAD-12	4	Regional	744006.8	1014002	6.8	9.8	10.2	9.1	***A945P/A378Q***	7.69%	
10/23/1997	SEAD-12	4	Regional	744011.1	1013902	6.5	9.9	10.8	9.1	***A945P/A378Q***	8.79%	
10/23/1997	SEAD-12	4	Regional	744015.5	1013802	7.2	8.5	10.8	9.1	***A945P/A378Q***	-6.59%	
10/23/1997	SEAD-12	4	Regional	744019.9	1013702	7.8	9.6	11.2	9.1	***A945P/A378Q***	5.49%	
10/23/1997	SEAD-12	4	Regional	744024.3	1013603	8.8	10.8	13.8	9.1	***A945P/A378Q***	18.68%	
10/23/1997	SEAD-12	4	Regional	744027.3	1013533	5.5	10	12.5	9.1	***A945P/A378Q***	9.89%	
10/23/1997	SEAD-12	4	Regional	744112.9	1015008	8	10	11	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	744117.3	1014908	9	10.9	13	9.5	A984P/A398Q	14.74%	
10/23/1997	SEAD-12	4	Regional	744121.6	1014808	9	10.5	12.5	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	744126	1014708	8.5	10.2	12.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	744130.4	1014608	8	10.2	11.8	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	744134.8	1014508	8.5	10	11.5	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	744139.1	1014408	8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744143.5	1014308	8.5	9.9	12	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744147.9	1014208	8	10.4	12	9.5	A984P/A398Q	9.47%	
10/23/1997	SEAD-12	4	Regional	744152.3	1014109	7	10.5	12	9.5	A984P/A398Q	10.53%	
10/23/1997	SEAD-12	4	Regional	744156.6	1014009	8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744161	1013909	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744165.4	1013809	8	10	11.8	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	744169.8	1013709	8	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744174.1	1013609	8.5	10	12	9.5	A984P/A398Q	5.26%	
10/23/1997	SEAD-12	4	Regional	744177.2	1013539	7.5	9.5	11	9.5	A984P/A398Q	0.00%	
10/23/1997	SEAD-12	4	Regional	744212.8	1015012	8.5	10.4	12	9.5	A984P/A398Q	9.47%	
10/23/1997	SEAD-12	4	Regional	744217.1	1014912	8	10.2	12	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	744221.5	1014812	8.5	10.2	11.5	9.5	A984P/A398Q	7.37%	
10/23/1997	SEAD-12	4	Regional	744225.9	1014712	8.8	9.7	12	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744230.3	1014612	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	744234.6	1014513	8	9.7	11.5	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744239	1014413	8	9.6	11	9.5	A984P/A398Q	1.05%	
10/23/1997	SEAD-12	4	Regional	744243.4	1014313	8.5	9.8	11.5	9.5	A984P/A398Q	3.16%	
10/23/1997	SEAD-12	4	Regional	744247.8	1014213	8	9.7	11.2	9.5	A984P/A398Q	2.11%	
10/23/1997	SEAD-12	4	Regional	744252.1	1014113	7.5	9.5	11.5	9.5	A984P/A398Q	0.00%	
10/23/1997	SEAD-12	4	Regional	744256.5	1014013	8	9.7	11	9.5	A984P/A398Q	2.11%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/23/1997	SEAD-12	4	Regional	744260.9	1013913	8	9.6	11.2	9.5	A984P/A398Q	1.05%	
10/23/1997	SEAD-12	4	Regional	744265.3	1013813	8.5	9.9	11.5	9.5	A984P/A398Q	4.21%	
10/23/1997	SEAD-12	4	Regional	744269.6	1013713	8.5	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	744274	1013613	9	10.1	12.5	9.5	A984P/A398Q	6.32%	
10/23/1997	SEAD-12	4	Regional	744277.1	1013544	7	10.2	12	9.5	A984P/A398Q	7.37%	
10/24/1999	SEAD-12	4	Regional	744062.9	1015006	7.5	9.9	12.2	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744067.3	1014906	8.2	10.2	12.5	9.7	***A945P/A378Q***	5.15%	
10/24/1999	SEAD-12	4	Regional	744071.7	1014806	7.8	9.8	11.8	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744076.1	1014706	7.5	9.6	11.5	9.7	***A945P/A378Q***	-1.03%	
10/24/1999	SEAD-12	4	Regional	744080.4	1014606	8	10.2	12.2	9.7	***A945P/A378Q***	5.15%	
10/24/1999	SEAD-12	4	Regional	744084.8	1014506	8.2	9.9	11.8	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744089.2	1014406	8.2	10.1	11.5	9.7	***A945P/A378Q***	4.12%	
10/24/1999	SEAD-12	4	Regional	744093.6	1014306	8	10	11.2	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744097.9	1014206	8.8	10.3	12.8	9.7	***A945P/A378Q***	6.19%	
10/24/1999	SEAD-12	4	Regional	744102.3	1014106	5.8	10.5	13.5	9.7	***A945P/A378Q***	8.25%	
10/24/1999	SEAD-12	4	Regional	744106.7	1014006	6.8	10.1	13	9.7	***A945P/A378Q***	4.12%	
10/24/1999	SEAD-12	4	Regional	744111.1	1013907	7.8	10	12.2	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744115.4	1013807	8	9.9	12	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744119.8	1013707	7.5	9.9	12.5	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744124.2	1013607	8	10.4	12	9.7	***A945P/A378Q***	7.22%	
10/24/1999	SEAD-12	4	Regional	744127.3	1013537	5.8	10.2	11.8	9.7	***A945P/A378Q***	5.15%	
10/24/1999	SEAD-12	4	Regional	744162.8	1015010	7.8	10	11.8	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744187.2	1014910	8.2	9.9	12.2	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744171.6	1014810	7.5	9.7	12	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744175.9	1014710	8.2	9.8	12.5	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744180.3	1014610	8.5	10.3	12.8	9.7	***A945P/A378Q***	6.19%	
10/24/1999	SEAD-12	4	Regional	744184.7	1014510	7.8	9.8	11.2	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744189.1	1014410	8.2	9.7	11.8	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744193.4	1014311	8	10	11.8	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744197.8	1014211	7.5	10.1	12	9.7	***A945P/A378Q***	4.12%	
10/24/1999	SEAD-12	4	Regional	744202.2	1014111	7.8	10.3	14.2	9.7	***A945P/A378Q***	6.19%	
10/24/1999	SEAD-12	4	Regional	744206.6	1014011	7	9.7	12	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744210.9	1013911	7.8	9.7	11.8	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744215.3	1013811	7.2	10	12.2	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744219.7	1013711	6.8	9.9	12.5	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744224.1	1013611	7.5	9.8	11	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744227.1	1013541	8.2	9.8	11.5	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744262.7	1015014	6.8	10.3	12.2	9.7	***A945P/A378Q***	6.19%	
10/24/1999	SEAD-12	4	Regional	744267.1	1014914	7.5	10.2	12.8	9.7	***A945P/A378Q***	5.15%	
10/24/1999	SEAD-12	4	Regional	744271.5	1014814	7.2	9.9	11.5	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744275.9	1014715	6.5	10	12.8	9.7	***A945P/A378Q***	3.09%	
10/24/1999	SEAD-12	4	Regional	744280.3	1014615	7.5	9.9	12.2	9.7	***A945P/A378Q***	2.06%	
10/24/1999	SEAD-12	4	Regional	744284.6	1014515	8	9.8	11.8	9.7	***A945P/A378Q***	1.03%	
10/24/1999	SEAD-12	4	Regional	744289	1014415	7.8	9.7	12	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744293.4	1014315	8	9.6	12.5	9.7	***A945P/A378Q***	-1.03%	
10/24/1999	SEAD-12	4	Regional	744297.8	1014215	7.2	9.7	12.8	9.7	***A945P/A378Q***	0.00%	
10/24/1999	SEAD-12	4	Regional	744302.1	1014115	7.5	10.5	12.5	9.8	A984P/A398Q	7.14%	
10/24/1999	SEAD-12	4	Regional	744306.5	1014015	8	10	11.2	9.8	A984P/A398Q	2.04%	
10/24/1999	SEAD-12	4	Regional	744310.9	1013915	8.5	10.2	12	9.8	A984P/A398Q	4.08%	
10/24/1999	SEAD-12	4	Regional	744315.3	1013815	8.5	10.1	12	9.8	A984P/A398Q	3.06%	
10/24/1999	SEAD-12	4	Regional	744319.6	1013716	9	10.3	12.2	9.8	A984P/A398Q	5.10%	
10/24/1999	SEAD-12	4	Regional	744324	1013616	9	10.3	12	9.8	A984P/A398Q	5.10%	
10/24/1999	SEAD-12	4	Regional	744327.1	1013546	7.5	10.6	11.5	9.8	A984P/A398Q	8.16%	
10/24/1997	SEAD-12	5	Regional	743181.2	1013425	7.5	8.9	10.5	9.8	A984P/A398Q	-9.18%	
10/24/1997	SEAD-12	5	Regional	743183.8	1013365	9	10.5	12	9.8	A984P/A398Q	7.14%	
10/24/1997	SEAD-12	5	Regional	743188.2	1013266	9	10.1	12	9.8	A984P/A398Q	3.06%	1655'-1677' Gravel
10/24/1997	SEAD-12	5	Regional	743192.6	1013166	7.5	9.7	11	9.8	A984P/A398Q	-1.02%	1552' - 24" Culvert
10/24/1997	SEAD-12	5	Regional	743196.9	1013066	8.5	10	11.5	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743201.3	1012966	8.5	10.2	12	9.8	A984P/A398Q	4.08%	
10/24/1997	SEAD-12	5	Regional	743205.7	1012866	8.5	10.3	11.5	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743210.1	1012766	8.5	10.2	11.5	9.8	A984P/A398Q	4.08%	
10/24/1997	SEAD-12	5	Regional	743214.4	1012666	7.5	9.5	12	9.8	A984P/A398Q	-3.06%	Roadway 1055'
10/24/1997	SEAD-12	5	Regional	743231.1	1013430	5.2	9.8	11.8	9.7	***A945P/A378Q***	1.03%	
10/24/1997	SEAD-12	5	Regional	743233.8	1013368	8.2	11.1	13.5	9.7	***A945P/A378Q***	14.43%	
10/24/1997	SEAD-12	5	Regional	743238.2	1013268	7.5	10.2	12.2	9.7	***A945P/A378Q***	5.15%	
10/24/1997	SEAD-12	5	Regional	743242.6	1013168	7.8	10.2	11.8	9.7	***A945P/A378Q***	5.15%	
10/24/1997	SEAD-12	5	Regional	743246.9	1013068	6.8	10.1	12.8	9.7	***A945P/A378Q***	4.12%	
10/24/1997	SEAD-12	5	Regional	743251.3	1012968	8.2	10.6	13.5	9.7	***A945P/A378Q***	9.28%	
10/24/1997	SEAD-12	5	Regional	743255.7	1012868	8.5	10.2	13	9.7	***A945P/A378Q***	5.15%	
10/24/1997	SEAD-12	5	Regional	743260.1	1012768	7.8	10	12.5	9.7	***A945P/A378Q***	3.09%	
10/24/1997	SEAD-12	5	Regional	743264.4	1012668	7.2	10.5	13.8	9.7	***A945P/A378Q***	8.25%	
10/24/1997	SEAD-12	5	Regional	743267.8	1012591	5.5	9.4	12.8	9.7	***A945P/A378Q***	-3.09%	
10/24/1997	SEAD-12	5	Regional	743281	1013432	8	10.5	11.5	9.8	A984P/A398Q	7.14%	
10/24/1997	SEAD-12	5	Regional	743283.8	1013370	9.5	11.3	13	9.8	A984P/A398Q	15.31%	
10/24/1997	SEAD-12	5	Regional	743288.1	1013270	8.5	10.7	12	9.8	A984P/A398Q	9.18%	
10/24/1997	SEAD-12	5	Regional	743292.5	1013170	9	10.3	12	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743296.9	1013070	9	10.3	12	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743301.3	1012970	9	10.3	11.5	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743305.6	1012870	8.5	10	11.2	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743310	1012770	9	10.2	12	9.8	A984P/A398Q	4.08%	
10/24/1997	SEAD-12	5	Regional	743314.4	1012671	8	10.3	11.5	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743318.8	1012571	7	10	11.5	9.8	A984P/A398Q	2.04%	Roadway - 895'
10/24/1997	SEAD-12	5	Regional	743330.9	1013435	5.5	10	13.2	9.7	***A945P/A378Q***	3.09%	
10/24/1997	SEAD-12	5	Regional	743333.7	1013372	8.8	11.2	14.5	9.7	***A945P/A378Q***	15.46%	
10/24/1997	SEAD-12	5	Regional	743338.1	1013272	8.2	10.8	13.8	9.7	***A945P/A378Q***	11.34%	
10/24/1997	SEAD-12	5	Regional	743342.4	1013172	8.5	10.2	13.5	9.7	***A945P/A378Q***	5.15%	
10/24/1997	SEAD-12	5	Regional	743346.8	1013072	8	10.4	13.8	9.7	***A945P/A378Q***	7.22%	
10/24/1997	SEAD-12	5	Regional	743351.2	1012972	8.5	10.6	13.5	9.7	***A945P/A378Q***	9.28%	
10/24/1997	SEAD-12	5	Regional	743355.6	1012873	7.8	10.1	12.5	9.7	***A945P/A378Q***	4.12%	
10/24/1997	SEAD-12	5	Regional	743359.9	1012773	7.5	10.3	12.2	9.7	***A945P/A378Q***	6.19%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/24/1997	SEAD-12	5	Regional	743364.3	1012673	7.8	10.2	11.8	9.7	***A945P/A378Q***	5.15%	
10/24/1997	SEAD-12	5	Regional	743368.7	1012573	7.5	10.5	13.2	9.7	***A945P/A378Q***	8.25%	
10/24/1997	SEAD-12	5	Regional	743372.9	1012478	5.5	10	12.2	9.7	***A945P/A378Q***	3.09%	
10/24/1997	SEAD-12	5	Regional	743380.9	1013437	7	9.4	11.5	9.8	A984P/A398Q	-4.08%	
10/24/1997	SEAD-12	5	Regional	743383.6	1013374	9	10.8	13	9.8	A984P/A398Q	10.20%	
10/24/1997	SEAD-12	5	Regional	743388	1013274	8.5	10.5	12.5	9.8	A984P/A398Q	7.14%	
10/24/1997	SEAD-12	5	Regional	743392.4	1013174	8.5	10.4	12	9.8	A984P/A398Q	6.12%	
10/24/1997	SEAD-12	5	Regional	743396.8	1013075	8	10	11.5	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743401.1	1012975	8.5	10.4	12	9.8	A984P/A398Q	6.12%	
10/24/1997	SEAD-12	5	Regional	743405.5	1012875	8.5	10.4	11.5	9.8	A984P/A398Q	6.12%	
10/24/1997	SEAD-12	5	Regional	743409.9	1012775	8	10	12	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743414.3	1012675	8	10.4	11.5	9.8	A984P/A398Q	6.12%	
10/24/1997	SEAD-12	5	Regional	743418.6	1012575	8	10.9	14	9.8	A984P/A398Q	11.22%	940' - Shale Roadway
10/24/1997	SEAD-12	5	Regional	743423	1012475	8	10	11	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743427.4	1012375	8	9.8	11	9.8	A984P/A398Q	0.00%	
10/24/1997	SEAD-12	5	Regional	743431.8	1012275	8	10.3	12	9.8	A984P/A398Q	5.10%	
10/24/1997	SEAD-12	5	Regional	743436.1	1012175	8.5	9.8	11	9.8	A984P/A398Q	0.00%	
10/24/1997	SEAD-12	5	Regional	743440.5	1012075	9.5	11	13	9.8	A984P/A398Q	12.24%	Old RR Bed - 487'
10/24/1997	SEAD-12	5	Regional	743444.9	1011976	9	10.5	12	9.8	A984P/A398Q	7.14%	
10/24/1997	SEAD-12	5	Regional	743449.3	1011876	8.5	10	11.5	9.8	A984P/A398Q	2.04%	
10/24/1997	SEAD-12	5	Regional	743453.6	1011776	8.5	9.9	11.5	9.8	A984P/A398Q	1.02%	
10/24/1997	SEAD-12	5	Regional	743458.1	1011676	9	10.4	12	9.8	A984P/A398Q	6.12%	
10/25/1997	SEAD-12	5	Regional	743430.9	1013439	5.2	9.7	12.8	10.2	***A945P/A378Q***	-4.90%	
10/25/1997	SEAD-12	5	Regional	743433.6	1013376	7.8	10.4	13.2	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743438	1013277	8	10.4	13.2	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743442.4	1013177	7.5	10.2	12	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743446.8	1013077	6.5	10.5	11.8	10.2	***A945P/A378Q***	2.94%	
10/25/1997	SEAD-12	5	Regional	743451.1	1012977	7.8	10.2	12	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743455.5	1012877	8.2	10	11.8	10.2	***A945P/A378Q***	-1.96%	
10/25/1997	SEAD-12	5	Regional	743459.9	1012777	8	10.2	11.5	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743464.3	1012677	8.5	10.3	12.2	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743468.6	1012577	7.8	10	13.8	10.2	***A945P/A378Q***	-1.96%	
10/25/1997	SEAD-12	5	Regional	743473	1012477	9.2	12.1	14.2	10.2	***A945P/A378Q***	18.63%	
10/25/1997	SEAD-12	5	Regional	743477.4	1012377	9.8	12.4	15.5	10.2	***A945P/A378Q***	21.57%	
10/25/1997	SEAD-12	5	Regional	743481.8	1012277	9	12	14.8	10.2	***A945P/A378Q***	17.65%	
10/25/1997	SEAD-12	5	Regional	743486.1	1012178	8.5	11.3	14.2	10.2	***A945P/A378Q***	10.78%	550'-930' - Crushed Shale Pad/Road
10/25/1997	SEAD-12	5	Regional	743490.5	1012078	8.8	10.9	13.8	10.2	***A945P/A378Q***	6.86%	
10/25/1997	SEAD-12	5	Regional	743494.9	1011978	8.2	11.1	14.2	10.2	***A945P/A378Q***	8.82%	
10/25/1997	SEAD-12	5	Regional	743499.3	1011878	7.8	10.7	13.5	10.2	***A945P/A378Q***	4.90%	
10/25/1997	SEAD-12	5	Regional	743503.6	1011778	8.2	10.6	12.8	10.2	***A945P/A378Q***	3.92%	
10/25/1997	SEAD-12	5	Regional	743508	1011678	7	10.1	12.5	10.2	***A945P/A378Q***	-0.98%	
10/25/1997	SEAD-12	5	Regional	743480.8	1013441	7	9.6	11	10	A984P/A398Q	-4.00%	
10/25/1997	SEAD-12	5	Regional	743483.6	1013379	9	10.7	13	10	A984P/A398Q	7.00%	
10/25/1997	SEAD-12	5	Regional	743487.9	1013279	9	10.4	12.5	10	A984P/A398Q	4.00%	
10/25/1997	SEAD-12	5	Regional	743492.3	1013179	8.5	10.6	12	10	A984P/A398Q	6.00%	
10/25/1997	SEAD-12	5	Regional	743496.7	1013079	8.5	10.1	12	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743501.1	1012979	8.8	10.6	12.2	10	A984P/A398Q	6.00%	
10/25/1997	SEAD-12	5	Regional	743505.4	1012879	8.5	10.1	12	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743509.8	1012779	8.5	10.3	11.5	10	A984P/A398Q	3.00%	
10/25/1997	SEAD-12	5	Regional	743514.2	1012679	8.8	10.4	12	10	A984P/A398Q	4.00%	
10/25/1997	SEAD-12	5	Regional	743518.6	1012579	8.5	10	11.5	10	A984P/A398Q	0.00%	
10/25/1997	SEAD-12	5	Regional	743522.9	1012479	8.5	10	11.5	10	A984P/A398Q	0.00%	
10/25/1997	SEAD-12	5	Regional	743527.3	1012380	8	10.2	12	10	A984P/A398Q	2.00%	
10/25/1997	SEAD-12	5	Regional	743531.7	1012280	8.5	10.1	11.5	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743536.1	1012180	8	10.3	13	10	A984P/A398Q	3.00%	
10/25/1997	SEAD-12	5	Regional	743540.4	1012080	9	10.6	13	10	A984P/A398Q	6.00%	Old RR Bed 490'-500'
10/25/1997	SEAD-12	5	Regional	743544.8	1011980	10	11.5	13.2	10	A984P/A398Q	15.00%	
10/25/1997	SEAD-12	5	Regional	743549.2	1011880	10	11.3	13.5	10	A984P/A398Q	13.00%	
10/25/1997	SEAD-12	5	Regional	743553.6	1011780	8.5	10.3	11.5	10	A984P/A398Q	3.00%	
10/25/1997	SEAD-12	5	Regional	743557.9	1011680	8	10.1	11.2	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743530.8	1013443	5.5	10.2	13.8	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743533.5	1013381	8.8	10.9	13.5	10.2	***A945P/A378Q***	6.86%	
10/25/1997	SEAD-12	5	Regional	743537.9	1013281	7.8	10.9	12.8	10.2	***A945P/A378Q***	6.86%	
10/25/1997	SEAD-12	5	Regional	743542.3	1013181	8.5	10.6	13.2	10.2	***A945P/A378Q***	3.92%	
10/25/1997	SEAD-12	5	Regional	743546.6	1013081	9.2	10.8	13	10.2	***A945P/A378Q***	5.88%	
10/25/1997	SEAD-12	5	Regional	743551	1012981	8.8	10.4	12.5	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743555.4	1012881	7.5	10.3	12.2	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743559.8	1012781	8	10.4	12.8	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743564.1	1012681	8.2	10.3	11.8	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743568.5	1012582	8.5	10.5	13.2	10.2	***A945P/A378Q***	2.94%	
10/25/1997	SEAD-12	5	Regional	743572.9	1012482	8	10.3	12.5	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743577.3	1012382	7.5	10.8	12.8	10.2	***A945P/A378Q***	5.88%	
10/25/1997	SEAD-12	5	Regional	743581.6	1012282	8.2	10.2	11.8	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743586	1012182	8.8	10.4	12.5	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743590.4	1012082	8	10.7	13	10.2	***A945P/A378Q***	4.90%	
10/25/1997	SEAD-12	5	Regional	743594.8	1011982	8.5	11	14.2	10.2	***A945P/A378Q***	7.84%	
10/25/1997	SEAD-12	5	Regional	743599.1	1011882	9.6	11.7	14.5	10.2	***A945P/A378Q***	14.71%	
10/25/1997	SEAD-12	5	Regional	743603.5	1011782	8.2	11.1	13.5	10.2	***A945P/A378Q***	8.82%	
10/25/1997	SEAD-12	5	Regional	743607.9	1011682	8.8	10.4	12	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743580.7	1013445	7	10.6	12	10	A984P/A398Q	6.00%	
10/25/1997	SEAD-12	5	Regional	743583.4	1013383	9	10.9	13	10	A984P/A398Q	9.00%	
10/25/1997	SEAD-12	5	Regional	743587.8	1013283	9	10.6	12.5	10	A984P/A398Q	6.00%	
10/25/1997	SEAD-12	5	Regional	743592.2	1013183	8.5	10.7	12.5	10	A984P/A398Q	7.00%	
10/25/1997	SEAD-12	5	Regional	743596.6	1013083	8.5	10.5	12.5	10	A984P/A398Q	5.00%	
10/25/1997	SEAD-12	5	Regional	743600.9	1012983	8.5	10.2	11.5	10	A984P/A398Q	2.00%	
10/25/1997	SEAD-12	5	Regional	743605.3	1012883	8	10	11.5	10	A984P/A398Q	0.00%	
10/25/1997	SEAD-12	5	Regional	743609.7	1012784	8	10.2	11.5	10	A984P/A398Q	2.00%	
10/25/1997	SEAD-12	5	Regional	743614.1	1012684	9	10.1	11.5	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743618.4	1012584	8.5	10.1	12	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743622.8	1012484	8.5	10	12	10	A984P/A398Q	0.00%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing		(kcpm)			(s/n)		
10/25/1997	SEAD-12	5	Regional	743627.2	1012384	8.5	10.4	12.2	10	A984P/A398Q	4.00%	
10/25/1997	SEAD-12	5	Regional	743631.6	1012284	9	10.3	12	10	A984P/A398Q	3.00%	
10/25/1997	SEAD-12	5	Regional	743635.9	1012184	8.5	10.3	12.5	10	A984P/A398Q	3.00%	
10/25/1997	SEAD-12	5	Regional	743640.3	1012084	8.5	10.9	12.5	10	A984P/A398Q	9.00%	Old RR Bed - 495'
10/25/1997	SEAD-12	5	Regional	743644.7	1011984	8.5	10.5	12	10	A984P/A398Q	5.00%	300'-350' - 11500 Scaler
10/25/1997	SEAD-12	5	Regional	743649.1	1011884	10	12.3	13.5	10	A984P/A398Q	23.00%	
10/25/1997	SEAD-12	5	Regional	743653.4	1011785	9.5	11.6	13	10	A984P/A398Q	16.00%	
10/25/1997	SEAD-12	5	Regional	743657.8	1011685	9	10.1	12	10	A984P/A398Q	1.00%	
10/25/1997	SEAD-12	5	Regional	743630.7	1013448	4.8	9.5	12.2	10.2	***A945P/A378Q***	-6.86%	
10/25/1997	SEAD-12	5	Regional	743633.4	1013385	8.8	10.2	12.5	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743637.8	1013285	7.8	10.4	11.8	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743642.1	1013185	8.2	10.4	12	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743646.5	1013085	8.5	10.2	12.8	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743650.9	1012986	8.2	10.1	12.5	10.2	***A945P/A378Q***	-0.98%	
10/25/1997	SEAD-12	5	Regional	743655.3	1012886	8	10.4	11.8	10.2	***A945P/A378Q***	1.96%	
10/25/1997	SEAD-12	5	Regional	743659.7	1012786	7.8	10.3	12.2	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743664.1	1012686	8.2	10.3	11.5	10.2	***A945P/A378Q***	0.98%	
10/25/1997	SEAD-12	5	Regional	743668.4	1012586	8	10.2	11.8	10.2	***A945P/A378Q***	0.00%	
10/25/1997	SEAD-12	5	Regional	743672.8	1012486	8.5	9.9	12.5	10.2	***A945P/A378Q***	-2.94%	
10/25/1997	SEAD-12	5	Regional	743677.2	1012386	8	9.9	11.8	10.2	***A945P/A378Q***	-2.94%	
10/25/1997	SEAD-12	5	Regional	743681.6	1012286	7.8	10	12.2	10.2	***A945P/A378Q***	-1.96%	
10/25/1997	SEAD-12	5	Regional	743685.9	1012186	8.5	11	13.8	10.2	***A945P/A378Q***	7.84%	
10/25/1997	SEAD-12	5	Regional	743690.3	1012086	8	10.7	13.2	10.2	***A945P/A378Q***	4.90%	
10/25/1997	SEAD-12	5	Regional	743694.7	1011987	8.2	11.2	15.5	10.2	***A945P/A378Q***	9.80%	at 340' 300-350-12300 ave
10/25/1997	SEAD-12	5	Regional	743699.1	1011887	9.8	12.1	14	10.2	***A945P/A378Q***	18.63%	
10/25/1997	SEAD-12	5	Regional	743703.4	1011787	8.5	10.6	13.8	10.2	***A945P/A378Q***	3.92%	
10/25/1997	SEAD-12	5	Regional	743707.8	1011687	7.8	10.5	13.2	10.2	***A945P/A378Q***	2.94%	
10/26/1997	SEAD-12	5	Regional	743680.6	1013450	7	10.95	12.5	9.9	A984P/A398Q	10.61%	
10/26/1997	SEAD-12	5	Regional	743683.4	1013387	9	10.6	12.5	9.9	A984P/A398Q	7.07%	
10/26/1997	SEAD-12	5	Regional	743687.8	1013287	8.5	10.3	12	9.9	A984P/A398Q	4.04%	
10/28/1997	SEAD-12	5	Regional	743692.1	1013188	8.5	10.3	12.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743696.5	1013088	8	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743700.9	1012988	8.5	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743705.3	1012888	8	10.2	11.5	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743709.6	1012788	8	10.1	11.5	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743714	1012688	8.5	10.2	11.5	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743718.4	1012588	8.5	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743722.8	1012488	8	10.1	11.5	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743727.1	1012388	8.5	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743731.5	1012288	8	10.4	12	9.9	A984P/A398Q	5.05%	
10/26/1997	SEAD-12	5	Regional	743735.9	1012189	8.5	11.3	13	9.9	A984P/A398Q	14.14%	Shale Visible
10/26/1997	SEAD-12	5	Regional	743740.3	1012089	9	10.5	13.5	9.9	A984P/A398Q	6.06%	Old RR Bed - 480'-500'
10/26/1997	SEAD-12	5	Regional	743744.6	1011989	10	11.8	13.8	9.9	A984P/A398Q	19.19%	
10/26/1997	SEAD-12	5	Regional	743749	1011889	10.5	12.4	14	9.9	A984P/A398Q	25.25%	
10/26/1997	SEAD-12	5	Regional	743753.4	1011789	8	10.3	12	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743757.8	1011689	9	10.9	13	9.9	A984P/A398Q	10.10%	
10/26/1997	SEAD-12	5	Regional	743730.6	1013452	5.8	9.7	13.8	9.9	***A945P/A378Q***	-2.02%	
10/26/1997	SEAD-12	5	Regional	743733.3	1013390	7.8	10.4	13.2	9.9	***A945P/A378Q***	5.05%	
10/26/1997	SEAD-12	5	Regional	743737.7	1013290	8.2	10.1	12.8	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	743742.1	1013190	7.5	10.2	12.2	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743746.4	1013090	6.8	10.5	13	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743750.8	1012990	8.2	10.3	13.8	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743755.2	1012890	7.5	10.2	13.2	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743759.6	1012790	8	10.2	12.5	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743763.9	1012690	7.8	10.2	11.8	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743768.3	1012590	8	10.1	12	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	743772.7	1012490	8.5	10	13.2	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743777.1	1012391	7.2	10	11.8	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743781.4	1012291	8	10	12.5	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743785.8	1012191	7.8	10.6	13.8	9.9	***A945P/A378Q***	7.07%	500' - Center of RR Cut
10/26/1997	SEAD-12	5	Regional	743790.2	1012091	8.8	11.1	14.2	9.9	***A945P/A378Q***	12.12%	
10/26/1997	SEAD-12	5	Regional	743794.6	1011991	9	11.7	14.8	9.9	***A945P/A378Q***	18.18%	325'-350' ~12600 cpm ave
10/26/1997	SEAD-12	5	Regional	743798.9	1011891	8.5	11.7	15.2	9.9	***A945P/A378Q***	18.18%	225'-300' ~12200 cpm ave
10/26/1997	SEAD-12	5	Regional	743803.3	1011791	7.8	10.3	12.8	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743807.7	1011691	8	10.2	12.5	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743780.5	1013454	7	10.4	12.2	9.9	A984P/A398Q	5.05%	
10/26/1997	SEAD-12	5	Regional	743783.3	1013392	7	10.4	12.2	9.9	A984P/A398Q	5.05%	
10/26/1997	SEAD-12	5	Regional	743787.6	1013292	8.5	10.5	12.5	9.9	A984P/A398Q	6.06%	
10/26/1997	SEAD-12	5	Regional	743792	1013192	9	10	12	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743796.4	1013092	8.5	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743800.8	1012992	9	10.6	13	9.9	A984P/A398Q	7.07%	
10/26/1997	SEAD-12	5	Regional	743805.1	1012892	9.5	10.8	13.2	9.9	A984P/A398Q	9.09%	
10/26/1997	SEAD-12	5	Regional	743809.5	1012792	8.5	10.7	12.5	9.9	A984P/A398Q	8.08%	
10/26/1997	SEAD-12	5	Regional	743813.9	1012692	9	10.6	12.8	9.9	A984P/A398Q	7.07%	
10/26/1997	SEAD-12	5	Regional	743818.3	1012593	9	10.5	12.5	9.9	A984P/A398Q	6.06%	
10/26/1997	SEAD-12	5	Regional	743822.6	1012493	9	10.1	11.8	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743827	1012393	8	10	11.5	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743831.4	1012293	8	10	11	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743835.8	1012193	8.5	10.7	12.5	9.9	A984P/A398Q	8.08%	Old RR Bed
10/26/1997	SEAD-12	5	Regional	743840.1	1012093	9	10.6	13	9.9	A984P/A398Q	7.07%	
10/26/1997	SEAD-12	5	Regional	743844.5	1011993	9.5	10.7	12.5	9.9	A984P/A398Q	8.08%	
10/26/1997	SEAD-12	5	Regional	743848.9	1011893	9.5	11	13	9.9	A984P/A398Q	11.11%	
10/26/1997	SEAD-12	5	Regional	743853.3	1011793	8	10.1	12	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743857.6	1011693	8	10	11.5	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743830.5	1013456	5.2	8.9	12.8	9.9	***A945P/A378Q***	-10.10%	
10/26/1997	SEAD-12	5	Regional	743833.2	1013394	8.8	10.3	13.2	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743837.6	1013294	8.2	10	12.5	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743841.9	1013194	8	10.3	11.5	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743846.3	1013094	7.5	10.3	12	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743850.7	1012994	8.2	10.3	12.5	9.9	***A945P/A378Q***	4.04%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/26/1997	SEAD-12	5	Regional	743855.1	1012894	8.8	10.5	11.8	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743859.4	1012795	8.5	10.5	11.5	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743863.8	1012695	8.2	10.5	12	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743868.2	1012595	8	10.4	11.5	9.9	***A945P/A378Q***	5.05%	
10/26/1997	SEAD-12	5	Regional	743872.6	1012495	8.2	10.1	12.5	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	743877	1012395	7.8	10	11.8	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743881.4	1012295	8	10	12.2	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743885.8	1012195	7.5	10.1	11.8	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	743890.1	1012095	8.8	10.5	13.2	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743894.5	1011995	8	10.6	13.5	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	743898.9	1011895	8.5	10.9	13	9.9	***A945P/A378Q***	10.10%	
10/26/1997	SEAD-12	5	Regional	743903.3	1011795	8.2	10.2	12.2	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743907.6	1011696	7.2	10.2	11.8	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743880.4	1013459	7	8.9	11	9.9	A984P/A398Q	-10.10%	
10/26/1997	SEAD-12	5	Regional	743883.2	1013396	8.5	10	12	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743887.6	1013296	8.5	9.8	11.5	9.9	A984P/A398Q	-1.01%	
10/26/1997	SEAD-12	5	Regional	743891.9	1013196	8	10.1	11.5	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743896.3	1013096	8.5	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743900.7	1012997	8	10.3	12	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743905.1	1012897	8	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743909.4	1012797	8	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743913.8	1012697	8	10	11.8	9.9	A984P/A398Q	1.01%	
10/26/1997	SEAD-12	5	Regional	743918.2	1012597	8	10.1	11.5	9.9	A984P/A398Q	2.02%	
10/26/1997	SEAD-12	5	Regional	743922.6	1012497	8.5	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743926.9	1012397	8	9.8	11.5	9.9	A984P/A398Q	-1.01%	
10/26/1997	SEAD-12	5	Regional	743931.3	1012297	8.5	10.2	11.5	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743935.7	1012197	8.5	10.3	12	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	743940.1	1012097	8.5	10.6	13	9.9	A984P/A398Q	7.07%	Old RR Bed
10/26/1997	SEAD-12	5	Regional	743944.4	1011997	9	11.6	14	9.9	A984P/A398Q	17.17%	12500 cpm - 300'-350'
10/26/1997	SEAD-12	5	Regional	743948.8	1011898	10	12.4	14	9.9	A984P/A398Q	25.25%	
10/26/1997	SEAD-12	5	Regional	743953.2	1011798	9	11.3	13	9.9	A984P/A398Q	14.14%	
10/26/1997	SEAD-12	5	Regional	743957.6	1011698	8	10.2	12	9.9	A984P/A398Q	3.03%	
10/26/1997	SEAD-12	5	Regional	743930.4	1013461	4.8	10.6	13.2	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	743933.1	1013398	8.2	10.8	12.5	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	743937.5	1013298	7.5	10.3	12.2	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743941.9	1013199	8.5	10.3	12.5	9.9	***A945P/A378Q***	4.04%	
10/26/1997	SEAD-12	5	Regional	743946.3	1013099	8	10.2	11.8	9.9	***A945P/A378Q***	3.03%	
10/26/1997	SEAD-12	5	Regional	743950.6	1012999	8.2	10.5	13.2	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	743955	1012899	8.5	11.5	14.2	9.9	***A945P/A378Q***	16.16%	
10/26/1997	SEAD-12	5	Regional	743959.4	1012799	9.5	12.1	15	9.9	***A945P/A378Q***	22.22%	
10/26/1997	SEAD-12	5	Regional	743963.8	1012699	8.2	11.4	12.8	9.9	***A945P/A378Q***	15.15%	
10/26/1997	SEAD-12	5	Regional	743968.1	1012599	7.8	10.4	12.2	9.9	***A945P/A378Q***	5.05%	
10/26/1997	SEAD-12	5	Regional	743972.5	1012499	8.2	10.1	11.8	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	743976.9	1012399	7.2	10	11.5	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743981.3	1012299	7.8	10	12.2	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	743985.6	1012199	7.2	10.4	13.2	9.9	***A945P/A378Q***	5.05%	
10/26/1997	SEAD-12	5	Regional	743990	1012100	8.2	10.9	14.5	9.9	***A945P/A378Q***	10.10%	
10/26/1997	SEAD-12	5	Regional	743994.4	1012000	9.2	11.4	13.8	9.9	***A945P/A378Q***	15.15%	
10/26/1997	SEAD-12	5	Regional	743998.8	1011900	8.8	11.6	13.2	9.9	***A945P/A378Q***	17.17%	
10/26/1997	SEAD-12	5	Regional	744003.1	1011800	8	10.8	13	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	744007.5	1011700	7.8	9.8	12.2	9.9	***A945P/A378Q***	-1.01%	
10/26/1997	SEAD-12	5	Regional	743980.3	1013463	7	10.8	14	9.9	A984P/A398Q	9.09%	
10/26/1997	SEAD-12	5	Regional	743983.1	1013401	10	11.8	14.5	9.9	A984P/A398Q	19.19%	
10/26/1997	SEAD-12	5	Regional	743987.4	1013301	9	11.2	13	9.9	A984P/A398Q	13.13%	
10/26/1997	SEAD-12	5	Regional	743991.8	1013201	9	11	13	9.9	A984P/A398Q	11.11%	
10/26/1997	SEAD-12	5	Regional	743996.2	1013101	8.5	10.9	12	9.9	A984P/A398Q	10.10%	
10/26/1997	SEAD-12	5	Regional	744000.6	1013001	9.5	10.9	13	9.9	A984P/A398Q	10.10%	
10/26/1997	SEAD-12	5	Regional	744004.9	1012901	8.5	10.7	12.5	9.9	A984P/A398Q	8.08%	
10/26/1997	SEAD-12	5	Regional	744009.3	1012801	10.5	12.4	14	9.9	A984P/A398Q	25.25%	
10/26/1997	SEAD-12	5	Regional	744013.7	1012701	9.5	12.2	14	9.9	A984P/A398Q	23.23%	
10/26/1997	SEAD-12	5	Regional	744018.1	1012601	9	10.7	12.5	9.9	A984P/A398Q	8.08%	
10/26/1997	SEAD-12	5	Regional	744022.4	1012501	9	10.7	12.5	9.9	A984P/A398Q	8.08%	
10/26/1997	SEAD-12	5	Regional	744026.8	1012401	8.5	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	744031.2	1012302	10.5	11.4	13.5	9.9	A984P/A398Q	15.15%	
10/26/1997	SEAD-12	5	Regional	744035.6	1012202	10	11.5	13.5	9.9	A984P/A398Q	16.16%	
10/26/1997	SEAD-12	5	Regional	744039.9	1012102	10	11.5	13.5	9.9	A984P/A398Q	16.16%	
10/26/1997	SEAD-12	5	Regional	744044.3	1012002	9.5	11.5	13	9.9	A984P/A398Q	16.16%	
10/26/1997	SEAD-12	5	Regional	744048.7	1011902	9	11	12.5	9.9	A984P/A398Q	11.11%	
10/26/1997	SEAD-12	5	Regional	744053.1	1011802	8.5	10.3	11.5	9.9	A984P/A398Q	4.04%	
10/26/1997	SEAD-12	5	Regional	744057.4	1011702	8.5	9.8	11.2	9.9	A984P/A398Q	-1.01%	
10/26/1997	SEAD-12	5	Regional	744030.3	1013465	5.8	11.8	13.8	9.9	***A945P/A378Q***	19.19%	
10/26/1997	SEAD-12	5	Regional	744033	1013403	9	11.2	13.5	9.9	***A945P/A378Q***	13.13%	
10/26/1997	SEAD-12	5	Regional	744037.4	1013303	8.5	10.8	12.2	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	744041.8	1013203	7.8	10.8	13.8	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	744046.1	1013103	6.8	10.6	12.8	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	744050.5	1013003	8	9.9	12.2	9.9	***A945P/A378Q***	0.00%	
10/26/1997	SEAD-12	5	Regional	744054.9	1012903	7.2	10.1	11.8	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	744059.3	1012803	7.8	10.6	12.5	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	744063.6	1012703	8	10.5	13	9.9	***A945P/A378Q***	6.06%	
10/26/1997	SEAD-12	5	Regional	744068	1012603	7.8	10.6	12.5	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	744072.4	1012504	8.5	10.8	13.8	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	744076.8	1012404	8.2	10	13	9.9	***A945P/A378Q***	1.01%	
10/26/1997	SEAD-12	5	Regional	744081.1	1012304	7	10.7	12	9.9	***A945P/A378Q***	8.08%	
10/26/1997	SEAD-12	5	Regional	744085.5	1012204	7.5	10.6	12.8	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	744089.9	1012104	8.5	10.8	13.8	9.9	***A945P/A378Q***	9.09%	
10/26/1997	SEAD-12	5	Regional	744094.3	1012004	7.2	10.6	12.2	9.9	***A945P/A378Q***	7.07%	
10/26/1997	SEAD-12	5	Regional	744098.7	1011904	8	10.1	12.5	9.9	***A945P/A378Q***	2.02%	
10/26/1997	SEAD-12	5	Regional	744103.1	1011804	8.2	9.7	11.8	9.9	***A945P/A378Q***	-2.02%	
10/26/1997	SEAD-12	5	Regional	744107.4	1011704	7.8	10.6	12.8	9.9	***A945P/A378Q***	7.07%	
10/27/1997	SEAD-12	5	Regional	744080.3	1013467	7	10.4	13	9.7	A984P/A398Q	7.22%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
10/27/1997	SEAD-12	5	Regional	744083	1013405	8.5	10.3	11.5	9.7	A984P/A398Q	6.19%	
10/27/1997	SEAD-12	5	Regional	744087.4	1013305	8.5	10	12	9.7	A984P/A398Q	3.09%	
10/27/1997	SEAD-12	5	Regional	744091.8	1013205	8	9.5	11.5	9.7	A984P/A398Q	-2.06%	
10/27/1997	SEAD-12	5	Regional	744096.1	1013105	8	9.4	11.5	9.7	A984P/A398Q	-3.09%	
10/27/1997	SEAD-12	5	Regional	744100.5	1013005	7.8	9.2	10.5	9.7	A984P/A398Q	-5.15%	
10/27/1997	SEAD-12	5	Regional	744104.9	1012905	7.5	9.7	12	9.7	A984P/A398Q	0.00%	
10/27/1997	SEAD-12	5	Regional	744109.3	1012805	8.5	10.1	12	9.7	A984P/A398Q	4.12%	
10/27/1997	SEAD-12	5	Regional	744113.6	1012706	8.5	10.1	12	9.7	A984P/A398Q	4.12%	
10/27/1997	SEAD-12	5	Regional	744118	1012606	8.5	9.8	11.5	9.7	A984P/A398Q	1.03%	
10/27/1997	SEAD-12	5	Regional	744122.4	1012506	8.5	9.8	12	9.7	A984P/A398Q	1.03%	
10/27/1997	SEAD-12	5	Regional	744126.8	1012406	8.5	9.6	11.5	9.7	A984P/A398Q	-1.03%	
10/27/1997	SEAD-12	5	Regional	744131.1	1012306	8	10	12	9.7	A984P/A398Q	3.09%	
10/27/1997	SEAD-12	5	Regional	744135.5	1012206	8	10.3	14	9.7	A984P/A398Q	6.19%	510' - Shale; 14000 cpm peak
10/27/1997	SEAD-12	5	Regional	744139.9	1012106	8	9.9	12	9.7	A984P/A398Q	2.06%	
10/27/1997	SEAD-12	5	Regional	744144.3	1012006	9	11.1	13	9.7	A984P/A398Q	14.43%	
10/27/1997	SEAD-12	5	Regional	744148.6	1011906	9	10.3	12.5	9.7	A984P/A398Q	6.19%	
10/27/1997	SEAD-12	5	Regional	744153	1011806	7.8	9.5	11.5	9.7	A984P/A398Q	-2.06%	
10/27/1997	SEAD-12	5	Regional	744157.4	1011707	8	9.6	11.5	9.7	A984P/A398Q	-1.03%	
10/27/1997	SEAD-12	5	Regional	744130.2	1013470	5.2	9.9	12.4	9.8	***A945P/A378Q***	1.02%	
10/27/1997	SEAD-12	5	Regional	744132.9	1013407	7.2	10.3	12.8	9.8	***A945P/A378Q***	5.10%	
10/27/1997	SEAD-12	5	Regional	744137.3	1013307	7.8	9.1	12.2	9.8	***A945P/A378Q***	-7.14%	
10/27/1997	SEAD-12	5	Regional	744141.7	1013207	7.2	9.1	11.8	9.8	***A945P/A378Q***	-7.14%	
10/27/1997	SEAD-12	5	Regional	744146.1	1013107	7.8	9.3	12	9.8	***A945P/A378Q***	-5.10%	
10/27/1997	SEAD-12	5	Regional	744150.4	1013007	7.8	9.4	11.5	9.8	***A945P/A378Q***	-4.08%	
10/27/1997	SEAD-12	5	Regional	744154.8	1012908	7.2	9.5	12	9.8	***A945P/A378Q***	-3.06%	
10/27/1997	SEAD-12	5	Regional	744159.2	1012808	6.8	9.6	11.2	9.8	***A945P/A378Q***	-2.04%	
10/27/1997	SEAD-12	5	Regional	744163.6	1012708	7.8	9.6	11.5	9.8	***A945P/A378Q***	-2.04%	
10/27/1997	SEAD-12	5	Regional	744167.9	1012608	7.5	9.8	11	9.8	***A945P/A378Q***	0.00%	
10/27/1997	SEAD-12	5	Regional	744172.3	1012508	7.2	9.5	11.5	9.8	***A945P/A378Q***	-3.06%	
10/27/1997	SEAD-12	5	Regional	744176.7	1012408	7.8	10.6	12.8	9.8	***A945P/A378Q***	8.16%	
10/27/1997	SEAD-12	5	Regional	744181.1	1012308	8	9.1	12	9.8	***A945P/A378Q***	-7.14%	
10/27/1997	SEAD-12	5	Regional	744185.4	1012208	8.2	10.1	11.2	9.8	***A945P/A378Q***	3.06%	
10/27/1997	SEAD-12	5	Regional	744189.8	1012108	7.8	10.6	12.8	9.8	***A945P/A378Q***	8.16%	
10/27/1997	SEAD-12	5	Regional	744194.2	1012008	7.2	11.4	14.2	9.8	***A945P/A378Q***	16.33%	
10/27/1997	SEAD-12	5	Regional	744198.6	1011909	8	10.4	13.8	9.8	***A945P/A378Q***	6.12%	
10/27/1997	SEAD-12	5	Regional	744202.9	1011809	7.5	9.1	11.8	9.8	***A945P/A378Q***	-7.14%	
10/27/1997	SEAD-12	5	Regional	744207.3	1011709	7.8	9.3	12	9.8	***A945P/A378Q***	-5.10%	
10/27/1997	SEAD-12	5	Regional	744180.1	1013472	7	10.6	13	9.7	A984P/A398Q	9.28%	
10/27/1997	SEAD-12	5	Regional	744182.9	1013409	8	10	12	9.7	A984P/A398Q	3.09%	
10/27/1997	SEAD-12	5	Regional	744187.3	1013309	7.5	8.9	10.5	9.7	A984P/A398Q	-8.25%	
10/27/1997	SEAD-12	5	Regional	744191.6	1013209	7	8.8	10	9.7	A984P/A398Q	-9.28%	
10/27/1997	SEAD-12	5	Regional	744196	1013110	7	8.9	10	9.7	A984P/A398Q	-8.25%	
10/27/1997	SEAD-12	5	Regional	744200.4	1013010	7.5	9.1	11	9.7	A984P/A398Q	-6.19%	
10/27/1997	SEAD-12	5	Regional	744204.8	1012910	7.5	9.4	10.5	9.7	A984P/A398Q	-3.09%	
10/27/1997	SEAD-12	5	Regional	744209.1	1012810	7.5	9.6	12	9.7	A984P/A398Q	-1.03%	
10/27/1997	SEAD-12	5	Regional	744213.5	1012710	8	9.7	11	9.7	A984P/A398Q	0.00%	
10/27/1997	SEAD-12	5	Regional	744217.9	1012610	8	9.6	11	9.7	A984P/A398Q	-1.03%	
10/27/1997	SEAD-12	5	Regional	744222.3	1012510	7.5	9.7	11	9.7	A984P/A398Q	0.00%	
10/27/1997	SEAD-12	5	Regional	744226.6	1012410	8	9.4	11.5	9.7	A984P/A398Q	-3.09%	
10/27/1997	SEAD-12	5	Regional	744231	1012310	8	9.9	12.5	9.7	A984P/A398Q	2.06%	
10/27/1997	SEAD-12	5	Regional	744235.4	1012210	8	10.4	13	9.7	A984P/A398Q	7.22%	
10/27/1997	SEAD-12	5	Regional	744239.8	1012111	8	10.4	12.5	9.7	A984P/A398Q	7.22%	Old RR Bed - 490'
10/27/1997	SEAD-12	5	Regional	744244.1	1012011	8	10	12	9.7	A984P/A398Q	3.09%	
10/27/1997	SEAD-12	5	Regional	744248.5	1011911	8.5	10	12	9.7	A984P/A398Q	3.09%	
10/27/1997	SEAD-12	5	Regional	744252.9	1011811	8	9.9	12	9.7	A984P/A398Q	2.06%	
10/27/1997	SEAD-12	5	Regional	744257.3	1011711	8	9.6	11.5	9.7	A984P/A398Q	-1.03%	
10/27/1997	SEAD-12	5	Regional	744230.1	1013474	5.5	9.6	12.8	9.8	***A945P/A378Q***	-2.04%	
10/27/1997	SEAD-12	5	Regional	744232.8	1013411	7.2	9.9	13.2	9.8	***A945P/A378Q***	1.02%	
10/27/1997	SEAD-12	5	Regional	744237.2	1013312	6.8	9.3	10.5	9.8	***A945P/A378Q***	-5.10%	
10/27/1997	SEAD-12	5	Regional	744241.6	1013212	7.2	9.4	11	9.8	***A945P/A378Q***	-4.08%	
10/27/1997	SEAD-12	5	Regional	744241.6	1013212	7.5	9.4	11.5	9.8	***A945P/A378Q***	-4.08%	
10/27/1997	SEAD-12	5	Regional	744245.9	1013112	7.5	9.4	11.5	9.8	***A945P/A378Q***	-4.08%	
10/27/1997	SEAD-12	5	Regional	744250.3	1013012	8.2	9.5	12	9.8	***A945P/A378Q***	-3.06%	
10/27/1997	SEAD-12	5	Regional	744254.7	1012912	7.8	10	12.8	9.8	***A945P/A378Q***	2.04%	
10/27/1997	SEAD-12	5	Regional	744259.1	1012812	8.5	11.3	13.2	9.8	***A945P/A378Q***	15.31%	
10/27/1997	SEAD-12	5	Regional	744263.4	1012712	7.8	10.9	14.2	9.8	***A945P/A378Q***	11.22%	
10/27/1997	SEAD-12	5	Regional	744267.8	1012612	7.5	9.5	11.5	9.8	***A945P/A378Q***	-3.06%	
10/27/1997	SEAD-12	5	Regional	744272.2	1012512	8	9.3	10.8	9.8	***A945P/A378Q***	-5.10%	
10/27/1997	SEAD-12	5	Regional	744276.6	1012412	7.5	9.5	11.8	9.8	***A945P/A378Q***	-3.06%	
10/27/1997	SEAD-12	5	Regional	744280.9	1012312	6.8	10.1	12.5	9.8	***A945P/A378Q***	3.06%	
10/27/1997	SEAD-12	5	Regional	744285.3	1012213	8	10.4	11.8	9.8	***A945P/A378Q***	6.12%	
10/27/1997	SEAD-12	5	Regional	744289.7	1012113	8.2	10.2	12.2	9.8	***A945P/A378Q***	4.08%	
10/27/1997	SEAD-12	5	Regional	744294.1	1012013	8.5	10.5	12.8	9.8	***A945P/A378Q***	7.14%	
10/27/1997	SEAD-12	5	Regional	744298.4	1011913	8	10	12.2	9.8	***A945P/A378Q***	2.04%	
10/27/1997	SEAD-12	5	Regional	744302.8	1011813	8.2	10.2	12.5	9.8	***A945P/A378Q***	4.08%	
10/27/1997	SEAD-12	5	Regional	744307.2	1011713	7.5	9.9	12	9.8	***A945P/A378Q***	1.02%	
10/28/1997	SEAD-12	5	Regional	744280.1	1013476	7	9.4	12	9.4	A984P/A398Q	0.00%	
10/28/1997	SEAD-12	5	Regional	744282.8	1013414	7.8	9.6	11.5	9.4	A984P/A398Q	2.13%	
10/28/1997	SEAD-12	5	Regional	744287.1	1013314	8	9.6	11	9.4	A984P/A398Q	2.13%	
10/28/1997	SEAD-12	5	Regional	744291.6	1013214	8	9.5	11	9.4	A984P/A398Q	1.06%	
10/28/1997	SEAD-12	5	Regional	744295.9	1013114	8	9.4	11	9.4	A984P/A398Q	0.00%	
10/28/1997	SEAD-12	5	Regional	744300.3	1013014	7.8	9.1	10.5	9.4	A984P/A398Q	-3.19%	
10/28/1997	SEAD-12	5	Regional	744304.7	1012914	8	9.2	11	9.4	A984P/A398Q	-2.13%	
10/28/1997	SEAD-12	5	Regional	744309.1	1012814	8	10	12	9.4	A984P/A398Q	6.38%	
10/28/1997	SEAD-12	5	Regional	744313.4	1012714	7.8	9.4	11	9.4	A984P/A398Q	0.00%	
10/28/1997	SEAD-12	5	Regional	744317.8	1012614	7.5	9.3	11	9.4	A984P/A398Q	-1.06%	
10/28/1997	SEAD-12	5	Regional	744322.2	1012514	8	9.7	11	9.4	A984P/A398Q	3.19%	
10/28/1997	SEAD-12	5	Regional	744326.6	1012415	7.5	10.1	12.5	9.4	A984P/A398Q	7.45%	107000 cpm 700'-750'
10/28/1997	SEAD-12	5	Regional	744330.9	1012315	8	10.2	13	9.4	A984P/A398Q	8.51%	
10/28/1997	SEAD-12	5	Regional	744335.3	1012215	8.5	10	12.5	9.4	A984P/A398Q	6.38%	Old RR Bed - 500'

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background (kcpm)	Instrument (s/n)	% +/- Background	Comments
10/28/1997	SEAD-12	5	Regional	744339.7	1012115	8 5	10 6	12 5	9 4	A984P/A398Q	12 77%	
10/28/1997	SEAD-12	5	Regional	744344.1	1012015	8 5	10 2	12.5	9 4	A984P/A398Q	8 51%	
10/28/1997	SEAD-12	5	Regional	744348.4	1011915	8 5	9 7	11	9 4	A984P/A398Q	3 19%	
10/28/1997	SEAD-12	5	Regional	744352 8	1011815	8 5	10	12	9 4	A984P/A398Q	6 38%	
10/28/1997	SEAD-12	5	Regional	744357.2	1011715	8	9 9	12	9 4	A984P/A398Q	5 32%	
10/28/1997	SEAD-12	5	Regional	744330	1013478	5 5	9 4	11 8	9 4	***A945P/A378Q***	0 00%	
10/28/1997	SEAD-12	5	Regional	744332.8	1013416	7 2	9 7	12 5	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744337.1	1013316	8	9 7	13 2	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744341.5	1013216	7 5	9 9	11 8	9 4	***A945P/A378Q***	5 32%	
10/28/1997	SEAD-12	5	Regional	744345 9	1013116	7 8	9 2	11 5	9 4	***A945P/A378Q***	-2 13%	
10/28/1997	SEAD-12	5	Regional	744350.3	1013016	6 8	9 2	12 5	9 4	***A945P/A378Q***	-2 13%	
10/28/1997	SEAD-12	5	Regional	744354.6	1012916	7.5	9.5	12.2	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744359	1012816	7 8	9.7	12 5	9.4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744363.4	1012716	8	9 5	11 8	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744367 8	1012617	7 5	9 4	11 2	9 4	***A945P/A378Q***	0 00%	
10/28/1997	SEAD-12	5	Regional	744372.1	1012517	7 8	9 3	12	9 4	***A945P/A378Q***	-1 06%	
10/28/1997	SEAD-12	5	Regional	744376.5	1012417	8	9 7	13 2	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744380.9	1012317	8 5	10 1	12.8	9 4	***A945P/A378Q***	7 45%	
10/28/1997	SEAD-12	5	Regional	744385.3	1012217	8	10 5	13.5	9 4	***A945P/A378Q***	11 70%	
10/28/1997	SEAD-12	5	Regional	744389.6	1012117	8.8	10 4	12 5	9 4	***A945P/A378Q***	10 64%	
10/28/1997	SEAD-12	5	Regional	744394	1012017	7 5	10	11 8	9 4	***A945P/A378Q***	6 38%	
10/28/1997	SEAD-12	5	Regional	744398 4	1011917	8 2	9 5	11.5	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744402 8	1011817	8	9.7	12	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744407.1	1011717	7 5	10 2	12.5	9 4	***A945P/A378Q***	8 51%	
10/28/1997	SEAD-12	5	Regional	744392.1	1013203	7	9	12	9 4	A984P/A398Q	-4 26%	Road - 1570'
10/28/1997	SEAD-12	5	Regional	744395 8	1013118	8	10	12	9 4	A984P/A398Q	6 38%	
10/28/1997	SEAD-12	5	Regional	744400.2	1013018	8	9 2	11	9 4	A984P/A398Q	-2 13%	
10/28/1997	SEAD-12	5	Regional	744404 6	1012918	8	9 3	11	9 4	A984P/A398Q	-1 06%	
10/28/1997	SEAD-12	5	Regional	744408 9	1012819	8	9 4	11	9 4	A984P/A398Q	0 00%	
10/28/1997	SEAD-12	5	Regional	744413.3	1012719	8	9 1	10 5	9.4	A984P/A398Q	-3 19%	
10/28/1997	SEAD-12	5	Regional	744417.7	1012619	7 5	9 2	11	9 4	A984P/A398Q	-2 13%	
10/28/1997	SEAD-12	5	Regional	744422 1	1012519	7 8	9 1	10 5	9 4	A984P/A398Q	-3 19%	
10/28/1997	SEAD-12	5	Regional	744426.4	1012419	8	9 3	10 5	9 4	A984P/A398Q	-1 06%	
10/28/1997	SEAD-12	5	Regional	744430 8	1012319	8 5	9 4	11	9 4	A984P/A398Q	0 00%	
10/28/1997	SEAD-12	5	Regional	744435.2	1012219	8 5	9 7	12	9 4	A984P/A398Q	3 19%	
10/28/1997	SEAD-12	5	Regional	744439 6	1012119	8 8	10 6	12	9 4	A984P/A398Q	12 77%	Old RR Bed - 500'
10/28/1997	SEAD-12	5	Regional	744443 9	1012019	8 5	9 6	11 5	9 4	A984P/A398Q	2 13%	
10/28/1997	SEAD-12	5	Regional	744448.3	1011919	8 5	9 7	11.5	9 4	A984P/A398Q	3 19%	
10/28/1997	SEAD-12	5	Regional	744452.7	1011820	8 5	9 7	11	9 4	A984P/A398Q	3 19%	
10/28/1997	SEAD-12	5	Regional	744457.1	1011720	8 5	9 8	11 5	9 4	A984P/A398Q	4 26%	
10/28/1997	SEAD-12	5	Regional	744449 6	1013033	5 2	9 8	10 8	9 4	***A945P/A378Q***	4 26%	
10/28/1997	SEAD-12	5	Regional	744454 5	1012921	7 8	9 4	11 2	9.4	***A945P/A378Q***	0 00%	
10/28/1997	SEAD-12	5	Regional	744458 9	1012821	7 5	9 3	12 2	9 4	***A945P/A378Q***	-1 06%	
10/28/1997	SEAD-12	5	Regional	744463 3	1012721	6 2	9 2	11 8	9 4	***A945P/A378Q***	-2 13%	
10/28/1997	SEAD-12	5	Regional	744467 6	1012621	7	9 2	10 2	9 4	***A945P/A378Q***	-2 13%	
10/28/1997	SEAD-12	5	Regional	744472	1012521	7 5	9 2	11	9 4	***A945P/A378Q***	-2 13%	
10/28/1997	SEAD-12	5	Regional	744476 4	1012421	7	9 1	10 8	9 4	***A945P/A378Q***	-3 19%	
10/28/1997	SEAD-12	5	Regional	744480 8	1012321	6 5	9 4	11.5	9 4	***A945P/A378Q***	0 00%	
10/28/1997	SEAD-12	5	Regional	744485.1	1012221	7 8	9 9	12	9 4	***A945P/A378Q***	5 32%	
10/28/1997	SEAD-12	5	Regional	744489 5	1012121	6 8	10	12 5	9 4	***A945P/A378Q***	6 38%	
10/28/1997	SEAD-12	5	Regional	744493 9	1012022	7 2	9 6	11 8	9 4	***A945P/A378Q***	2 13%	
10/28/1997	SEAD-12	5	Regional	744498 3	1011922	6 2	9 7	11 5	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744502.6	1011822	8	9 5	12	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744507	1011722	8 8	10 2	12 8	9 4	***A945P/A378Q***	8 51%	
10/28/1997	SEAD-12	5	Regional	744505 3	1012903	6 5	9 1	12	9 4	A984P/A398Q	-3 19%	Road
10/28/1997	SEAD-12	5	Regional	744508 8	1012823	8	9 4	10 5	9 4	A984P/A398Q	0 00%	
10/28/1997	SEAD-12	5	Regional	744513.3	1012723	8	9 2	10 5	9 4	A984P/A398Q	-2 13%	
10/28/1997	SEAD-12	5	Regional	744517.6	1012623	8	9 3	11	9 4	A984P/A398Q	-1 06%	
10/28/1997	SEAD-12	5	Regional	744522	1012523	7 5	9 1	10 5	9.4	A984P/A398Q	-3 19%	
10/28/1997	SEAD-12	5	Regional	744526.4	1012423	8	9 2	10.5	9 4	A984P/A398Q	-2 13%	
10/28/1997	SEAD-12	5	Regional	744530 8	1012323	8	9 5	12	9 4	A984P/A398Q	1 06%	
10/28/1997	SEAD-12	5	Regional	744535 1	1012224	8 5	10	12	9 4	A984P/A398Q	6 38%	
10/28/1997	SEAD-12	5	Regional	744539.5	1012124	8 5	10 4	13	9 4	A984P/A398Q	10 64%	Old RR Bed = Max Reading
10/28/1997	SEAD-12	5	Regional	744543.9	1012024	8	9 4	11	9 4	A984P/A398Q	0 00%	
10/28/1997	SEAD-12	5	Regional	744548.3	1011924	8 5	9 4	11 5	9 4	A984P/A398Q	0 00%	
10/28/1997	SEAD-12	5	Regional	744552.6	1011824	8	9 6	11.5	9 4	A984P/A398Q	2 13%	
10/28/1997	SEAD-12	5	Regional	744557	1011724	8	10 1	12	9 4	A984P/A398Q	7 45%	
10/28/1997	SEAD-12	5	Regional	744559.9	1012800	5.2	9 4	11 8	9 4	***A945P/A378Q***	0 00%	
10/28/1997	SEAD-12	5	Regional	744563.2	1012725	7 8	9 5	12 5	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744567.6	1012625	7 8	8 8	11 5	9 4	***A945P/A378Q***	-6 38%	
10/28/1997	SEAD-12	5	Regional	744571.9	1012525	6 5	9 1	10 8	9 4	***A945P/A378Q***	-3 19%	
10/28/1997	SEAD-12	5	Regional	744576.3	1012426	7 2	9 5	11 2	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744580.7	1012326	7 5	9 3	12	9 4	***A945P/A378Q***	-1 06%	
10/28/1997	SEAD-12	5	Regional	744585.1	1012226	8	10	11 8	9 4	***A945P/A378Q***	6 38%	
10/28/1997	SEAD-12	5	Regional	744589 4	1012126	7 8	10	12 5	9 4	***A945P/A378Q***	6 38%	
10/28/1997	SEAD-12	5	Regional	744593 8	1012026	7	9 9	11 5	9 4	***A945P/A378Q***	5 32%	
10/28/1997	SEAD-12	5	Regional	744598 2	1011926	8 5	9.7	12 8	9 4	***A945P/A378Q***	3 19%	
10/28/1997	SEAD-12	5	Regional	744602 6	1011826	8	9 5	11 8	9 4	***A945P/A378Q***	1 06%	
10/28/1997	SEAD-12	5	Regional	744606 9	1011726	7 2	10 3	12 5	9 4	***A945P/A378Q***	9 57%	
10/28/1997	SEAD-12	5	Regional	744613.8	1012712	7	9 5	11 5	9 4	A984P/A398Q	1 06%	
10/28/1997	SEAD-12	5	Regional	744617 5	1012628	7	8 8	10	9 4	A984P/A398Q	-6 38%	
10/28/1997	SEAD-12	5	Regional	744621 9	1012528	8	9 2	10 5	9 4	A984P/A398Q	-2 13%	
10/28/1997	SEAD-12	5	Regional	744626.3	1012428	8	9 3	11	9 4	A984P/A398Q	-1 06%	
10/28/1997	SEAD-12	5	Regional	744630.6	1012328	8 5	9 6	11	9 4	A984P/A398Q	2 13%	
10/28/1997	SEAD-12	5	Regional	744635	1012228	9	9 8	11.5	9 4	A984P/A398Q	4 26%	
10/28/1997	SEAD-12	5	Regional	744639 4	1012128	8 5	9 9	12	9 4	A984P/A398Q	5 32%	
10/28/1997	SEAD-12	5	Regional	744643 8	1012028	8 5	10	12	9 4	A984P/A398Q	6 38%	
10/28/1997	SEAD-12	5	Regional	744648.1	1011928	8 5	9 6	11 5	9 4	A984P/A398Q	2 13%	
10/28/1997	SEAD-12	5	Regional	744652 5	1011828	8	9 8	11 5	9 4	A984P/A398Q	4 26%	
10/28/1997	SEAD-12	5	Regional	744656 9	1011728	8 5	10 1	12	9 4	A984P/A398Q	7 45%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument (s/n)	% +/- Background	Comments
							(kcpm)					
10/28/1997	SEAD-12	5	Regional	744667.4	1012630	5.5	8.9	10.8	9.4	***A945P/A378Q***	-5.32%	
10/28/1997	SEAD-12	5	Regional	744671.8	1012530	6.8	9.5	11.8	9.4	***A945P/A378Q***	1.06%	
10/28/1997	SEAD-12	5	Regional	744676.2	1012430	7.5	9.3	10.5	9.4	***A945P/A378Q***	-1.06%	
10/28/1997	SEAD-12	5	Regional	744680.6	1012330	8	9.4	11.2	9.4	***A945P/A378Q***	0.00%	
10/28/1997	SEAD-12	5	Regional	744684.9	1012230	7.2	9.7	11.8	9.4	***A945P/A378Q***	3.19%	
10/28/1997	SEAD-12	5	Regional	744689.3	1012130	8	9.7	12.5	9.4	***A945P/A378Q***	3.19%	
10/28/1997	SEAD-12	5	Regional	744693.7	1012030	7.5	9.5	11.5	9.4	***A945P/A378Q***	1.06%	
10/28/1997	SEAD-12	5	Regional	744698.1	1011930	7.8	9.4	10.8	9.4	***A945P/A378Q***	0.00%	
10/28/1997	SEAD-12	5	Regional	744702.4	1011830	7.2	9.4	10.2	9.4	***A945P/A378Q***	0.00%	
10/28/1997	SEAD-12	5	Regional	744706.8	1011731	8	9.7	11.2	9.4	***A945P/A378Q***	3.19%	
10/28/1997	SEAD-12	5	Regional	744719.1	1012592	7	8.9	10.5	9.8	A984P/A398Q	-9.18%	Road
10/28/1997	SEAD-12	5	Regional	744721.8	1012532	7	9.1	10.5	9.8	A984P/A398Q	-7.14%	
10/29/1997	SEAD-12	5	Regional	744726.1	1012432	8	9.3	11.5	9.8	A984P/A398Q	-5.10%	
10/29/1997	SEAD-12	5	Regional	744730.5	1012332	8	9.5	11.5	9.8	A984P/A398Q	-3.06%	
10/29/1997	SEAD-12	5	Regional	744734.9	1012232	8.5	10.1	12	9.8	A984P/A398Q	3.06%	
10/29/1997	SEAD-12	5	Regional	744739.3	1012132	8	9.2	12	9.8	A984P/A398Q	-6.12%	
10/29/1997	SEAD-12	5	Regional	744743.7	1012032	8.5	10	12	9.8	A984P/A398Q	2.04%	
10/29/1997	SEAD-12	5	Regional	744748.1	1011933	8	9.6	11.5	9.8	A984P/A398Q	-2.04%	
10/29/1997	SEAD-12	5	Regional	744752.4	1011833	8.5	9.5	11.5	9.8	A984P/A398Q	-3.06%	
10/29/1997	SEAD-12	5	Regional	744756.8	1011733	8.5	10.2	12	9.8	A984P/A398Q	4.08%	
10/29/1997	SEAD-12	5	Regional	744773.4	1012497	4.8	7	11.2	9.7	***A945P/A378Q***	-27.84%	805'-825' - Gravel Shoulder of Road
10/29/1997	SEAD-12	5	Regional	744776.1	1012434	6.8	9	12.2	9.7	***A945P/A378Q***	-7.22%	
10/29/1997	SEAD-12	5	Regional	744780.5	1012334	7.8	9	11.5	9.7	***A945P/A378Q***	-7.22%	
10/29/1997	SEAD-12	5	Regional	744784.9	1012234	7.2	9.5	12.5	9.7	***A945P/A378Q***	-2.06%	
10/29/1997	SEAD-12	5	Regional	744789.3	1012135	6.5	9.5	12.8	9.7	***A945P/A378Q***	-2.06%	
10/29/1997	SEAD-12	5	Regional	744793.6	1012035	7.8	9.6	12.2	9.7	***A945P/A378Q***	-1.03%	
10/29/1997	SEAD-12	5	Regional	744798	1011935	8.2	9.4	11.8	9.7	***A945P/A378Q***	-3.09%	
10/29/1997	SEAD-12	5	Regional	744802.4	1011835	7.5	9.4	11	9.7	***A945P/A378Q***	-3.09%	
10/29/1997	SEAD-12	5	Regional	744806.8	1011735	8	10.1	11.8	9.7	***A945P/A378Q***	4.12%	
10/29/1997	SEAD-12	5	Regional	744830.4	1012337	6.5	9.1	11	9.8	A984P/A398Q	-7.14%	
10/29/1997	SEAD-12	5	Regional	744834.8	1012237	8	9.3	10.5	9.8	A984P/A398Q	-5.10%	
10/29/1997	SEAD-12	5	Regional	744839.2	1012137	7.5	9.4	12	9.8	A984P/A398Q	-4.08%	
10/29/1997	SEAD-12	5	Regional	744843.6	1012037	8	9.9	12	9.8	A984P/A398Q	1.02%	
10/29/1997	SEAD-12	5	Regional	744847.9	1011937	8	9.2	11	9.8	A984P/A398Q	-6.12%	
10/29/1997	SEAD-12	5	Regional	744852.3	1011837	7.8	9.3	11.2	9.8	A984P/A398Q	-5.10%	
10/29/1997	SEAD-12	5	Regional	744856.7	1011737	8	9.4	12.5	9.8	A984P/A398Q	-4.08%	
10/29/1997	SEAD-12	5	Regional	744881.6	1012311	5.2	9.2	12.2	9.7	***A945P/A378Q***	-5.15%	
10/29/1997	SEAD-12	5	Regional	744884.8	1012239	7.2	9.5	11.8	9.7	***A945P/A378Q***	-2.06%	
10/29/1997	SEAD-12	5	Regional	744889.1	1012139	7.8	9	11.2	9.7	***A945P/A378Q***	-7.22%	
10/29/1997	SEAD-12	5	Regional	744893.5	1012039	6.8	9.7	12.2	9.7	***A945P/A378Q***	0.00%	
10/29/1997	SEAD-12	5	Regional	744897.9	1011939	7	9.3	11.5	9.7	***A945P/A378Q***	-4.12%	
10/29/1997	SEAD-12	5	Regional	744902.3	1011839	7.5	9.2	10.8	9.7	***A945P/A378Q***	-5.15%	
10/29/1997	SEAD-12	5	Regional	744906.6	1011739	8	9.7	11.8	9.7	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	5	Regional	744936	1012211	6.5	9.5	12	9.5	A984P/A398Q	0.00%	Road
11/5/1997	SEAD-12	5	Regional	744939.1	1012141	8	9.8	11.5	9.5	A984P/A398Q	3.16%	
11/5/1997	SEAD-12	5	Regional	744943.4	1012041	7	9.2	10.5	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	5	Regional	744947.8	1011941	8	9.1	10.5	9.5	A984P/A398Q	-4.21%	
11/5/1997	SEAD-12	5	Regional	744952.3	1011841	7.5	9.4	11.5	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	5	Regional	744956.6	1011742	8.5	10	12	9.5	A984P/A398Q	5.26%	
11/5/1997	SEAD-12	5	Regional	744989.6	1012131	5.5	9.7	11.5	9.3	***A945P/A398Q***	4.30%	465'-500' Pavement
11/5/1997	SEAD-12	5	Regional	744993.4	1012043	6.8	9.5	11.8	9.3	***A945P/A398Q***	2.15%	
11/5/1997	SEAD-12	5	Regional	744997.8	1011944	7	8.9	11	9.3	***A945P/A398Q***	-4.30%	
11/5/1997	SEAD-12	5	Regional	745002.2	1011844	6.2	9.1	10.8	9.3	***A945P/A398Q***	-2.15%	
11/5/1997	SEAD-12	5	Regional	745006.6	1011744	6.8	9.4	11.5	9.3	***A945P/A398Q***	1.08%	
11/5/1997	SEAD-12	5	Regional	745043.7	1012038	6.5	9.2	11.5	9.5	A984P/A378Q	-3.16%	
11/5/1997	SEAD-12	5	Regional	745047.8	1011946	8	9.3	11	9.5	A984P/A378Q	-2.11%	
11/5/1997	SEAD-12	5	Regional	745052.1	1011846	7.5	9.1	10.5	9.5	A984P/A378Q	-4.21%	
11/5/1997	SEAD-12	5	Regional	745056.5	1011746	8	10	11.5	9.5	A984P/A378Q	5.26%	
11/5/1997	SEAD-12	5	Regional	745097.8	1011945	5.5	9.2	12	9.3	***A945P/A398Q***	-1.08%	
11/5/1997	SEAD-12	5	Regional	745102.1	1011848	7.2	9.2	10.8	9.3	***A945P/A398Q***	-1.08%	
11/5/1997	SEAD-12	5	Regional	745106.4	1011748	7.5	9.7	12.2	9.3	***A945P/A398Q***	4.30%	
11/5/1997	SEAD-12	5	Regional	745152	1011850	6.5	9.4	12	9.5	A984P/A378Q	-1.05%	Road at 200'
11/5/1997	SEAD-12	5	Regional	745156.4	1011750	8	9.9	11.5	9.5	A984P/A378Q	4.21%	
11/5/1997	SEAD-12	5	Regional	745203.1	1011826	6.2	10.7	13.2	9.3	***A945P/A398Q***	15.05%	
11/5/1997	SEAD-12	5	Regional	745206.4	1011752	7.8	10.1	12.8	9.3	***A945P/A398Q***	8.60%	
11/5/1997	SEAD-12	5	Regional	745256.9	1011740	6	9.7	13.5	9.5	A984P/A378Q	2.11%	Road at 70' - at Shale Exposed Bank Scaler = 11700 to 12800 cpm
11/6/1997	SEAD-12	6	Regional	744762.3	1015036	6.2	8.8	10.2	9.7	***A945P/A378Q***	-9.28%	
11/6/1997	SEAD-12	6	Regional	744766.6	1014936	6.8	9.3	10.8	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	744771	1014836	7.5	9.1	11.2	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	744775.4	1014736	7.2	9.2	10.8	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	6	Regional	744779.8	1014637	8.2	9.5	11.8	9.7	***A945P/A378Q***	-2.06%	
11/6/1997	SEAD-12	6	Regional	744784.1	1014537	7.5	9.6	11.2	9.7	***A945P/A378Q***	-1.03%	
11/6/1997	SEAD-12	6	Regional	744788.5	1014437	7.8	9.4	11	9.7	***A945P/A378Q***	-3.09%	
11/6/1997	SEAD-12	6	Regional	744792.9	1014337	7.2	9.2	11.8	9.7	***A945P/A378Q***	-5.15%	
11/5/1997	SEAD-12	6	Regional	744362.6	1015019	7.5	9.3	11.2	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744367	1014919	8	9.4	11.5	9.3	***A945P/A378Q***	1.08%	
11/5/1997	SEAD-12	6	Regional	744371.4	1014819	7.8	10.2	12.2	9.3	***A945P/A378Q***	9.68%	
11/5/1997	SEAD-12	6	Regional	744375.8	1014719	8.2	10.5	11.8	9.3	***A945P/A378Q***	12.90%	
11/5/1997	SEAD-12	6	Regional	744380.1	1014619	7.5	10.1	12.5	9.3	***A945P/A378Q***	8.60%	
11/5/1997	SEAD-12	6	Regional	744384.5	1014519	7.8	9.7	12	9.3	***A945P/A378Q***	4.30%	
11/5/1997	SEAD-12	6	Regional	744388.9	1014419	8	9.6	11.8	9.3	***A945P/A378Q***	3.23%	
11/5/1997	SEAD-12	6	Regional	744393.3	1014319	7.2	9.8	12	9.3	***A945P/A378Q***	5.38%	
11/5/1997	SEAD-12	6	Regional	744412.6	1015021	7	8.8	10	9.5	A984P/A398Q	-7.37%	
11/5/1997	SEAD-12	6	Regional	744416.9	1014921	8	9.3	10.5	9.5	A984P/A398Q	-2.11%	
11/5/1997	SEAD-12	6	Regional	744421.3	1014821	7.5	9.3	10.5	9.5	A984P/A398Q	-2.11%	
11/5/1997	SEAD-12	6	Regional	744425.7	1014721	8	9.4	10.5	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744430.1	1014621	8	9.2	11	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744434.4	1014521	7.8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744438.8	1014421	7.5	9.3	11	9.5	A984P/A398Q	-2.11%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background (kcpm)	Instrument (s/n)	% +/- Background	Comments
11/5/1997	SEAD-12	6	Regional	744443.2	1014322	7.5	9.4	11.5	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744462.5	1015023	7.5	9.1	10.5	9.3	***A945P/A378Q***	-2.15%	
11/5/1997	SEAD-12	6	Regional	744466.9	1014923	7.2	9.2	10.5	9.3	***A945P/A378Q***	-1.08%	
11/5/1997	SEAD-12	6	Regional	744471.3	1014823	7.2	9.3	11.2	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744475.6	1014723	6.8	9	10.8	9.3	***A945P/A378Q***	-3.23%	
11/5/1997	SEAD-12	6	Regional	744480	1014623	7.2	9.3	10.8	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744484.4	1014524	8	9.3	11.2	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744488.8	1014424	7.8	9.3	10.5	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744493.2	1014324	7.5	9.5	11	9.3	***A945P/A378Q***	2.15%	
11/5/1997	SEAD-12	6	Regional	744512.5	1015025	7.8	9	10.5	9.5	A984P/A398Q	-5.26%	
11/5/1997	SEAD-12	6	Regional	744516.9	1014925	8	9.3	10.8	9.5	A984P/A398Q	-2.11%	
11/5/1997	SEAD-12	6	Regional	744521.3	1014825	8	9.2	10.8	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744525.6	1014726	7.5	9.2	10.5	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744530	1014626	8	9.2	10.5	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744534.4	1014526	8	9.1	10.5	9.5	A984P/A398Q	-4.21%	
11/5/1997	SEAD-12	6	Regional	744538.8	1014426	7.5	9.4	11.2	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744543.1	1014326	8	9.2	11	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744562.4	1015027	5.2	8.6	10.5	9.3	***A945P/A378Q***	-7.53%	3320'-3400' - Very marshy/standing water intermittently
11/5/1997	SEAD-12	6	Regional	744566.8	1014928	6.5	9.2	10.8	9.3	***A945P/A378Q***	-1.08%	
11/5/1997	SEAD-12	6	Regional	744571.2	1014828	7.5	9.5	11.2	9.3	***A945P/A378Q***	2.15%	
11/5/1997	SEAD-12	6	Regional	744575.6	1014728	6.8	9.9	11.8	9.3	***A945P/A378Q***	6.45%	
11/5/1997	SEAD-12	6	Regional	744579.9	1014628	7.2	9.3	11.2	9.3	***A945P/A378Q***	0.00%	
11/5/1997	SEAD-12	6	Regional	744584.3	1014528	7.8	9.8	11.5	9.3	***A945P/A378Q***	5.38%	
11/5/1997	SEAD-12	6	Regional	744588.7	1014428	7.5	9.4	11	9.3	***A945P/A378Q***	1.08%	
11/5/1997	SEAD-12	6	Regional	744593.1	1014328	8.2	10.1	12.2	9.3	***A945P/A378Q***	8.60%	
11/5/1997	SEAD-12	6	Regional	744612.4	1015030	8	9.6	11.5	9.5	A984P/A398Q	1.05%	
11/5/1997	SEAD-12	6	Regional	744616.8	1014930	8	9.4	11	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744621.1	1014830	8	9.6	11.5	9.5	A984P/A398Q	1.05%	
11/5/1997	SEAD-12	6	Regional	744625.5	1014730	8	9.4	11.2	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744629.9	1014630	8	9.1	10.5	9.5	A984P/A398Q	-4.21%	
11/5/1997	SEAD-12	6	Regional	744634.3	1014530	7.5	9.3	10.5	9.5	A984P/A398Q	-2.11%	
11/5/1997	SEAD-12	6	Regional	744638.6	1014430	8	9.3	11	9.5	A984P/A398Q	-2.11%	
11/5/1997	SEAD-12	6	Regional	744643	1014330	7	9.1	10.5	9.5	A984P/A398Q	-4.21%	
11/5/1997	SEAD-12	6	Regional	744662.3	1015032	6.8	9.2	10.8	9.3	***A945P/A378Q***	-1.08%	
11/5/1997	SEAD-12	6	Regional	744666.7	1014932	7	9.2	11	9.3	***A945P/A378Q***	-1.08%	
11/5/1997	SEAD-12	6	Regional	744671.1	1014832	6.2	9	11.5	9.3	***A945P/A378Q***	-3.23%	
11/5/1997	SEAD-12	6	Regional	744675.4	1014732	7	8.9	10.2	9.3	***A945P/A378Q***	-4.30%	
11/5/1997	SEAD-12	6	Regional	744679.8	1014632	6.8	9.2	10.5	9.3	***A945P/A378Q***	-1.08%	
11/5/1997	SEAD-12	6	Regional	744684.2	1014532	8	9.5	10.8	9.3	***A945P/A378Q***	2.15%	
11/5/1997	SEAD-12	6	Regional	744688.6	1014432	8.2	9.5	11.8	9.3	***A945P/A378Q***	2.15%	
11/5/1997	SEAD-12	6	Regional	744692.9	1014332	7.5	9.7	11.5	9.3	***A945P/A378Q***	4.30%	
11/5/1997	SEAD-12	6	Regional	744712.3	1015034	8	9.2	10.8	9.5	A984P/A398Q	-3.16%	
11/5/1997	SEAD-12	6	Regional	744716.7	1014934	8	9.1	10.5	9.5	A984P/A398Q	-4.21%	
11/5/1997	SEAD-12	6	Regional	744721.1	1014834	7.5	9	11	9.5	A984P/A398Q	-5.26%	
11/5/1997	SEAD-12	6	Regional	744725.4	1014734	7.5	8.8	10	9.5	A984P/A398Q	-7.37%	
11/5/1997	SEAD-12	6	Regional	744729.8	1014634	8	9	10.5	9.5	A984P/A398Q	-5.26%	
11/5/1997	SEAD-12	6	Regional	744734.2	1014534	8	9.4	10.8	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744738.6	1014435	7.5	9.4	11	9.5	A984P/A398Q	-1.05%	
11/5/1997	SEAD-12	6	Regional	744742.9	1014335	8	9.4	11.5	9.5	A984P/A398Q	-1.05%	
11/6/1997	SEAD-12	6	Regional	744762.3	1015036	6.2	8.8	10.2	9.7	***A945P/A378Q***	-9.28%	
11/6/1997	SEAD-12	6	Regional	744766.6	1014936	6.8	9.3	10.8	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	744771	1014836	7.5	9.1	11.2	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	744775.4	1014736	7.2	9.2	10.8	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	6	Regional	744779.8	1014637	8.2	9.5	11.8	9.7	***A945P/A378Q***	-2.06%	
11/6/1997	SEAD-12	6	Regional	744784.1	1014537	7.5	9.6	11.2	9.7	***A945P/A378Q***	-1.03%	
11/6/1997	SEAD-12	6	Regional	744788.5	1014437	7.8	9.4	11	9.7	***A945P/A378Q***	-3.09%	
11/6/1997	SEAD-12	6	Regional	744792.9	1014337	7.2	9.2	11.8	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	6	Regional	744812.2	1015038	7	8.8	10	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	6	Regional	744816.6	1014938	8	9.3	11.5	9.7	A984P/A398Q	-4.12%	
11/6/1997	SEAD-12	6	Regional	744820.9	1014839	8	9.4	11	9.7	A984P/A398Q	-3.09%	
11/6/1997	SEAD-12	6	Regional	744825.3	1014739	7.5	9.2	11.5	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744829.7	1014639	8	9.2	11	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744834.1	1014539	8	9.9	12	9.7	A984P/A398Q	2.06%	
11/6/1997	SEAD-12	6	Regional	744838.4	1014439	8	9.5	11	9.7	A984P/A398Q	-2.06%	
11/6/1997	SEAD-12	6	Regional	744842.8	1014339	8	9.2	11	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744862.1	1015041	6.8	8.6	11.5	9.7	***A945P/A378Q***	-11.34%	
11/6/1997	SEAD-12	6	Regional	744866.5	1014941	6.8	9.5	11.2	9.7	***A945P/A378Q***	-2.06%	
11/6/1997	SEAD-12	6	Regional	744870.9	1014841	7.8	9.3	12	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	744875.3	1014741	7.2	9.3	11.8	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	744879.6	1014641	6.8	9.1	11.5	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	744884	1014541	7.8	9.7	12.2	9.7	***A945P/A378Q***	0.00%	
11/6/1997	SEAD-12	6	Regional	744888.4	1014441	7.2	9.4	11.2	9.7	***A945P/A378Q***	-3.09%	
11/6/1997	SEAD-12	6	Regional	744892.8	1014341	6.8	9.5	11.5	9.7	***A945P/A378Q***	-2.06%	
11/6/1997	SEAD-12	6	Regional	744912.1	1015043	7.5	9	10.5	9.7	A984P/A398Q	-7.22%	
11/6/1997	SEAD-12	6	Regional	744916.5	1014943	7.5	8.9	10.5	9.7	A984P/A398Q	-8.25%	
11/6/1997	SEAD-12	6	Regional	744920.9	1014843	7.5	9.2	11	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744925.3	1014743	7.5	9.2	11.2	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744929.6	1014643	8	9	11	9.7	A984P/A398Q	-7.22%	
11/6/1997	SEAD-12	6	Regional	744934	1014543	8	9.3	11	9.7	A984P/A398Q	-4.12%	
11/6/1997	SEAD-12	6	Regional	744938.4	1014443	8.5	9.6	11.5	9.7	A984P/A398Q	-1.03%	
11/6/1997	SEAD-12	6	Regional	744942.8	1014343	8	9.2	11	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	744962.1	1015045	7.2	9	10.8	9.7	***A945P/A378Q***	-7.22%	
11/6/1997	SEAD-12	6	Regional	744966.4	1014945	7.8	9.1	11.5	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	744970.8	1014845	8.2	9.4	11.2	9.7	***A945P/A378Q***	-3.09%	
11/6/1997	SEAD-12	6	Regional	744975.2	1014745	7.8	9.7	11.8	9.7	***A945P/A378Q***	0.00%	
11/6/1997	SEAD-12	6	Regional	744979.6	1014645	6.8	9.3	11.2	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	744983.9	1014545	6.5	9.2	11.8	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	6	Regional	744988.3	1014445	7	9.4	12.2	9.7	***A945P/A378Q***	-3.09%	
11/6/1997	SEAD-12	6	Regional	744992.7	1014346	7.2	9.5	11.5	9.7	***A945P/A378Q***	-2.06%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min	Mean	Max	Background	Instrument	% +/- Background	Comments
							(kcpm)			(s/n)		
11/6/1997	SEAD-12	6	Regional	745012	1015047	7	9.1	10.5	9.7	A984P/A398Q	-6.19%	
11/6/1997	SEAD-12	6	Regional	745016.4	1014947	7.5	9.3	10.5	9.7	A984P/A398Q	-4.12%	
11/6/1997	SEAD-12	6	Regional	745020.8	1014847	8	9.3	10.8	9.7	A984P/A398Q	-4.12%	
11/6/1997	SEAD-12	6	Regional	745025.1	1014747	7.5	8.9	11.5	9.7	A984P/A398Q	-8.25%	
11/6/1997	SEAD-12	6	Regional	745029.5	1014647	7.5	9.6	11.5	9.7	A984P/A398Q	-1.03%	
11/6/1997	SEAD-12	6	Regional	745033.9	1014548	8	9.3	11.5	9.7	A984P/A398Q	-4.12%	
11/6/1997	SEAD-12	6	Regional	745038.3	1014448	8	9.4	11	9.7	A984P/A398Q	-3.09%	
11/6/1997	SEAD-12	6	Regional	745042.6	1014348	7	8.8	10	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	6	Regional	745061.9	1015049	6.2	8.7	10.5	9.7	***A945P/A378Q***	-10.31%	
11/6/1997	SEAD-12	6	Regional	745066.3	1014949	6.5	8.6	11	9.7	***A945P/A378Q***	-11.34%	
11/6/1997	SEAD-12	6	Regional	745070.7	1014849	7.8	9.2	11.2	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	6	Regional	745075.1	1014750	7.2	9.1	10.5	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	745079.4	1014650	6.8	8.9	10.8	9.7	***A945P/A378Q***	-8.25%	
11/6/1997	SEAD-12	6	Regional	745083.8	1014550	7	9.1	11.2	9.7	***A945P/A378Q***	-6.19%	
11/6/1997	SEAD-12	6	Regional	745088.2	1014450	7.5	9.3	11.8	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	6	Regional	745092.6	1014350	6.8	8.9	11.5	9.7	***A945P/A378Q***	-8.25%	
11/6/1997	SEAD-12	6	Regional	745111.9	1015051	7	8.6	10	9.7	A984P/A398Q	-11.34%	
11/6/1997	SEAD-12	6	Regional	745116.3	1014952	6	8.1	9.5	9.7	A984P/A398Q	-16.49%	
11/6/1997	SEAD-12	6	Regional	745120.6	1014852	7	9.1	10	9.7	A984P/A398Q	-6.19%	
11/6/1997	SEAD-12	6	Regional	745125	1014752	7	8.8	9.8	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	6	Regional	745129.4	1014652	7.5	9.2	10.5	9.7	A984P/A398Q	-5.15%	
11/6/1997	SEAD-12	6	Regional	745133.8	1014552	7.5	9.1	11	9.7	A984P/A398Q	-6.19%	
11/6/1997	SEAD-12	6	Regional	745138.2	1014452	7.5	9	10.5	9.7	A984P/A398Q	-7.22%	
11/6/1997	SEAD-12	6	Regional	745142.6	1014352	7	9.1	10	9.7	A984P/A398Q	-6.19%	
11/6/1997	SEAD-12	6	Regional	745161.9	1015054	5.8	8.6	10.8	9.7	***A945P/A378Q***	-11.34%	
11/6/1997	SEAD-12	6	Regional	745166.3	1014954	6.8	8.6	11.2	9.7	***A945P/A378Q***	-11.34%	
11/6/1997	SEAD-12	6	Regional	745170.6	1014854	7.5	9	11.2	9.7	***A945P/A378Q***	-7.22%	
11/6/1997	SEAD-12	6	Regional	745175	1014754	7.2	9	10.8	9.7	***A945P/A378Q***	-7.22%	
11/6/1997	SEAD-12	6	Regional	745179.4	1014654	7	8.9	11	9.7	***A945P/A378Q***	-8.25%	
11/6/1997	SEAD-12	6	Regional	745183.8	1014554	6.8	8.6	11.5	9.7	***A945P/A378Q***	-11.34%	
11/6/1997	SEAD-12	6	Regional	745188.1	1014454	7.2	8.7	10.8	9.7	***A945P/A378Q***	-10.31%	
11/6/1997	SEAD-12	6	Regional	745192.5	1014354	7	9	10.5	9.7	***A945P/A378Q***	-7.22%	
11/6/1997	SEAD-12	6	Regional	745211.8	1015056	7	8.5	9.5	9.7	A984P/A398Q	-12.37%	
11/6/1997	SEAD-12	6	Regional	745216.2	1014956	7	8.5	10	9.7	A984P/A398Q	-12.37%	
11/6/1997	SEAD-12	6	Regional	745220.6	1014856	7	8.7	10	9.7	A984P/A398Q	-10.31%	
11/6/1997	SEAD-12	6	Regional	745224.9	1014756	7	8.6	9.8	9.7	A984P/A398Q	-11.34%	
11/6/1997	SEAD-12	6	Regional	745229.3	1014656	7	8.8	10	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	6	Regional	745233.7	1014556	7	8.5	9.8	9.7	A984P/A398Q	-12.37%	
11/6/1997	SEAD-12	6	Regional	745238.1	1014456	7	8.8	9.5	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	6	Regional	745242.4	1014357	7	8.7	9.8	9.7	A984P/A398Q	-10.31%	
11/6/1997	SEAD-12	6	Regional	745261.8	1015058	5	6.5	7.8	9.7	***A945P/A378Q***	-32.99%	
11/6/1997	SEAD-12	6	Regional	745266.1	1014958	5.5	7	8.8	9.7	***A945P/A378Q***	-27.84%	
11/6/1997	SEAD-12	6	Regional	745270.5	1014858	5	6.8	8.5	9.7	***A945P/A378Q***	-29.90%	
11/6/1997	SEAD-12	6	Regional	745274.9	1014758	5	6.6	8.5	9.7	***A945P/A378Q***	-31.96%	
11/6/1997	SEAD-12	6	Regional	745279.3	1014658	5	6.5	8.5	9.7	***A945P/A378Q***	-32.99%	
11/6/1997	SEAD-12	6	Regional	745283.6	1014559	5	6.6	8	9.7	***A945P/A378Q***	-31.96%	
11/6/1997	SEAD-12	6	Regional	745288	1014459	5	6.8	9	9.7	***A945P/A378Q***	-29.90%	
11/6/1997	SEAD-12	6	Regional	745292.4	1014359	5.5	6.7	8	9.7	***A945P/A378Q***	-30.93%	
11/6/1997	SEAD-12	7	Regional	744397.6	1014219	6.8	9.3	11.5	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	7	Regional	744402	1014120	5.2	9.3	10.8	9.7	***A945P/A378Q***	-4.12%	2455'-2412' - Pavement
11/6/1997	SEAD-12	7	Regional	744406.4	1014020	7.2	9.2	10.5	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	7	Regional	744410.8	1013920	6.8	9.2	11.2	9.7	***A945P/A378Q***	-5.15%	
11/6/1997	SEAD-12	7	Regional	744415.1	1013820	7.5	9.3	12.5	9.7	***A945P/A378Q***	-4.12%	
11/6/1997	SEAD-12	7	Regional	744419.5	1013720	8	10.3	13.2	9.7	***A945P/A378Q***	6.19%	
11/6/1997	SEAD-12	7	Regional	744423.9	1013620	5.8	10.3	12.2	9.7	***A945P/A378Q***	6.19%	1945'-1810' - Pavement
11/6/1997	SEAD-12	7	Regional	744428.3	1013520	5.2	7.6	9.8	9.7	***A945P/A378Q***	-21.65%	
11/6/1997	SEAD-12	7	Regional	744447.6	1014222	8.5	10.2	12.5	9.7	A984P/A398Q	5.15%	
11/6/1997	SEAD-12	7	Regional	744450.9	1014147	6.5	10.3	12	9.7	A984P/A398Q	6.19%	2450'-1900' - Road
11/6/1997	SEAD-12	7	Regional	744478.9	1013552	8	8.8	10	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	7	Regional	744480.2	1013477	6.5	8.2	10	9.7	A984P/A398Q	-15.46%	1810'-1860' - Pavement
11/6/1997	SEAD-12	7	Regional	744497.6	1014224	7	9.6	11.5	9.7	A984P/A398Q	-1.03%	
11/6/1997	SEAD-12	7	Regional	744500.8	1014149	6.5	10.3	12	9.7	A984P/A398Q	6.19%	Substation Pad Area, 2450'-1900' - Road
11/6/1997	SEAD-12	7	Regional	744530.1	1013480	6	7.7	9	9.7	A984P/A398Q	-20.62%	
11/6/1997	SEAD-12	7	Regional	744547.5	1014226	7	9.6	11.5	9.7	A984P/A398Q	-1.03%	Substation fence - 2530'
11/6/1997	SEAD-12	7	Regional	744550.8	1014151	7	9.1	10.5	9.7	A984P/A398Q	-6.19%	Substation Pad Area, 2450' - Road
11/6/1997	SEAD-12	7	Regional	744580.1	1013482	6.5	7.4	9.5	9.7	A984P/A398Q	-23.71%	
11/6/1997	SEAD-12	7	Regional	744597.4	1014228	8	10.8	12.8	9.7	A984P/A398Q	11.34%	
11/6/1997	SEAD-12	7	Regional	744600.8	1014153	7	8.8	12	9.7	A984P/A398Q	-9.28%	Drainage ditch - Gravel road
11/6/1997	SEAD-12	7	Regional	744630.1	1013484	7	8.8	9.5	9.7	A984P/A398Q	-9.28%	
11/6/1997	SEAD-12	7	Regional	744647.4	1014230	8.5	10.1	12.5	9.7	A984P/A398Q	4.12%	
11/6/1997	SEAD-12	7	Regional	744650.7	1014155	6	8.9	12	9.7	A984P/A398Q	-8.25%	
11/6/1997	SEAD-12	7	Regional	744678	1013531	5.5	7.4	9	9.9	A984P/A398Q	-25.25%	RR - 1900'
11/7/1997	SEAD-12	7	Regional	744697.3	1014233	7.2	10.3	13	9.9	***A945P/A378Q***	4.04%	
11/7/1997	SEAD-12	7	Regional	744700.6	1014158	5.5	9.9	12.5	9.9	***A945P/A378Q***	0.00%	1900'-2450' - Pavement
11/7/1997	SEAD-12	7	Regional	744728	1013533	5.2	9.8	13.2	9.9	***A945P/A378Q***	-1.01%	
11/7/1997	SEAD-12	7	Regional	744747.3	1014235	9	10.8	13	9.9	A984P/A398Q	9.09%	
11/7/1997	SEAD-12	7	Regional	744751	1014150	9	10.4	12.5	9.9	A984P/A398Q	5.05%	
11/7/1997	SEAD-12	7	Regional	744762.2	1013695	9.5	9.9	12	9.9	A984P/A398Q	0.00%	
11/7/1997	SEAD-12	7	Regional	744764.8	1013835	9.5	10.8	12.5	9.9	A984P/A398Q	9.09%	
11/7/1997	SEAD-12	7	Regional	744769.2	1013735	8	9.4	12	9.9	A984P/A398Q	-5.05%	
11/7/1997	SEAD-12	7	Regional	744773.6	1013635	8.5	9.8	12	9.9	A984P/A398Q	-1.01%	RR - 1900'
11/7/1997	SEAD-12	7	Regional	744775.8	1013585	7	10.5	13	9.9	A984P/A398Q	6.06%	
11/7/1997	SEAD-12	7	Regional	744797.3	1014237	8.2	10.3	12.2	9.9	***A945P/A378Q***	4.04%	
11/7/1997	SEAD-12	7	Regional	744801.6	1014137	7.5	10.1	13	9.9	***A945P/A378Q***	2.02%	
11/7/1997	SEAD-12	7	Regional	744806	1014037	7.8	8.9	13.2	9.9	***A945P/A378Q***	-10.10%	
11/7/1997	SEAD-12	7	Regional	744810.4	1013937	8.2	10.6	12.8	9.9	***A945P/A378Q***	7.07%	
11/7/1997	SEAD-12	7	Regional	744814.8	1013837	7.8	10.8	14	9.9	***A945P/A378Q***	9.09%	2160'-2300' - Shale bank
11/7/1997	SEAD-12	7	Regional	744819.1	1013737	7.2	10.5	12.8	9.9	***A945P/A378Q***	6.06%	
11/7/1997	SEAD-12	7	Regional	744823.5	1013638	6.8	11.1	13.8	9.9	***A945P/A378Q***	12.12%	Shale-covered, bare ground
11/7/1997	SEAD-12	7	Regional	744827.9	1013538	6.2	10.9	13.5	9.9	***A945P/A378Q***	10.10%	1800'-1900' - RR bed

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background	Instrument (s/n)	% +/- Background	Comments
11/7/1997	SEAD-12	7	Regional	744847.2	1014239	8.5	10.2	13	9.9	A984P/A398Q	3.03%	
11/7/1997	SEAD-12	7	Regional	744851.6	1014139	8.5	10.6	12.5	9.9	A984P/A398Q	7.07%	
11/7/1997	SEAD-12	7	Regional	744855.9	1014039	8.5	10.3	12	9.9	A984P/A398Q	4.04%	
11/7/1997	SEAD-12	7	Regional	744860.3	1013939	8.5	10.4	12.5	9.9	A984P/A398Q	5.05%	
11/7/1997	SEAD-12	7	Regional	744864.7	1013840	8.5	10.2	12.5	9.9	A984P/A398Q	3.03%	
11/7/1997	SEAD-12	7	Regional	744869.1	1013740	8.5	10.1	12	9.9	A984P/A398Q	2.02%	
11/7/1997	SEAD-12	7	Regional	744873.4	1013640	7	10	13	9.9	A984P/A398Q	1.01%	
11/7/1997	SEAD-12	7	Regional	744877.8	1013540	7	10	12	9.9	A984P/A398Q	1.01%	RR - 1900'
11/7/1997	SEAD-12	7	Regional	744897.1	1014241	7	10.1	13.2	9.9	***A945P/A378Q***	2.02%	
11/7/1997	SEAD-12	7	Regional	744901.5	1014141	8.2	10.3	12.5	9.9	***A945P/A378Q***	4.04%	
11/7/1997	SEAD-12	7	Regional	744905.9	1014042	7.5	9.8	11.8	9.9	***A945P/A378Q***	-1.01%	
11/7/1997	SEAD-12	7	Regional	744910.3	1013942	7.5	9.5	11	9.9	***A945P/A378Q***	-4.04%	
11/7/1997	SEAD-12	7	Regional	744914.6	1013842	7	9.7	10.8	9.9	***A945P/A378Q***	-2.02%	
11/7/1997	SEAD-12	7	Regional	744919	1013742	7.2	9.6	11.5	9.9	***A945P/A378Q***	-3.03%	
11/7/1997	SEAD-12	7	Regional	744923.4	1013642	5.2	10.1	12.5	9.9	***A945P/A378Q***	2.02%	
11/7/1997	SEAD-12	7	Regional	744927.8	1013542	6.2	10	11.8	9.9	***A945P/A378Q***	1.01%	
11/7/1997	SEAD-12	7	Regional	744947.1	1014243	8	9.7	12	9.9	A984P/A398Q	-2.02%	
11/7/1997	SEAD-12	7	Regional	744951.5	1014144	8	10.2	12.5	9.9	A984P/A398Q	3.03%	
11/7/1997	SEAD-12	7	Regional	744955.9	1014044	7.8	9.8	11.8	9.9	A984P/A398Q	-1.01%	
11/7/1997	SEAD-12	7	Regional	744960.3	1013944	8	9.7	11.5	9.9	A984P/A398Q	-2.02%	
11/7/1997	SEAD-12	7	Regional	744964.6	1013844	8	9.6	11	9.9	A984P/A398Q	-3.03%	
11/7/1997	SEAD-12	7	Regional	744969	1013744	8	9.3	11	9.9	A984P/A398Q	-6.06%	
11/7/1997	SEAD-12	7	Regional	744973.4	1013644	8	9.7	13	9.9	A984P/A398Q	-2.02%	
11/7/1997	SEAD-12	7	Regional	744977.6	1013547	8	9.7	11.5	9.9	A984P/A398Q	-2.02%	
11/8/1997	SEAD-12	7	Regional	745001.4	1014146	6.8	9.2	11.8	9.3	***A945P/A378Q***	-1.08%	
11/8/1997	SEAD-12	7	Regional	744997	1014246	6.8	9.2	11.8	9.3	***A945P/A378Q***	-1.08%	
11/8/1997	SEAD-12	7	Regional	745005.8	1014046	6.5	9.6	10.8	9.3	***A945P/A378Q***	3.23%	
11/8/1997	SEAD-12	7	Regional	745010.2	1013946	7.2	9.7	11.8	9.3	***A945P/A378Q***	4.30%	
11/8/1997	SEAD-12	7	Regional	745014.6	1013846	8.2	9.8	12	9.3	***A945P/A378Q***	5.38%	
11/8/1997	SEAD-12	7	Regional	745018.9	1013746	7.5	10.1	12.2	9.3	***A945P/A378Q***	8.60%	
11/8/1997	SEAD-12	7	Regional	745023.3	1013646	8.2	10.8	11.8	9.3	***A945P/A378Q***	16.13%	
11/8/1997	SEAD-12	7	Regional	745027.7	1013546	5.5	10.7	12.8	9.3	***A945P/A378Q***	15.05%	
11/8/1997	SEAD-12	7	Regional	745047	1014248	7.5	9.7	12	9.4	A984P/A398Q	3.19%	
11/8/1997	SEAD-12	7	Regional	745051.4	1014148	8	9.6	11.5	9.4	A984P/A398Q	2.13%	
11/8/1997	SEAD-12	7	Regional	745055.8	1014048	8	10	11.8	9.4	A984P/A398Q	6.38%	
11/8/1997	SEAD-12	7	Regional	745060.1	1013948	8	9.8	11.5	9.4	A984P/A398Q	4.26%	
11/8/1997	SEAD-12	7	Regional	745064.5	1013848	8	9.8	11.2	9.4	A984P/A398Q	4.26%	
11/8/1997	SEAD-12	7	Regional	745068.9	1013748	8	9.6	11	9.4	A984P/A398Q	2.13%	
11/8/1997	SEAD-12	7	Regional	745073.3	1013648	7.5	9.5	11	9.4	A984P/A398Q	1.06%	
11/8/1997	SEAD-12	7	Regional	745077.6	1013549	8	9.8	12	9.4	A984P/A398Q	4.26%	
11/10/1997	SEAD-12	7	Regional	745096.9	1014250	7.2	8.8	11.5	9.2	***A945P/A378Q***	-4.35%	
11/10/1997	SEAD-12	7	Regional	745101.3	1014150	6.5	8.8	10.8	9.2	***A945P/A378Q***	-4.35%	
11/10/1997	SEAD-12	7	Regional	745105.7	1014050	7.5	9	10.5	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	7	Regional	745110.1	1013950	7.2	9.4	11.2	9.2	***A945P/A378Q***	2.17%	
11/10/1997	SEAD-12	7	Regional	745114.4	1013850	7.5	9.3	12	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	7	Regional	745118.8	1013751	7.8	9.5	12.2	9.2	***A945P/A378Q***	3.26%	
11/10/1997	SEAD-12	7	Regional	745123.2	1013651	7.2	9.2	12	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	7	Regional	745127.6	1013551	5.2	9	12.8	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	7	Regional	745146.9	1014252	7.5	8.8	10.5	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	7	Regional	745151.3	1014152	8	8.9	10.2	9.2	A984P/A398Q	-3.26%	
11/10/1997	SEAD-12	7	Regional	745155.7	1014052	8	9.6	11.5	9.2	A984P/A398Q	4.35%	
11/10/1997	SEAD-12	7	Regional	745160.1	1013953	8	9.8	12	9.2	A984P/A398Q	6.52%	
11/10/1997	SEAD-12	7	Regional	745164.4	1013853	7.8	9.6	11.5	9.2	A984P/A398Q	4.35%	
11/10/1997	SEAD-12	7	Regional	745168.8	1013753	7.5	9.4	11.2	9.2	A984P/A398Q	2.17%	
11/10/1997	SEAD-12	7	Regional	745173.2	1013653	7.8	9.3	11.2	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	7	Regional	745177.6	1013553	6.5	9.3	11.5	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	7	Regional	745196.9	1014254	6.8	8.8	10.8	9.2	***A945P/A378Q***	-4.35%	
11/10/1997	SEAD-12	7	Regional	745201.3	1014155	6.8	8.9	11.8	9.2	***A945P/A378Q***	-3.26%	
11/10/1997	SEAD-12	7	Regional	745205.6	1014055	7.5	9.6	11.5	9.2	***A945P/A378Q***	4.35%	
11/10/1997	SEAD-12	7	Regional	745210	1013955	7.8	9.3	12	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	7	Regional	745214.4	1013855	7.2	9.5	11.8	9.2	***A945P/A378Q***	3.26%	
11/10/1997	SEAD-12	7	Regional	745218.8	1013755	7.5	9.3	10.8	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	7	Regional	745223.1	1013655	8.2	9	11.2	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	7	Regional	745227.5	1013555	5.2	9	12.8	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	7	Regional	745246.8	1014257	7	8.4	10.2	9.2	A984P/A398Q	-8.70%	
11/10/1997	SEAD-12	7	Regional	745251.2	1014157	7.8	8.8	10.5	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	7	Regional	745255.6	1014057	7.8	9.4	11.2	9.2	A984P/A398Q	2.17%	
11/10/1997	SEAD-12	7	Regional	745259.9	1013957	7.5	9.2	10.8	9.2	A984P/A398Q	0.00%	
11/10/1997	SEAD-12	7	Regional	745264.3	1013857	7.5	9.2	11	9.2	A984P/A398Q	0.00%	
11/10/1997	SEAD-12	7	Regional	745268.7	1013757	7.8	9.3	11	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	7	Regional	745273.1	1013657	8	9.5	11	9.2	A984P/A398Q	3.26%	
11/10/1997	SEAD-12	7	Regional	745277.4	1013557	8	9.6	11	9.2	A984P/A398Q	4.35%	
11/10/1997	SEAD-12	7	Regional	745296.8	1014259	6	7.6	9	9.2	***A945P/A378Q***	-17.39%	
11/10/1997	SEAD-12	7	Regional	745301.1	1014159	6	7.8	9.2	9.2	***A945P/A378Q***	-15.22%	
11/10/1997	SEAD-12	7	Regional	745305.5	1014059	6	7.7	9	9.2	***A945P/A378Q***	-16.30%	
11/10/1997	SEAD-12	7	Regional	745309.9	1013959	6.5	8.2	10.5	9.2	***A945P/A378Q***	-10.87%	
11/10/1997	SEAD-12	7	Regional	745314.3	1013859	7	8.1	9.5	9.2	***A945P/A378Q***	-11.96%	
11/10/1997	SEAD-12	7	Regional	745318.6	1013759	6.5	7.9	9	9.2	***A945P/A378Q***	-14.13%	
11/10/1997	SEAD-12	7	Regional	745323	1013659	6.5	8.4	10	9.2	***A945P/A378Q***	-8.70%	
11/10/1997	SEAD-12	7	Regional	745327.4	1013559	6.5	8.4	9.5	9.2	***A945P/A378Q***	-8.70%	
11/10/1997	SEAD-12	8	Regional	744432.6	1013420	7.2	9.3	10.8	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744437	1013320	6.8	8.7	10.2	9.2	***A945P/A378Q***	-5.43%	
11/10/1997	SEAD-12	8	Regional	744440.9	1013230	4.8	9.6	11.5	9.2	***A945P/A378Q***	4.35%	
11/10/1997	SEAD-12	8	Regional	744482.6	1013422	8	9.7	11	9.2	A984P/A398Q	5.43%	
11/10/1997	SEAD-12	8	Regional	744486.9	1013322	7	8.8	10.2	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	8	Regional	744491.3	1013223	7.5	9.1	11	9.2	A984P/A398Q	-1.09%	
11/10/1997	SEAD-12	8	Regional	744495.7	1013123	7.5	8.8	10.5	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	8	Regional	744498.8	1013053	6	8.5	10.8	9.2	A984P/A398Q	-7.61%	Road @ 1360'
11/10/1997	SEAD-12	8	Regional	744532.6	1013425	5.5	9.4	11.5	9.2	***A945P/A378Q***	2.17%	
11/10/1997	SEAD-12	8	Regional	744536.9	1013325	6.8	8.9	11.2	9.2	***A945P/A378Q***	-3.26%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing			(kcpm)		(s/n)		
11/10/1997	SEAD-12	8	Regional	744541.3	1013225	6.5	9	10.8	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744545.7	1013125	6.8	9.1	10.5	9.2	***A945P/A378Q***	-1.09%	
11/10/1997	SEAD-12	8	Regional	744550.1	1013025	7.2	9	11.5	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744553.6	1012945	5.2	8.5	10.8	9.2	***A945P/A378Q***	-7.61%	
11/10/1997	SEAD-12	8	Regional	744582.5	1013427	7.8	9.5	12	9.2	A984P/A398Q	3.26%	
11/10/1997	SEAD-12	8	Regional	744586.9	1013327	8	9.2	11	9.2	A984P/A398Q	0.00%	
11/10/1997	SEAD-12	8	Regional	744591.3	1013227	8	9.2	11	9.2	A984P/A398Q	0.00%	
11/10/1997	SEAD-12	8	Regional	744595.6	1013127	8	9.3	11.2	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	8	Regional	744600	1013027	8	8.9	10.8	9.2	A984P/A398Q	-3.26%	
11/10/1997	SEAD-12	8	Regional	744604.4	1012927	7.8	9.1	10.8	9.2	A984P/A398Q	-1.09%	
11/10/1997	SEAD-12	8	Regional	744607.9	1012847	6.5	8.6	10.2	9.2	A984P/A398Q	-6.52%	Road @ 1140'
11/10/1997	SEAD-12	8	Regional	744632.4	1013429	7.5	9.5	11.8	9.2	***A945P/A378Q***	3.26%	
11/10/1997	SEAD-12	8	Regional	744636.8	1013329	6.8	9.1	11.2	9.2	***A945P/A378Q***	-1.09%	
11/10/1997	SEAD-12	8	Regional	744641.2	1013229	7.2	8.9	10.5	9.2	***A945P/A378Q***	-3.26%	
11/10/1997	SEAD-12	8	Regional	744645.6	1013129	6.8	9	10.8	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744649.9	1013029	6.5	9.1	11.5	9.2	***A945P/A378Q***	-1.09%	
11/10/1997	SEAD-12	8	Regional	744654.3	1012929	7.2	9.2	11	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744658.7	1012830	6.8	9.2	11.2	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744682.4	1013431	8	9.2	12	9.2	A984P/A398Q	0.00%	
11/10/1997	SEAD-12	8	Regional	744686.8	1013331	7.8	9.4	11.5	9.2	A984P/A398Q	2.17%	
11/10/1997	SEAD-12	8	Regional	744691.1	1013231	7.8	9.4	12	9.2	A984P/A398Q	2.17%	
11/10/1997	SEAD-12	8	Regional	744695.5	1013131	7.5	9	10.5	9.2	A984P/A398Q	-2.17%	
11/10/1997	SEAD-12	8	Regional	744699.9	1013032	7.5	8.8	10.2	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	8	Regional	744704.3	1012932	8	9.1	11	9.2	A984P/A398Q	-1.09%	
11/10/1997	SEAD-12	8	Regional	744708.6	1012832	7.5	9	11.5	9.2	A984P/A398Q	-2.17%	
11/10/1997	SEAD-12	8	Regional	744713	1012732	7.5	8.9	11	9.2	A984P/A398Q	-3.26%	
11/10/1997	SEAD-12	8	Regional	744715.9	1012667	6	8.4	10.5	9.2	A984P/A398Q	-8.70%	
11/10/1997	SEAD-12	8	Regional	744732.4	1013433	8	9.7	12.2	9.2	***A945P/A378Q***	5.43%	
11/10/1997	SEAD-12	8	Regional	744736.8	1013333	7.5	9.3	11.5	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744741.1	1013234	7.8	9.5	12	9.2	***A945P/A378Q***	3.26%	
11/10/1997	SEAD-12	8	Regional	744745.5	1013134	7.2	9.9	12.2	9.2	***A945P/A378Q***	7.61%	
11/10/1997	SEAD-12	8	Regional	744749.9	1013034	7.5	9.3	11.5	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744754.3	1012934	7.8	9.1	11	9.2	***A945P/A378Q***	-1.09%	
11/10/1997	SEAD-12	8	Regional	744758.6	1012834	8	9	10.8	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744763	1012734	7.5	8.7	11.2	9.2	***A945P/A378Q***	-5.43%	
11/10/1997	SEAD-12	8	Regional	744767.4	1012634	6.8	8.8	10.8	9.2	***A945P/A378Q***	-4.35%	
11/10/1997	SEAD-12	8	Regional	744770.2	1012569	5.2	7.8	10.2	9.2	***A945P/A378Q***	-15.22%	
11/10/1997	SEAD-12	8	Regional	744782.3	1013436	8	9.7	12	9.2	A984P/A398Q	5.43%	
11/10/1997	SEAD-12	8	Regional	744786.7	1013336	8	9.4	11.5	9.2	A984P/A398Q	2.17%	
11/10/1997	SEAD-12	8	Regional	744791.1	1013236	8	9.3	11.2	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	8	Regional	744795.4	1013136	8	9.3	10.8	9.2	A984P/A398Q	1.09%	
11/10/1997	SEAD-12	8	Regional	744799.8	1013036	7.5	9.1	10.5	9.2	A984P/A398Q	-1.09%	
11/10/1997	SEAD-12	8	Regional	744804.2	1012936	7	8.7	10	9.2	A984P/A398Q	-5.43%	
11/10/1997	SEAD-12	8	Regional	744808.6	1012836	7.2	8.7	10.5	9.2	A984P/A398Q	-5.43%	
11/10/1997	SEAD-12	8	Regional	744812.9	1012736	7.5	8.8	10.8	9.2	A984P/A398Q	-4.35%	
11/10/1997	SEAD-12	8	Regional	744817.3	1012636	7.8	9.1	10.5	9.2	A984P/A398Q	-1.09%	
11/10/1997	SEAD-12	8	Regional	744821.7	1012536	7.5	8.9	10.2	9.2	A984P/A398Q	-3.26%	
11/10/1997	SEAD-12	8	Regional	744824.1	1012481	6	7	9	9.2	A984P/A398Q	-23.91%	
11/10/1997	SEAD-12	8	Regional	744832.3	1013438	7.5	9.2	11.2	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744836.6	1013338	7.2	9.8	12.2	9.2	***A945P/A378Q***	6.52%	
11/10/1997	SEAD-12	8	Regional	744841	1013238	6.8	9.8	12.5	9.2	***A945P/A378Q***	6.52%	
11/10/1997	SEAD-12	8	Regional	744845.4	1013138	7.5	9.8	12	9.2	***A945P/A378Q***	6.52%	
11/10/1997	SEAD-12	8	Regional	744849.8	1013038	7	9.7	13.2	9.2	***A945P/A378Q***	5.43%	
11/10/1997	SEAD-12	8	Regional	744854.1	1012938	7.2	9.3	12	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744858.5	1012838	7.8	9.3	11.5	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744862.9	1012738	7.2	9.2	11.8	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744867.3	1012638	6.8	8.9	11.5	9.2	***A945P/A378Q***	-3.26%	
11/10/1997	SEAD-12	8	Regional	744871.6	1012539	6.5	8.7	10.5	9.2	***A945P/A378Q***	-5.43%	
11/10/1997	SEAD-12	8	Regional	744869.6	1012586	5.5	8.7	10.8	9.2	***A945P/A378Q***	-5.43%	
11/10/1997	SEAD-12	8	Regional	744882.2	1013440	8	9.2	11.2	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744886.6	1013340	8	9.5	11.5	9.2	***A945P/A378Q***	3.26%	
11/10/1997	SEAD-12	8	Regional	744890.9	1013240	8	9.7	11.5	9.2	***A945P/A378Q***	5.43%	
11/10/1997	SEAD-12	8	Regional	744895.3	1013140	8.2	9.7	11.5	9.2	***A945P/A378Q***	5.43%	
11/10/1997	SEAD-12	8	Regional	744899.7	1013040	8	10	11.8	9.2	***A945P/A378Q***	8.70%	
11/10/1997	SEAD-12	8	Regional	744904.1	1012940	7.8	9.4	11	9.2	***A945P/A378Q***	2.17%	
11/10/1997	SEAD-12	8	Regional	744908.4	1012840	7.5	9.2	11	9.2	***A945P/A378Q***	0.00%	
11/10/1997	SEAD-12	8	Regional	744912.8	1012741	7	8.9	9.8	9.2	***A945P/A378Q***	-3.26%	
11/10/1997	SEAD-12	8	Regional	744917.2	1012641	7.5	9	11.5	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744921.6	1012541	7.5	9.3	11.5	9.2	***A945P/A378Q***	1.09%	
11/10/1997	SEAD-12	8	Regional	744925.9	1012441	8	9	11	9.2	***A945P/A378Q***	-2.17%	
11/10/1997	SEAD-12	8	Regional	744930.3	1012341	6	8.7	11	9.2	***A945P/A378Q***	-5.43%	
11/11/1997	SEAD-12	8	Regional	744932.2	1013442	6.8	9	10.8	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	744936.6	1013342	7.2	9.3	10.8	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	744940.9	1013242	7.5	9.8	11.5	9.1	***A945P/A378Q***	7.69%	
11/11/1997	SEAD-12	8	Regional	744945.3	1013142	8	9.7	12	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	744949.7	1013042	7.8	9.8	12.2	9.1	***A945P/A378Q***	7.69%	
11/11/1997	SEAD-12	8	Regional	744954.1	1012943	7.2	9.2	11.8	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	744958.4	1012843	6.8	9	11	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	744962.8	1012743	7	9	11.2	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	744967.2	1012643	7.5	9	10.8	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	744971.6	1012543	8	9.3	11.8	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	744975.9	1012443	7.8	9.3	11.2	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	744980.3	1012343	7.2	9	10.5	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	744984.3	1012253	5.2	9.1	11.2	9.1	***A945P/A378Q***	0.00%	
11/11/1997	SEAD-12	8	Regional	744982.1	1013444	7.8	9.3	10.5	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	744986.5	1013344	8	9.2	11.2	9.2	A984P/A398Q	0.00%	
11/11/1997	SEAD-12	8	Regional	744990.9	1013244	8.5	9.6	11.8	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	744995.3	1013145	8.5	9.5	11.2	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	744999.6	1013045	8	9	11.5	9.2	A984P/A398Q	-2.17%	
11/11/1997	SEAD-12	8	Regional	745004	1012945	8	9.4	11	9.2	A984P/A398Q	2.17%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27		Min	Mean	Max	Background	Instrument	% +/- Background	Comments
				easting	northing		(kcpm)			(s/n)		
11/11/1997	SEAD-12	8	Regional	745008.4	1012845	7.2	8.9	10	9.2	A984P/A398Q	-3.26%	
11/11/1997	SEAD-12	8	Regional	745012.8	1012745	7.8	9.1	10.5	9.2	A984P/A398Q	-1.09%	
11/11/1997	SEAD-12	8	Regional	745017.1	1012645	8	9.1	10.8	9.2	A984P/A398Q	-1.09%	
11/11/1997	SEAD-12	8	Regional	745021.5	1012545	8	9.7	12	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745025.9	1012445	8	9.6	12	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	745030.3	1012345	7.8	9.2	11	9.2	A984P/A398Q	0.00%	
11/11/1997	SEAD-12	8	Regional	745034.6	1012245	7.5	9.3	11.5	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745038.3	1012160	6.5	8.4	10.5	9.2	A984P/A398Q	-8.70%	Road @ 430'
11/11/1997	SEAD-12	8	Regional	745032.1	1013446	7	9.2	11.8	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	745036.4	1013347	7.5	9.1	10.8	9.1	***A945P/A378Q***	0.00%	
11/11/1997	SEAD-12	8	Regional	745040.8	1013247	7.8	9.7	11.5	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745045.2	1013147	8	9.6	12.5	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745049.6	1013047	7.8	9.8	12.2	9.1	***A945P/A378Q***	7.69%	
11/11/1997	SEAD-12	8	Regional	745053.9	1012947	8.2	9.6	11.2	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745058.3	1012847	7.8	9.5	12	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745062.7	1012747	7.2	9.4	11.5	9.1	***A945P/A378Q***	3.30%	
11/11/1997	SEAD-12	8	Regional	745067.1	1012647	7.8	9	11.2	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	745071.4	1012547	8.2	8.9	11.8	9.1	***A945P/A378Q***	-2.20%	
11/11/1997	SEAD-12	8	Regional	745075.8	1012447	7.8	9.6	12.2	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745080.2	1012348	7.2	9.3	11.5	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745084.6	1012248	7.5	9.1	10.8	9.1	***A945P/A378Q***	0.00%	
11/11/1997	SEAD-12	8	Regional	745088.9	1012148	7.8	9	11.5	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	745092	1012078	5.2	8.4	10.8	9.1	***A945P/A378Q***	-7.69%	
11/11/1997	SEAD-12	8	Regional	745082	1013449	8	9.5	11.5	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	745086.4	1013349	7.8	9.4	11	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745090.8	1013249	7.5	9.4	11.2	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745095.1	1013149	7.8	9.5	11.5	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	745099.5	1013049	8	9.3	11.2	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745103.9	1012949	8	9.5	11.5	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	745108.3	1012849	7.5	9.5	11.2	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	745112.6	1012749	7.8	9.4	11.5	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745117	1012649	7.8	9.4	11.2	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745121.4	1012550	7.5	9	11	9.2	A984P/A398Q	-2.17%	
11/11/1997	SEAD-12	8	Regional	745125.8	1012450	7.5	9.3	11.2	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745130.1	1012350	7.5	9.7	11.5	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745134.5	1012250	7.5	9.1	11.2	9.2	A984P/A398Q	-1.09%	
11/11/1997	SEAD-12	8	Regional	745138.9	1012150	7	9	10.5	9.2	A984P/A398Q	-2.17%	
11/11/1997	SEAD-12	8	Regional	745143.3	1012050	7.5	9.3	10.8	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745146.1	1011985	6	8.1	10.5	9.2	A984P/A398Q	-11.96%	
11/11/1997	SEAD-12	8	Regional	745131.9	1013451	7.2	9.4	12.8	9.1	***A945P/A378Q***	3.30%	
11/11/1997	SEAD-12	8	Regional	745136.3	1013351	8	9.3	12.2	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745140.7	1013251	6.8	9.3	11.2	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745145.1	1013151	8.2	9.7	12	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745149.5	1013051	7.5	9.7	11.5	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745153.9	1012951	8.2	9.6	12.5	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745158.3	1012851	7.2	9.4	11.2	9.1	***A945P/A378Q***	3.30%	
11/11/1997	SEAD-12	8	Regional	745162.6	1012751	7.8	9.5	12.2	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745167	1012652	7.5	9.6	11.5	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745171.4	1012552	6.8	9.2	11	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	745175.8	1012452	7.8	9.3	11.2	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745180.1	1012352	7.2	9.3	12.5	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745184.5	1012252	8.2	9.7	12	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745188.9	1012152	7.8	9.1	11.8	9.1	***A945P/A378Q***	0.00%	
11/11/1997	SEAD-12	8	Regional	745193.3	1012052	7.2	9.3	10.2	9.1	***A945P/A378Q***	2.20%	
11/11/1997	SEAD-12	8	Regional	745197.6	1011952	7.8	9.5	10.5	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745200.5	1011886	5.2	8.5	11.8	9.1	***A945P/A378Q***	-6.59%	
11/11/1997	SEAD-12	8	Regional	745181.9	1013453	7	9.7	13	9.2	A984P/A398Q	5.43%	RR Tracks @ 1795'
11/11/1997	SEAD-12	8	Regional	745186.3	1013353	8	9.2	11	9.2	A984P/A398Q	0.00%	
11/11/1997	SEAD-12	8	Regional	745190.7	1013253	8	9.4	11.8	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745195.1	1013153	8	9.6	12	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	745199.4	1013053	8.5	10	12	9.2	A984P/A398Q	8.70%	
11/11/1997	SEAD-12	8	Regional	745203.8	1012953	8	9.6	11.5	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	745208.2	1012854	8	9.3	11.5	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745212.6	1012754	8	9.6	11.5	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	745216.9	1012654	7.8	9.2	11	9.2	A984P/A398Q	0.00%	
11/11/1997	SEAD-12	8	Regional	745221.3	1012554	8	9.4	11	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745225.7	1012454	8	9.2	11	9.2	A984P/A398Q	0.00%	
11/11/1997	SEAD-12	8	Regional	745230.1	1012354	8	9.4	12	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745234.4	1012254	7.8	9.3	11	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745238.8	1012154	7.5	9.3	12	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745243.2	1012054	8	9.4	11	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745247.6	1011954	8	9.5	11.5	9.2	A984P/A398Q	3.26%	
11/11/1997	SEAD-12	8	Regional	745251.9	1011855	8.5	9.7	12	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745254.4	1011797	7	9.3	11.8	9.2	A984P/A398Q	1.09%	Road @ 85'
11/11/1997	SEAD-12	8	Regional	745231.9	1013455	4.8	9.3	13.2	9.1	***A945P/A378Q***	2.20%	RR Tracks 1705'-1725'
11/11/1997	SEAD-12	8	Regional	745236.3	1013355	7.5	9.5	12.8	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745240.6	1013255	8	9.1	11.2	9.1	***A945P/A378Q***	0.00%	
11/11/1997	SEAD-12	8	Regional	745245	1013155	6.5	9.4	10.5	9.1	***A945P/A378Q***	3.30%	1450'-1320' very wet, some standing water
11/11/1997	SEAD-12	8	Regional	745249.4	1013056	7.8	9.2	11.8	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	745253.8	1012956	7.2	9.7	11.5	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745258.1	1012856	7.5	9.6	12.2	9.1	***A945P/A378Q***	5.49%	
11/11/1997	SEAD-12	8	Regional	745262.5	1012756	7.8	9.5	11	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745266.9	1012656	8.2	9.5	11.5	9.1	***A945P/A378Q***	4.40%	
11/11/1997	SEAD-12	8	Regional	745271.3	1012556	6.8	9.2	11.2	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	745275.6	1012456	7.2	9.2	10.8	9.1	***A945P/A378Q***	1.10%	
11/11/1997	SEAD-12	8	Regional	745280	1012356	6.5	8.7	10.2	9.1	***A945P/A378Q***	-4.40%	
11/11/1997	SEAD-12	8	Regional	745284.4	1012256	6.8	9	11.5	9.1	***A945P/A378Q***	-1.10%	
11/11/1997	SEAD-12	8	Regional	745288.8	1012156	6.2	8.4	10.5	9.1	***A945P/A378Q***	-7.69%	
11/11/1997	SEAD-12	8	Regional	745293.1	1012057	6.5	9.7	12.8	9.1	***A945P/A378Q***	6.59%	
11/11/1997	SEAD-12	8	Regional	745297.5	1011957	7.2	9.5	11.5	9.1	***A945P/A378Q***	4.40%	

Appendix F
Class III Areas Gamma Scanning Results
SEAD-12 Remedial Investigation
Seneca Army Depot

Collection Date	Site	Area	Grid	NAD-27 easting	NAD-27 northing	Min (kcpm)	Mean (kcpm)	Max (kcpm)	Background	Instrument (s/n)	% +/- Background	Comments
11/11/1997	SEAD-12	8	Regional	745301.9	1011857	7.5	10	13.8	9.1	***A945P/A378Q***	9.89%	
11/11/1997	SEAD-12	8	Regional	745305.8	1011767	5.8	10.8	13.5	9.1	***A945P/A378Q***	18.68%	Shale bank
11/11/1997	SEAD-12	8	Regional	745281.9	1013455	7.8	9.3	11	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745286.2	1013357	7	8.9	10.5	9.2	A984P/A398Q	-3.26%	RR Tracks @ 1675'
11/11/1997	SEAD-12	8	Regional	745290.6	1013258	8.5	10	12	9.2	A984P/A398Q	8.70%	
11/11/1997	SEAD-12	8	Regional	745294.9	1013158	8.5	9.9	12	9.2	A984P/A398Q	7.61%	
11/11/1997	SEAD-12	8	Regional	745299.3	1013058	8	9.7	11.5	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745303.7	1012958	8	9.8	11.8	9.2	A984P/A398Q	6.52%	
11/11/1997	SEAD-12	8	Regional	745308.1	1012858	8	9.7	12	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745312.4	1012758	7.5	9.4	11.5	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745316.8	1012658	8	9.4	11.5	9.2	A984P/A398Q	2.17%	
11/11/1997	SEAD-12	8	Regional	745321.2	1012558	8	10.2	12	9.2	A984P/A398Q	10.87%	
11/11/1997	SEAD-12	8	Regional	745325.6	1012458	8	9.8	12.5	9.2	A984P/A398Q	6.52%	
11/11/1997	SEAD-12	8	Regional	745329.9	1012358	8	9.6	12	9.2	A984P/A398Q	4.35%	
11/11/1997	SEAD-12	8	Regional	745334.3	1012259	8.5	9.8	11.5	9.2	A984P/A398Q	6.52%	
11/11/1997	SEAD-12	8	Regional	745338.7	1012159	8.5	10.1	12.5	9.2	A984P/A398Q	9.78%	
11/11/1997	SEAD-12	8	Regional	745343.1	1012059	8.5	9.9	12.5	9.2	A984P/A398Q	7.61%	
11/11/1997	SEAD-12	8	Regional	745347.4	1011959	8	9.8	11.5	9.2	A984P/A398Q	6.52%	
11/11/1997	SEAD-12	8	Regional	745351.8	1011859	8	9.7	11.5	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745356.2	1011759	8	9.7	11.2	9.2	A984P/A398Q	5.43%	
11/11/1997	SEAD-12	8	Regional	745331.8	1013460	5.8	7.7	9.5	9.1	***A945P/A378Q***	-15.38%	
11/11/1997	SEAD-12	8	Regional	745336.1	1013360	5.2	7.7	10.2	9.1	***A945P/A378Q***	-15.38%	
11/11/1997	SEAD-12	8	Regional	745340.5	1013260	6.2	8.1	9.8	9.1	***A945P/A378Q***	-10.99%	
11/11/1997	SEAD-12	8	Regional	745344.9	1013160	5.5	7.4	10	9.1	***A945P/A378Q***	-18.68%	
11/11/1997	SEAD-12	8	Regional	745349.3	1013060	6.5	7.8	9.5	9.1	***A945P/A378Q***	-14.29%	
11/11/1997	SEAD-12	8	Regional	745353.6	1012960	6.8	8.3	10.2	9.1	***A945P/A378Q***	-8.79%	
11/11/1997	SEAD-12	8	Regional	745358	1012860	6.2	7.9	10.8	9.1	***A945P/A378Q***	-13.19%	
11/11/1997	SEAD-12	8	Regional	745362.4	1012760	5.8	6.6	10.5	9.1	***A945P/A378Q***	-27.47%	
11/11/1997	SEAD-12	8	Regional	745366.8	1012660	5.2	6.3	9.5	9.1	***A945P/A378Q***	-30.77%	
11/11/1997	SEAD-12	8	Regional	745371.2	1012560	5	6.2	8	9.2	A984P/A398Q	-32.61%	
11/11/1997	SEAD-12	8	Regional	745375.6	1012461	5.5	6.4	9	9.2	A984P/A398Q	-30.43%	
11/11/1997	SEAD-12	8	Regional	745379.9	1012361	5.5	6.4	8	9.2	A984P/A398Q	-30.43%	
11/11/1997	SEAD-12	8	Regional	745384.3	1012261	5.5	6.8	8.5	9.2	A984P/A398Q	-26.09%	
11/11/1997	SEAD-12	8	Regional	745388.7	1012161	5	6.8	8.5	9.2	A984P/A398Q	-26.09%	
11/11/1997	SEAD-12	8	Regional	745393.1	1012061	6	7	9.5	9.2	A984P/A398Q	-23.91%	
11/11/1997	SEAD-12	8	Regional	745397.4	1011961	7.5	9.3	11	9.2	A984P/A398Q	1.09%	
11/11/1997	SEAD-12	8	Regional	745401.8	1011861	9	10.4	13	9.2	A984P/A398Q	13.04%	
11/11/1997	SEAD-12	8	Regional	745406.2	1011761	5.5	8.8	12.5	9.2	A984P/A398Q	-4.35%	
											1.78%	
											30.85%	

APPENDIX G

BACKGROUND AND PHASE I RI DATA-SOIL

CHEMICAL INORGANICS DATA-SOIL

- FIGURE G-1: LOCATION OF SOIL BACKGROUND SAMPLES
- TABLE G-1: BACKGROUND DATA-SOIL
- TABLE G-2: BLDG 819/EM-27-SURFACE SOIL
- TABLE G-3: BLDG 819/EM-27-SUBSURFACE SOIL
- TABLE G-4: BLDG 815/816/EM-28-SURFACE SOIL
- TABLE G-5: BLDG 815/816/EM-28-SUBSURFACE SOIL
- TABLE G-6: DISPOSAL PIT A/B-SURFACE SOIL
- TABLE G-7: DISPOSAL PIT A/B-SUBSURFACE SOIL
- TABLE G-8: DISPOSAL PIT C-SURFACE SOIL
- TABLE G-9: DISPOSAL PIT C-SUBSURFACE SOIL
- TABLE G-10: FORMER DRY WASTE DISPOSAL PIT-SURFACE SOIL
- TABLE G-11: FORMER DRY WASTE DISPOSAL PIT-SUBSURFACE SOIL
- TABLE G-12: EM-5-SURFACE SOIL
- TABLE G-13: EM-5-SUBSURFACE SOIL
- TABLE G-14: EM-6-SURFACE SOIL
- TABLE G-15: EM-6-SUBSURFACE SOIL
- TABLE G-16: CLASS III-SURFACE SOIL
- TABLE G-17: CLASS III-SUBSURFACE SOIL
- TABLE G-18: WASTE WATER TREATMENT PLANT OUTFALL-SURFACE SOIL

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										B-9-91		B-9-91		BK-1		BK-2		GB35
QC CODE										SA		SA		SA		SA		SA
STUDY ID										RI PHASE1		RI PHASE1		RI PHASE1		RI PHASE1		RI PHASE
TOP																		
BOTTOM																		
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		11/5/91		11/5/91		12/16/92		12/16/92		1/20/93
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	OIL1	S1105-29SOIL1		S1105-30RESOIL1		BK-1SOIL3		BK-2RESOIL3		GB35-1G
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		8880		7160		19400		14400		18000
Antimony	MG/KG	6.8	2 74	18%	6	2	10	57	UJ	9 9	UJ	7	UJ	7 9	U	7 2	U	5 8
Arsenic	MG/KG	21 5	5 23	95%	8 9	2	54	57	J	3 8	J	4 4	J	3		2 7		6.2
Barium	MG/KG	159	78.43	100%	300	0	57	57	J	110	J	39 9	J	159		106		93 6
Beryllium	MG/KG	1 4	0 67	100%	1 13	2	57	57		0 76		0 52	J	1 1		0 81		0 85
Cadmium	MG/KG	2.9	0.52	35%	2 46	2	20	57		1 7		1 5		0 45	U	0 41	U	0 33
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		104000		101000		4590		22500		1590
Chromium	MG/KG	32.7	20 32	100%	30	2	57	57	J	13 8	J	11 2	J	30		22 3		23 5
Cobalt	MG/KG	29 1	11 39	100%	30	0	57	57		10 7		8 1		14 4		12 3		9 4
Copper	MG/KG	62 8	20 99	100%	33	3	57	57		21 6		19 3		26.9		18 8		17 5
Cyanide	MG/KG	0.41	0.29	0%	0 35	0	0	51	U	0 63	U	0 62	U	0.57	U	0 61	U	0 78
Iron	MG/KG	38600	24705	100%	37410	2	57	57		19600		17300		**38600**		26600		25200
Lead	MG/KG	266	17 39	95%	24 4	3	54	57		10 1		7 8		15.8		18 9		14 4
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		17000		12600		5980		7910		3850
Manganese	MG/KG	2380	608	95%	1100	2	54	57		532		514		**2380**		800		701
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	J	0 04	J	0 05	J	**0.13**	J	**0.11**		0 06
Nickel	MG/KG	62 3	30.94	98%	50	2	56	57		23.8		19		47.7		31		26 3
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57		1080		1050		1720		1210		1110
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57	UJ	0 65	UJ	0 21	UJ	0.73	J	0.94		0 23
Silver	MG/KG	0.87	0 38	4%	0 8	1	2	54	U	1 5	U	1 1	U	0.47	U	0.43	U	0 34
Sodium	MG/KG	269	87.04	82%	188	2	47	57	J	112	J	116	J	49 1	J	61 1	J	35 6
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	U	0.36	U	0 6	U	0.42	U	0.38	U	0.55
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57		19.5		12 9		28		22 4		27.1
Zinc	MG/KG	126	71 57	95%	115	2	54	57	J	84 3	J	74 8	J	98.6		63 7		55

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										GB35		GB35		GB36		GB36		MW-36	
QC CODE										SA		DU		SA		SA		SA	
STUDY ID										RI PHASE1		RI PHASE1		RI PHASE1		RI PHASE1		RI Phase 1 Step 1	
TOP																		-1	
BOTTOM																		-1	
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		1/20/93		1/20/93		1/20/93		1/20/93		11-Jan-93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	ID	GB35-2GRID		GB35-6DUGRID		GB36-1GRID		GB36-2GRID		MW36-3GRID	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		17600		16200		18100		16200		12700	
Antimony	MG/KG	6 8	2 74	18%	6	2	10	57	UJ	**6.8**	J	**6.3**	J	5 9	J	5 8	UJ	5 7	
Arsenic	MG/KG	21 5	5 23	95%	8 9	2	54	57		7 7		5 3		4 6		**9.7**		2 9	
Barium	MG/KG	159	78 43	100%	300	0	57	57		61 7		61 7		74 8		50 8		46 9	
Beryllium	MG/KG	1 4	0 67	100%	1 13	2	57	57		0 74		0 77		0 77		0 65		0 59	
Cadmium	MG/KG	2 9	0 52	35%	2 46	2	20	57	U	0 31	U	0 35	U	0 3	U	0 33	U	0 33	
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		17700		1370		1660		22900		4170	
Chromium	MG/KG	32 7	20 32	100%	30	2	57	57		29 3		25 1		24 8		27 4		23 3	
Cobalt	MG/KG	29 1	11 39	100%	30	0	57	57		16 3		10 3		20 4		13 2		18 6	
Copper	MG/KG	62 8	20 99	100%	33	3	57	57		24 5		17 2		17 7		17 5		19 2	
Cyanide	MG/KG	0 41	0 29	0%	0 35	0	0	51	U	0 71	U	0 82	U	0 7	U	0 68	U	0 56	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		34200		30800		26100		30700		27500	
Lead	MG/KG	266	17 39	95%	24 4	3	54	57		5 4		19 1		12 7		6 2		20 2	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		7790		4490		4490		7150		5750	
Manganese	MG/KG	2380	608	95%	1100	2	54	57		646		775		426		507		540	
Mercury	MG/KG	0 13	0 038	72%	0 1	2	41	57	J	0 03	U	0 07	J	0 02	J	0 02	J	0 02	
Nickel	MG/KG	62 3	30 94	98%	50	2	56	57		48 7		28 3		28 3		42 8		43 3	
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57		1110		975		1400		1100		754	
Selenium	MG/KG	1 7	0 35	40%	2	0	23	57	UJ	0 23	UJ	0 21	UJ	0 2	UJ	0 18	UJ	0 19	
Silver	MG/KG	0 87	0 38	4%	0 8	1	2	54	U	0 32	U	0 36	U	0 31	U	0 34	U	0 34	
Sodium	MG/KG	269	87 04	82%	188	2	47	57	J	77 5	J	34 6	J	46 6	J	97 6	J	31 6	
Thallium	MG/KG	1 2	0 27	17%	0 855	3	9	54	U	0 54	U	0 5	U	0 46	U	0 43	U	0 45	
Vanadium	MG/KG	32 7	21 41	100%	150	0	57	57		22 3		26 1		27 8		19 7		16 2	
Zinc	MG/KG	126	71 57	95%	115	2	54	57		83 4		53 1		59 2		74 1		34 7	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs.

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										MW-34		SB24-5		SB24-5		SB24-5		MW25-1	
QC CODE										SA		SA		SA		SA		SA	
STUDY ID										RI PHASE1		ESI		ESI		ESI		ESI	
TOP												-1		-1		-1		0	
BOTTOM												-1		-1		-1		2	
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		11/20/91		12/02/93		12/02/93		12/02/93		12/3/93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF		S2011121MW34GRID		SB24-5-1		SB24-5-3		SB24-5-5		SB25-6-	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		16100		16200		10100		13700		10600	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	UJ	5.7	J	12.5	UJ	5.8	UJ	11.3	UJ	4.2	
Arsenic	MG/KG	21.5	5.23	95%	8.9	2	54	57	J	6.3	U	4.2		3.3		5		8.3	
Barium	MG/KG	159	78.43	100%	300	0	57	57	J	67.5		117		58.3		67.2		59.1	
Beryllium	MG/KG	1.4	0.67	100%	1.13	2	57	57		0.86		0.98	J	0.48	J	0.62	J	0.48	
Cadmium	MG/KG	2.9	0.52	35%	2.46	2	20	57	U	2.3		0.78	U	0.36	U	0.7	U	0.41	
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		28600		4540		74200		49000		82500	
Chromium	MG/KG	32.7	20.32	100%	30	2	57	57	J	26.6		24.5		16.9		23.1		16.9	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57		17		16		8.2		12		11.2	
Copper	MG/KG	62.8	20.99	100%	33	3	57	57	J	32.7		28.4		20.9		22.2		20.2	
Cyanide	MG/KG	0.41	0.29	0%	0.35	0	0	51	U	0.54	U	0.6	U	0.51	U	0.57	U	0.58	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		35000		33600		21300		26700		21400	
Lead	MG/KG	266	17.39	95%	24.4	3	54	57		11.9		**45.5**	J	8.7	J	7.9	J	9.5	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		6850		5150		12100		11400		19600	
Manganese	MG/KG	2380	608	95%	1100	2	54	57		803		1080		400		450		722	
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	J	0.07	R	0.07	JR	0.06	JR	0.04	JR	0.03	
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57	J	49.3	J	37.3		26.4		35.2		26.8	
Potassium	MG/KG	3160	1487.2	100%	2623	2	57	57		1290		1170	J	993		1660		1480	
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57	UJ	0.18	UJ	0.15	UJ	0.23	UJ	0.22	UJ	0.97	
Silver	MG/KG	0.87	0.38	4%	0.8	1	2	54	U	**0.87**	J	1.6	U	0.73	U	1.4	U	0.82	
Sodium	MG/KG	269	87.04	82%	188	2	47	57	U	55.2	J	50.9	J	153	J	139	J	**269**	
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	U	0.51	U	0.16	U	0.25	U	0.24	U	0.24	
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57	J	22.3		29.9		14.4		19.5		18.5	
Zinc	MG/KG	126	71.57	95%	115	2	54	57	J	95.7		85.7		62.8		63.2		71.6	

Note
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										MW25-1		MW25-6		MW25-6		MW25-6		MW25-6		MW64A-1	
QC CODE										SA		SA		SA		SA		DU		SA	
STUDY ID										ESI		RI ROUND1		RI ROUND1		RI ROUND1		RI ROUND1		ESI	
TOP										2		0		4		6		0		0	
BOTTOM										4		0 17		6		8		0 17		0 2	
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		12/3/93		9/25/95		9/25/95		9/25/95		9/25/95		4/2/94	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	1	SB25-6-02		SB25-7-00		SB25-7-03		SB25-7-04		SB25-7-10		MW64A-1	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		7070		12500		8020		7550		12500		16100	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	U	3	U	0 4		0 42	UJ	0 44	U	0 4	UJ	0 23	
Arsenic	MG/KG	21.5	5.23	95%	8 9	2	54	57		4 8		4.3		4 1		3 4		4 3		7 1	
Barium	MG/KG	159	78.43	100%	300	0	57	57		35		71 3		58		52		71 3		83 7	
Beryllium	MG/KG	1 4	0 67	100%	1 13	2	57	57	J	0 35	J	0 56		0 43		0 39		0 56		0 68	
Cadmium	MG/KG	2.9	0.52	35%	2 46	2	20	57	U	0 29	U	0 05	U	0 06	U	0 06	U	0 05	U	0 11	
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		122000		47400	J	120000	J	**133000**	J	47400	J	7210	
Chromium	MG/KG	32 7	20.32	100%	30	2	57	57		11 3		16 9	J	13 7	J	12 4	J	16 9	J	23	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57		6 6	J	8		8 2		6 9		8		11 8	
Copper	MG/KG	62 8	20 99	100%	33	3	57	57	J	12	J	15 7		17 7		16 4		15 7		25 5	
Cyanide	MG/KG	0.41	0.29	0%	0 35	0	0	51	U	0 64	U	0 44	U	0 57	U	0 51	U	0 444	U	0 66	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		15800		20500		18900		15400		20500		28500	
Lead	MG/KG	266	17.39	95%	24 4	3	54	57		13 8		11 1		7		6 5		11 1		21 6	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		**22800**		11700		17400		20700		11700		5480	
Manganese	MG/KG	2380	608	95%	1100	2	54	57	J	610	J	452		735		402		452		558	
Mercury	MG/KG	0.13	0 038	72%	0 1	2	41	57	J	0 04	U	0 03		0 02		0 01		0 03		0 05	
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57		18		22 3		26 4		22 4		22 3		32 2	
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57		1060		1110		1280		1430		1110		2590	
Selenium	MG/KG	1 7	0.35	40%	2	0	23	57	J	0 63	J	0 63	U	0 7	U	0 74	U	0 66	U	0 96	
Silver	MG/KG	0 87	0 38	4%	0 8	1	2	54	U	0 59	U	0 89	U	0 98	U	1	U	0 92	U	0 12	
Sodium	MG/KG	269	87 04	82%	188	2	47	57	J	186	J	59 9		89 1		110		57 5		27 5	
Thallium	MG/KG	1.2	0 27	17%	0 855	3	9	54	UJ	0 21	UJ	**1.2**		**1.1**		0 6	U	**1.2**		0 42	
Vanadium	MG/KG	32.7	21 41	100%	150	0	57	57		12		21		13 4		13 7		21		27 6	
Zinc	MG/KG	126	71.57	95%	115	2	54	57	J	40 6	J	54 1		64 9		65 1		54 1		104	

Note
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										MW64A-1		MW64A-1		MW64B-1		MW64B-1		MW64B-1	
QC CODE										SA		SA		SA		SA		SA	
STUDY ID										ESI		ESI		ESI		ESI		ESI	
TOP										2		4		0		4		6	
BOTTOM										4		6		0.2		6		8	
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		4/2/94		4/2/94		5/13/94		5/13/94		5/13/94	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	1	MW64A-1-2		MW64A-1-3		MW64B-1-1		MW64B-1-2		MW64B-1	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		19800		12600		13400		8870		7620	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	J	0.2	UJ	0.2	UJ	0.3	J	0.15	UJ	0.15	
Arsenic	MG/KG	21.5	5.23	95%	8.9	2	54	57		8.2		5		5.5		4.3		5.5	
Barium	MG/KG	159	78.43	100%	300	0	57	57		91.2		62.3		75.5		70.8		76.7	
Beryllium	MG/KG	1.4	0.67	100%	1.13	2	57	57	J	0.74	J	0.53	J	0.56	J	0.43	J	0.37	
Cadmium	MG/KG	2.9	0.52	35%	2.46	2	20	57	J	0.02	U	0.12	J	0.63	J	0.64	J	0.54	
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		4300		72400		5530		70000		75900	
Chromium	MG/KG	32.7	20.32	100%	30	2	57	57		25		19		17.5		14.1		13.5	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57		11.3		9.1	J	7.2	J	10		7.4	
Copper	MG/KG	62.8	20.99	100%	33	3	57	57		21		23.7		18.9		20.2		17.6	
Cyanide	MG/KG	0.41	0.29	0%	0.35	0	0	51	U	0.56	U	0.55	U	0.6	U	0.5	U	0.48	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		28000		22600		20900		18400		17100	
Lead	MG/KG	266	17.39	95%	24.4	3	54	57		13.6		15.4		21.4		8.8		8.3	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		5010		14800		3720		18900		21500	
Manganese	MG/KG	2380	608	95%	1100	2	54	57		604		402		207		434		389	
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	J	0.03	J	0.02	J	0.05	J	0.02	J	0.01	
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57		28.6		26.7		19.8		28.2		22.6	
Potassium	MG/KG	3160	1487.2	100%	2623	2	57	57	J	2260	J	2700	J	1700		1630		1650	
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57		1.7		0.34	U	0.99	J	0.26	U	0.57	
Silver	MG/KG	0.87	0.38	4%	0.8	1	2	54	U	0.14	U	0.14	U	0.16	UJ	0.11	UJ	0.11	
Sodium	MG/KG	269	87.04	82%	188	2	47	57	U	31.8	U	92.1	J	35.9	U	96.8	J	79.6	
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	J	0.32	U	0.32	U	0.41	J	0.24	U	0.24	
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57		32.2		22.8		23.3		14.8		14.2	
Zinc	MG/KG	126	71.57	95%	115	2	54	57		87.1		64.9		72.2		59		45.6	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs.

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										MW64B-1	MW67-2	MW67-2	MW67-2	MW70-1
QC CODE										SA	SA	SA	SA	SA
STUDY ID										ESI	ESI	ESI	ESI	ESI
TOP										6	0	2	4	0
BOTTOM										8	0 2	4	5	0 2
MATRIX										SOIL	SOIL	SOIL	SOIL	SOIL
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		13-May-94	3/30/94	3/30/94	3/30/94	5/11/94
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	3	MW64B-1-04	MW67-2-1	MW67-2-2	MW67-2-3	MW70-1-1
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		7620	16700	14900	9460	12200
Antimony	MG/KG	6 8	2 74	18%	6	2	10	57	UJ	0 15 UJ	0 27 J	0 22 J	0 2 UJ	0 23
Arsenic	MG/KG	21.5	5 23	95%	8 9	2	54	57		5 5	4 4	4 5	4 2	5 4
Barium	MG/KG	159	78 43	100%	300	0	57	57		76 7	114	105	80 8	67 5
Beryllium	MG/KG	1 4	0 67	100%	1 13	2	57	57	J	0 37 J	0 67 J	0 61 J	0 4 J	0 44
Cadmium	MG/KG	2 9	0 52	35%	2 46	2	20	57	J	0 54 J	0 2 J	0 11 J	0 12 J	0 57
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		75900	3580	79000	77800	3600
Chromium	MG/KG	32.7	20 32	100%	30	2	57	57		13 5	19 5	22 5	14 8	13 7
Cobalt	MG/KG	29.1	11 39	100%	30	0	57	57	J	7 4 J	7 5 J	10 4 J	9 7 J	5 5
Copper	MG/KG	62 8	20 99	100%	33	3	57	57		17 6	16 5	20 3	20 5	12 4
Cyanide	MG/KG	0 41	0 29	0%	0 35	0	0	51	U	0 48 U	0 64 U	0 5 U	0 54 U	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		17100	20500	24400	18700	17700
Lead	MG/KG	266	17 39	95%	24 4	3	54	57		8 3	17 5	9 3	8 5	20 7
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		21500				2830
Manganese	MG/KG	2380	608	95%	1100	2	54	57		389	438	528	411	233
Mercury	MG/KG	0 13	0 038	72%	0 1	2	41	57	U	0 01 U	0 04	0 01 J	0 02 J	0 1
Nickel	MG/KG	62 3	30 94	98%	50	2	56	57		22 6	18 7	32 3	25 9	12 3
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57		1650	1780 J	**3160** J	1970 J	982
Selenium	MG/KG	1 7	0 35	40%	2	0	23	57	J	0 57 J	0 81	0 36 U	0 34 U	1
Silver	MG/KG	0 87	0 38	4%	0 8	1	2	54	UJ	0 11 UJ	0 11 U	0 15 U	0 14 U	
Sodium	MG/KG	269	87 04	82%	188	2	47	57	J	79 6 J	25 1 U	112 J	107 J	36 4
Thallium	MG/KG	1 2	0 27	17%	0 855	3	9	54	U	0 24 U	0 48 J	0 34 U	0 32 U	
Vanadium	MG/KG	32 7	21 41	100%	150	0	57	57		14 2	28 2	24 8	16 5	23 3
Zinc	MG/KG	126	71 57	95%	115	2	54	57		45 600	64 8	62	60 1	55 4

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										MW70-1		MW70-1		SB11-3		SB11-3		SB11-3	
QC CODE										SA		SA		SA		SA		SA	
STUDY ID										ESI		ESI		ESI		ESI		ESI	
TOP										2		4		0		2		10	
BOTTOM										4		6		2		4		12	
MATRIX										SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER		5/11/94		5/11/94		11/2/93		11/2/93		11/3/93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF		MW70-1-2		MW70-1-3		SB11-3-1		SB11-3-2		SB11-3-6	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		9480		11000		17600		6330		10900	
Antimony	MG/KG	6 8	2 74	18%	6	2	10	57	UJ	0 21	UJ	0 19	UJ	10 8	UJ	8	UJ	7 6	
Arsenic	MG/KG	21 5	5.23	95%	8 9	2	54	57		4 1		5 7		5.6		3.4	R	6	
Barium	MG/KG	159	78 43	100%	300	0	57	57		56 6		79.9		113		57 4		62 7	
Beryllium	MG/KG	1 4	0 67	100%	1 13	2	57	57	J	0 41	J	0 54	J	0.85	J	0 34	J	0 47	
Cadmium	MG/KG	2 9	0 52	35%	2 46	2	20	57	J	0 43	J	0 8	J	0.67	U	0 5	U	0 48	
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		51600		48600		4950		91300		48600	
Chromium	MG/KG	32 7	20 32	100%	30	2	57	57		14 7		17 8		24		11 1		18 6	
Cobalt	MG/KG	29 1	11 39	100%	30	0	57	57	J	7 1	J	21		11 3		6 5	J	10 1	
Copper	MG/KG	62 8	20.99	100%	33	3	57	57		19 7		**33.5**		20		12 2		21 7	
Cyanide	MG/KG	0 41	0.29	0%	0 35	0	0	51						0.57	U	0 47	U	0.53	
Iron	MG/KG	38600	24705	100%	37410	2	57	57		16000		26400		27200		13200		28300	
Lead	MG/KG	266	17 39	95%	24 4	3	54	57		9 1		13 6		**27.9**		11 4		10 1	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		13600		7980		4160		12900		10100	
Manganese	MG/KG	2380	608	95%	1100	2	54	57		470		1040		674		356		434	
Mercury	MG/KG	0.13	0 038	72%	0 1	2	41	57	J	0.03	J	0 02	J	0 05	J	0 04	U	0 03	
Nickel	MG/KG	62.3	30 94	98%	50	2	56	57		17 6		**52.4**		28.3		16 7		29 5	
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57	J	1590		1350		2110		1110		1230	
Selenium	MG/KG	1 7	0 35	40%	2	0	23	57	J	0 64	J	0 32	U	0.24	J	0 13	UJ	0 21	
Silver	MG/KG	0.87	0.38	4%	0 8	1	2	54						1 4	UJ	1	UJ	0 97	
Sodium	MG/KG	269	87 04	82%	188	2	47	57	U	126	J	165	J	66 3	J	136	J	146	
Thallium	MG/KG	1 2	0.27	17%	0 855	3	9	54						0 19	U	1 5	U	0 23	
Vanadium	MG/KG	32 7	21 41	100%	150	0	57	57		17 2		17 6		31 8		13 3		17	
Zinc	MG/KG	126	71 57	95%	115	2	54	57		42 4		**116**		83 2		65	R	77 3	

Note
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID										SB13-1		SB13-1		SB13-1		MW13-6	
QC CODE										SA		SA		SA		SA	
STUDY ID										ESI		ESI		ESI		ESI	
TOP										0				6		0	
BOTTOM										2				8		2	
MATRIX:										SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE:				FREQUENCY		NUMBER	NUMBER	NUMBER		12/8/93				12/8/93		15-Dec-93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF		SB13-1-1		SB13-1-2		SB13-1-3		SB13-6-1	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	O	VALUE	O	VALUE	O	VALUE	O	VALUE	O
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57		18300		8250		11700		16000	
Antimony	MG/KG	6.8	2 74	18%	6	2	10	57	UJ	5 1	J	3 7	UJ	2 8	UJ	3 2	UJ
Arsenic	MG/KG	21 5	5.23	95%	8 9	2	54	57	R	7		6 2		5 7		4 6	
Barium	MG/KG	159	78 43	100%	300	0	57	57		106		88 1		33 9		103	
Beryllium	MG/KG	1.4	0 67	100%	1 13	2	57	57	J	0 92	J	0 42	J	0 54	J	0 92	
Cadmium	MG/KG	2 9	0 52	35%	2 46	2	20	57	U	0 45	U	0 36	U	0 27	U	0 31	U
Calcium	MG/KG	293000	45450	100%	125300	2	57	57		3570		87700		50300		5140	
Chromium	MG/KG	32 7	20 32	100%	30	2	57	57		29 4		13 3		19 6		21 5	
Cobalt	MG/KG	29 1	11 39	100%	30	0	57	57		12		7 2	J	11 1		10 6	
Copper	MG/KG	62 8	20 99	100%	33	3	57	57		11 6		18 4		17 6		16	
Cyanide	MG/KG	0 41	0.29	0%	0 35	0	0	51	U	0 61	U	0 5	U	0 53	U	0 6	U
Iron	MG/KG	38600	24705	100%	37410	2	57	57		32500		17400		24700		25300	
Lead	MG/KG	266	17 39	95%	24 4	3	54	57		15		9	R	11 7	R	13 8	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54		5890		20800		12600		3750	
Manganese	MG/KG	2380	608	95%	1100	2	54	57		451		517		404		934	
Mercury	MG/KG	0.13	0.038	72%	0 1	2	41	57	U	0.03	J	0 07	J	0 02	U	0.03	J
Nickel	MG/KG	62 3	30 94	98%	50	2	56	57		34 9		24		33 1		22 7	
Potassium	MG/KG	3160	1487 2	100%	2623	2	57	57		2190		1390		1270		1330	
Selenium	MG/KG	1.7	0 35	40%	2	0	23	57	UJ	0.26	J	0 56	J	0.51	J	1 2	
Silver	MG/KG	0 87	0 38	4%	0 8	1	2	54	UJ	0 9	U	0 71	U	0 54	U	0 62	U
Sodium	MG/KG	269	87 04	82%	188	2	47	57	J	80 6	J	155	J	134	J	61 9	J
Thallium	MG/KG	1 2	0 27	17%	0 855	3	9	54	U	0 43	J	0 43	J	0 64	J	0 18	U
Vanadium	MG/KG	32 7	21 41	100%	150	0	57	57		32 7		13 3		16 3		29 9	
Zinc	MG/KG	126	71 57	95%	115	2	54	57	R	81 9		56 2		45 8		62 5	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID									MW13-6		MW13-6		SB17-1		SB17-1		SB17-1	
QC CODE									SA		SA		SA		SA		SA	
STUDY ID									ESI		ESI		ESI		ESI		ESI	
TOP									4		6		0		2		4	
BOTTOM									6		8		2		4		6	
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER	15-Dec-93		15-Dec-93		12/1/93		12/1/93		12/1/93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	SB13-6-3		SB13-6-4		SB17-1-1		SB17-1-2		SB17-1-3	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57	13500		10200		13700		18100		8700	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	2.5	UJ	2.9	UJ	11.7	UJ	11.8	UJ	9	UJ
Arsenic	MG/KG	21.5	5.23	95%	8.9	2	54	57	2.7		2.3		4.3		5.2		3.4	
Barium	MG/KG	159	78.43	100%	300	0	57	57	60.4		56.8		107		114		59.4	
Beryllium	MG/KG	1.4	0.67	100%	1.13	2	57	57	0.71		0.58	J	0.7	J	0.9	J	0.42	J
Cadmium	MG/KG	2.9	0.52	35%	2.46	2	20	57	0.25	U	0.28	U	0.73	U	0.74	U	0.56	U
Calcium	MG/KG	293000	45450	100%	125300	2	57	57	31800		45200		2870		20900		72800	
Chromium	MG/KG	32.7	20.32	100%	30	2	57	57	23.5		17.8		17.6		25.1		13.9	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57	15		11.3		9.9	J	13.3		8.8	
Copper	MG/KG	62.8	20.99	100%	33	3	57	57	27.4		14.5		**46.4**		26.9		20	
Cyanide	MG/KG	0.41	0.29	0%	0.35	0	0	51	0.53	U	0.51	U	0	NA	0	NA	0	NA
Iron	MG/KG	38600	24705	100%	37410	2	57	57	26900		20700		25100		29900		18800	
Lead	MG/KG	266	17.39	95%	24.4	3	54	57	11.6		11.7		**266**		11.4	J	7.5	J
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54	6640		5220		3330		8490		18100	
Manganese	MG/KG	2380	608	95%	1100	2	54	57	508		556		547		487		391	
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	0.01	U	0.01	U	0.05	J	0.06	J	0.03	UJ
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57	41.9		33		19.1		42		25.2	
Potassium	MG/KG	3160	1487.2	100%	2623	2	57	57	1120		1000		628	J	1560		1090	
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57	0.11	J	0.24	J	0.25	UJ	0.24	UJ	0.14	UJ
Silver	MG/KG	0.87	0.38	4%	0.8	1	2	54	0.49	U	0.56	U	1.5	U	1.5	U	1.1	U
Sodium	MG/KG	269	87.04	82%	188	2	47	57	116	J	141	J	46.2	J	74.6	J	137	J
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	0.14	U	0.23	U	0.28	UJ	0.26	UJ	0.15	UJ
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57	18.5		13.8		23.1		27		13.9	
Zinc	MG/KG	126	71.57	95%	115	2	54	57	64.7		39.3		93.4		80.2		57.1	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID									SB26-1		SB26-1		SB4-1		SB4-1		SB4-1	
QC CODE									SA		SA		SA		DU		SA	
STUDY ID									ESI		ESI		ESI		ESI		ESI	
TOP									0		2		0		0		4	
BOTTOM									2		4		2		2		6	
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER	11/17/93		11/17/93		12/6/93		12/6/93		12/6/93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	SB26-1-1		SB26-1-2		SB4-1-1		SB4-1-10		SB4-1-2	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q	VALUE	Q
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57	5560		9040		14800		**21000**		15300	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	7.3	UJ	6.7	UJ	4.8	UJ	3.8	UJ	5	UJ
Arsenic	MG/KG	21.5	5.23	95%	8.9	2	54	57	3.2		5.3		6.2		4.2		3.9	
Barium	MG/KG	159	78.43	100%	300	0	57	57	73.2		43.7		72		97.7		40.4	J
Beryllium	MG/KG	1.4	0.67	100%	1.13	2	57	57	0.35	J	0.41	J	0.73	J	0.64	J	0.74	J
Cadmium	MG/KG	2.9	0.52	35%	2.46	2	20	57	0.46	U	0.42	U	0.47	U	0.37	U	0.49	U
Calcium	MG/KG	293000	45450	100%	125300	2	57	57	**293000**		47300		4280		2460		30900	
Chromium	MG/KG	32.7	20.32	100%	30	2	57	57	10.3		15.7		23.2		27.9		27.6	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57	5.9	J	9.5		11.3		5.9	J	16.5	
Copper	MG/KG	62.8	20.99	100%	33	3	57	57	9.7		14.3		14.1		15.1		**62.8**	
Cyanide	MG/KG	0.41	0.29	0%	0.35	0	0	51	0.48	U	0.57	U	0.52	U	0.53	U	0.53	U
Iron	MG/KG	38600	24705	100%	37410	2	57	57	8770		19100		27500		19500		34300	
Lead	MG/KG	266	17.39	95%	24.4	3	54	57	6.33		8.5		17.7	J	9.8	J	7.5	J
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54	**29100**		9160		4270		4460		7130	
Manganese	MG/KG	2380	608	95%	1100	2	54	57	309		551		615	J	119	JR	337	R
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	0.02	U	0.02	U	0.05	J	0.04	J	0.04	J
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57	31.6	R	23.9		27.8		25.1		47.6	
Potassium	MG/KG	3160	1487.2	100%	2623	2	57	57	1710		901		1250		2490		1300	
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57	0.13	UJ	0.26	J	0.4	J	0.23	J	0.09	U
Silver	MG/KG	0.87	0.38	4%	0.8	1	2	54	0.92	UJ	0.85	UJ	0.93	U	0.74	U	0.98	U
Sodium	MG/KG	269	87.04	82%	188	2	47	57	**192**	J	108	J	43.8	U	39.2	J	105	J
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	0.73	U	0.17	U	0.23	U	0.23	U	0.16	U
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57	12.7		14.4		28.6		31		22.2	
Zinc	MG/KG	126	71.57	95%	115	2	54	57	283	R	90.6		79.6		72.1		102	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs.

TABLE G-1
BACKGROUND METALS DATA-SOIL
SENECA ARMY DEPOT ACTIVITY

LOC_ID									SB4-1		TP57-11	
QC CODE									SA		SA	
STUDY ID									ESI		ESI	
TOP									8		3	
BOTTOM									10		3	
MATRIX									SOIL		SOIL	
SAMPLE DATE				FREQUENCY		NUMBER	NUMBER	NUMBER	12/6/93		11/8/93	
SAMP ID			ARITHMETIC	OF		ABOVE	OF	OF	SB4-1-3		TP57-11	
VOLATILE ORGANICS	UNIT	MAXIMUM	AVERAGE	DETECTION	TAGM	TAGM	DETECTS	ANALYSES	VALUE	Q	VALUE	Q
Aluminum	MG/KG	21000	13341	100%	19520	3	57	57	19200		14600	
Antimony	MG/KG	6.8	2.74	18%	6	2	10	57	2.8	UJ	11.3	UJ
Arsenic	MG/KG	21.5	5.23	95%	8.9	2	54	57	**21.5**		5.9	
Barium	MG/KG	159	78.43	100%	300	0	57	57	81.2		120	
Beryllium	MG/KG	1.4	0.67	100%	1.13	2	57	57	1		0.81	J
Cadmium	MG/KG	2.9	0.52	35%	2.46	2	20	57	0.27	U	0.71	U
Calcium	MG/KG	293000	45450	100%	125300	2	57	57	14400		22300	
Chromium	MG/KG	32.7	20.32	100%	30	2	57	57	**32.7**		20.1	
Cobalt	MG/KG	29.1	11.39	100%	30	0	57	57	29.1		8.8	J
Copper	MG/KG	62.8	20.99	100%	33	3	57	57	21.6		21.7	
Cyanide	MG/KG	0.41	0.29	0%	0.35	0	0	51	0.47	U	0.54	U
Iron	MG/KG	38600	24705	100%	37410	2	57	57	**37900**		24900	
Lead	MG/KG	266	17.39	95%	24.4	3	54	57	9.1	J	11.3	
Magnesium	MG/KG	29100	10290	100%	21700	2	54	54	8040		5360	
Manganese	MG/KG	2380	608	95%	1100	2	54	57	0		329	
Mercury	MG/KG	0.13	0.038	72%	0.1	2	41	57	0.04	J	0.04	J
Nickel	MG/KG	62.3	30.94	98%	50	2	56	57	**62.3**		25.7	
Potassium	MG/KG	3160	1487.2	100%	2623	2	57	57	2030		1430	
Selenium	MG/KG	1.7	0.35	40%	2	0	23	57	0.14	U	0.46	J
Silver	MG/KG	0.87	0.38	4%	0.8	1	2	54	0.64	J	1.4	UJ
Sodium	MG/KG	269	87.04	82%	188	2	47	57	91.6	J	93	J
Thallium	MG/KG	1.2	0.27	17%	0.855	3	9	54	0.24	U	0.17	U
Vanadium	MG/KG	32.7	21.41	100%	150	0	57	57	29.3		27.8	
Zinc	MG/KG	126	71.57	95%	115	2	54	57	115		57.9	

Note:
Arithmetic average was calculated by using the half detection limit for the non-dectecs

TABLE G-2
BLDG 819/EM-27 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-20		MW12-21		SS12-88		SS12-89	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123040		123046		123049		123280		123281	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.8		0.2		0.2	
SAMP_DATE								10/2/1998		10/3/1998		10/3/1998		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	5	12	U	12	U	12	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	5	12	U	12	U	12	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	5	12	U	12	U	12	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	5	12	U	12	U	12	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	5	12	U	12	U	12	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Acetone	UG/KG	64	40%	200	0	2	5	11	J	12	UJ	12	UJ	64		12	U
Benzene	UG/KG	0	0%	60	0	0	5	12	U	12	U	12	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	5	12	U	12	U	12	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	5	12	U	12	U	12	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	5	12	U	12	U	12	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	5	12	U	12	U	12	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	5	12	U	12	U	12	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	5	12	U	12	U	12	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	5	12	U	12	UJ	12	UJ	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	5	12	U	12	UJ	12	UJ	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	5	12	U	12	U	12	U	12	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	5	12	U	12	U	12	U	12	U	12	U
Styrene	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	5	12	U	12	U	12	U	12	U	12	U
Toluene	UG/KG	4	40%	1500	0	2	5	12	U	4	J	12	U	2	J	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	5	12	U	12	U	12	U	12	U	12	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	12	U	12	U	12	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	5	12	U	12	U	12	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	5	12	U	12	U	12	U	12	U	12	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	5	1100	U	81	U	84	U	2100	U	260	U

TABLE G-2
BLDG 819/EM-27 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-20		MW12-21		SS12-88		SS12-89	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123040		123046		123049		123280		123281	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.8		0.2		0.2	
SAMP_DATE								10/2/1998		10/3/1998		10/3/1998		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES										
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	5	1100	U	81	U	84	U	2100	U	260	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	5	1100	U	81	U	84	U	2100	U	260	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	5	1100	U	81	U	84	U	2100	U	260	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	5	2700	U	200	U	200	U	5100	U	630	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	5	1100	U	81	U	84	U	2100	U	260	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5	1100	UJ	81	UJ	84	UJ	2100	UJ	260	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	5	2700	U	200	U	200	U	5100	UJ	630	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	5	1100	U	81	U	84	U	2100	U	260	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5	1100	UJ	81	U	84	U	2100	U	260	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	5	1100	U	81	U	84	U	2100	U	260	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	5	1100	UJ	81	U	84	U	2100	U	260	U
2-Methylphenol	UG/KG	0	0%	100	0	0	5	1100	U	81	U	84	U	2100	U	260	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	5	2700	U	200	U	200	U	5100	U	630	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	5	1100	U	81	U	84	U	2100	UJ	260	UJ
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	5	2700	U	200	U	200	UJ	5100	UJ	630	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5	2700	U	200	U	200	U	5100	UJ	630	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	5	1100	U	81	U	84	U	2100	U	260	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	5	1100	UJ	81	UJ	84	UJ	2100	UJ	260	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
4-Methylphenol	UG/KG	0	0%	900	0	0	5	1100	U	81	U	84	U	2100	U	260	U
4-Nitroaniline	UG/KG	0	0%		0	0	5	2700	UJ	200	U	200	U	5100	UJ	630	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	5	2700	U	200	U	200	UJ	5100	U	630	U
Acenaphthene	UG/KG	1600	100%	50000	0	5	5	82	J	11	J	4.3	J	1600	J	91	J
Acenaphthylene	UG/KG	240	40%	41000	0	2	5	240	J	14	J	84	U	2100	U	260	U
Anthracene	UG/KG	1800	80%	50000	0	4	5	480	J	23	J	84	U	1800	J	90	J
Benzo(a)anthracene	UG/KG	6200	100%	224	4	5	5	**3800**		**260**		24	J	**6200**		**400**	
Benzo(a)pyrene	UG/KG	5400	100%	61	4	5	5	**3800**		**270**		25	J	**5400**		**390**	
Benzo(b)fluoranthene	UG/KG	4800	100%	1100	2	5	5	**2800**		300		29	J	**4800**		470	
Benzo(ghi)perylene	UG/KG	3100	100%	50000	0	5	5	2200		190		23	J	3100		220	J
Benzo(k)fluoranthene	UG/KG	6100	100%	1100	2	5	5	**4100**		310		30	J	**6100**		390	
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U

TABLE G-2
BLDG 819/EM-27 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-20		MW12-21		SS12-88		SS12-89	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123040		123046		123049		123280		123281	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.8		0.2		0.2	
SAMP_DATE								10/2/1998		10/3/1998		10/3/1998		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
Bis(2-Ethylhexyl)phthalate	UG/KG	17	40%	50000	0	2	5	1100	U	15	J	17	J	2100	UJ	260	UJ
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	5	1100	U	81	U	84	UJ	2100	UJ	260	UJ
Carbazole	UG/KG	2600	100%		0	5	5	230	J	29	J	7	J	2600	J	180	J
Chrysene	UG/KG	6800	100%	400	3	5	5	3600		310		32	J	[illegible]		[illegible]	
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	5	1100	UJ	81	U	84	U	2100	U	260	U
Di-n-octylphthalate	UG/KG	6.2	20%	50000	0	1	5	1100	U	81	U	6.2	J	2100	U	260	U
Dibenz(a,h)anthracene	UG/KG	1500	80%	14	4	4	5	990	J	[illegible]	J	84	U	1500	J	160	J
Dibenzofuran	UG/KG	650	60%	6200	0	3	5	1100	U	5	J	84	U	650	J	33	J
Diethyl phthalate	UG/KG	0	0%	7100	0	0	5	1100	UJ	81	U	84	U	2100	U	260	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	5	1100	U	81	U	84	U	2100	U	260	U
Fluoranthene	UG/KG	14000	100%	50000	0	5	5	6400		440		50	J	14000		1100	
Fluorene	UG/KG	1200	80%	50000	0	4	5	180	J	10	J	84	U	1200	J	64	J
Hexachlorobenzene	UG/KG	0	0%	410	0	0	5	1100	U	81	U	84	U	2100	U	260	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	5	1100	U	81	UJ	84	U	2100	U	260	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	UJ	260	UJ
Hexachloroethane	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
Indeno(1,2,3-cd)pyrene	UG/KG	3000	100%	3200	0	5	5	2400		170		17	J	3000		210	J
Isophorone	UG/KG	0	0%	4400	0	0	5	1100	U	81	U	84	U	2100	U	260	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5	1100	U	81	U	84	U	2100	U	260	U
Naphthalene	UG/KG	0	0%	13000	0	0	5	1100	U	81	U	84	U	2100	U	260	U
Nitrobenzene	UG/KG	0	0%	200	0	0	5	1100	U	81	U	84	U	2100	U	260	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	5	2700	U	200	UJ	200	UJ	5100	R	630	R
Phenanthrene	UG/KG	11000	100%	50000	0	5	5	2200		160		38	J	11000		700	
Phenol	UG/KG	0	0%	30	0	0	5	1100	U	81	U	84	U	2100	U	260	U
Pyrene	UG/KG	13000	100%	50000	0	5	5	4400		440		56	J	13000	J	740	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	37	60%	2900	0	3	5	6.4	J	4.1	U	4.2	U	3	J	37	
4,4'-DDE	UG/KG	490	40%	2100	0	2	5	3.9	U	4.1	U	4.2	U	58		490	
4,4'-DDT	UG/KG	110	60%	2100	0	3	5	4.8	J	4.1	U	4.2	U	110		84	J
Aldrin	UG/KG	0	0%	41	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U
Alpha-BHC	UG/KG	0	0%	110	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U
Alpha-Chlordane	UG/KG	0	0%		0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	5	80	U	82	U	85	U	74	U	160	U

TABLE G-2
BLDG 819/EM-27 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12			
LOC_ID								MW12-19		MW12-20		MW12-21		SS12-88		SS12-89			
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL			
SAMP_ID								123040		123046		123049		123280		123281			
DEPTH_TOP								0		0		0		0		0			
DEPTH_BOT								0.2		0.2		0.8		0.2		0.2			
SAMP_DATE								10/2/1998		10/3/1998		10/3/1998		17-Nov-98		17-Nov-98			
QC_CODE								SA		SA		SA		SA		SA			
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U		
Aroclor-1242	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U		
Aroclor-1248	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U		
Aroclor-1254	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U		
Aroclor-1260	UG/KG	0	0%	10000	0	0	5	39	U	41	U	42	U	37	U	78	U		
Beta-BHC	UG/KG	0	0%	200	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Delta-BHC	UG/KG	0	0%	300	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Dieldrin	UG/KG	0	0%	44	0	0	5	3.9	U	4.1	U	4.2	U	3.7	U	7.8	U		
Endosulfan I	UG/KG	0	0%	900	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Endosulfan II	UG/KG	18	20%	900	0	1	5	3.9	U	4.1	U	4.2	U	3.7	U	18			
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	5	3.9	U	4.1	U	4.2	U	3.7	U	7.8	U		
Endrin	UG/KG	2.7	40%	100	0	2	5	2.7	J	4.1	U	4.2	U	2.3	J	7.8	U		
Endrin aldehyde	UG/KG	8.9	40%		0	2	5	7.8		4.1	U	4.2	U	8.9	J	7.8	U		
Endrin ketone	UG/KG	18	40%		0	2	5	18		4.1	U	4.2	U	11		7.8	U		
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Gamma-Chlordane	UG/KG	3.1	40%	540	0	2	5	1.2	J	2.1	U	2.2	U	3.1	J	4	U		
Heptachlor	UG/KG	0	0%	100	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Heptachlor epoxide	UG/KG	0	0%	20	0	0	5	2	U	2.1	U	2.2	U	1.9	U	4	U		
Methoxychlor	UG/KG	26	20%		0	1	5	26	J	21	U	22	U	19	U	40	U		
Toxaphene	UG/KG	0	0%		0	0	5	200	U	210	U	220	U	190	U	400	U		
METALS																			
Aluminum	MG/KG	20800	100%	19520	1	5	5	16000		20800		15500		4990	J	3230	J		
Antimony	MG/KG	0	0%	6	0	0	5	1.3	R	1.3	R	1.4	R	0.91	R	1.1	R		
Arsenic	MG/KG	5.4	100%	8.9	0	5	5	5.4		3.5		3.8		4.7		3			
Barium	MG/KG	116	100%	300	0	5	5	74.5		102		116		47.6		23.9	J		
Beryllium	MG/KG	0.78	100%	1.13	0	5	5	0.62	J	0.78	J	0.62	J	0.06	J	0.16	J		
Cadmium	MG/KG	1.6	20%	2.46	0	1	5	0.06	U	0.06	U	0.07	U	1.6		0.32	U		
Calcium	MG/KG	202000	100%	125300	1	5	5	13600	J	7950	J	4020	J	118000		202000			
Chromium	MG/KG	25.1	100%	30	0	5	5	24.9		25.1	J	18.3	J	12.8		7.3			
Cobalt	MG/KG	13.6	100%	30	0	5	5	12.7		13.6		11.5	J	3.5	J	3.8	J		
Copper	MG/KG	23.1	100%	33	0	5	5	18.1		21.4		23.1		22.3		17.7			
Cyanide	MG/KG	0	0%	0.35	0	0	5	0.61	UJ	0.64	U	0.66	U	0.56	U	0.59	U		
Iron	MG/KG	34000	100%	37410	0	5	5	30000		34000		24900		12000	J	9070	J		
Lead	MG/KG	33.1	100%	24.4	1	5	5	9	J	17.1	J	23	J	33.1	J	18.1	J		
Magnesium	MG/KG	34800	100%	21700	1	5	5	5460		6020		4280		34800		14800			
Manganese	MG/KG	629	100%	1100	0	5	5	534		629	J	554	J	614		322			

TABLE G-2
BLDG 819/EM-27 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-20		MW12-21		SS12-88		SS12-89	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123040		123046		123049		123280		123281	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.8		0.2		0.2	
SAMP_DATE								10/2/1998		10/3/1998		10/3/1998		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Mercury	MG/KG	0.09	20%	0.1	0	1	5	0.06	U	0.06	UJ	0.06	U	0.09	J	0.06	U
Nickel	MG/KG	35.3	100%	50	0	5	5	33.4		35.3	J	25.5	J	9.9		14.2	
Potassium	MG/KG	2660	100%	2623	1	5	5	1990		**2660**		2560		1160		838	J
Selenium	MG/KG	0	0%	2	0	0	5	0.96	UJ	0.48	U	0.54	U	0.34	UJ	0.41	UJ
Silver	MG/KG	0	0%	0.8	0	0	5	0.25	U	0.25	U	0.28	U	0.18	U	0.21	U
Sodium	MG/KG	128	80%	188	0	4	5	55.3	J	71.9	J	59.7	U	119	J	128	J
Thallium	MG/KG	3	20%	0.855	1	1	5	**3**		1.1	UJ	1.2	U	0.78	U	0.92	U
Vanadium	MG/KG	32.2	100%	150	0	5	5	25.1		32.2		25.1		12.7		12	
Zinc	MG/KG	109	100%	115	0	5	5	108		98.2	J	83.4	J	109	J	62.1	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	9	13	U	11	R	12	U	12	UJ	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Acetone	UG/KG	8	22%	200	0	2	9	6	J	8	J	12	UJ	12	UJ	11	UJ
Benzene	UG/KG	0	0%	60	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Bromoform	UG/KG	0	0%		0	0	9	13	U	11	R	12	U	12	UJ	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	9	13	U	11	R	12	U	12	UJ	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	9	13	U	11	R	12	U	12	UJ	11	U
Methyl bromide	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	UJ	12	UJ	11	U
Methyl chloride	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	9	13	U	11	UJ	12	UJ	12	UJ	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Methylene chloride	UG/KG	100	33%	100	0	3	9	13	U	11	UJ	12	U	12	U	11	U
Styrene	UG/KG	0	0%		0	0	9	13	U	11	R	12	U	12	UJ	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Toluene	UG/KG	13	44%	1500	0	4	9	3	J	13	J	4	J	7	J	11	U
Total Xylenes	UG/KG	0	0%	1200	0	0	9	13	U	11	R	12	U	12	UJ	11	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	13	U	11	UJ	12	U	12	U	11	U
Trichloroethene	UG/KG	0	0%	700	0	0	9	13	U	11	UJ	12	U	12	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	9	13	U	11	UJ	12	U	12	U	11	U
SEMI VOLATLE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	9	78	U	75	U	80	U	75	U	72	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	9	78	U	75	U	80	U	75	U	72	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	9	78	U	75	U	80	U	75	U	72	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	9	78	U	75	U	80	U	75	U	72	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	9	190	U	180	U	190	U	180	U	170	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	9	78	UJ	75	U	80	U	75	U	72	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	9	78	U	75	U	80	U	75	U	72	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	9	78	UJ	75	UJ	80	UJ	75	UJ	72	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	9	190	R	180	R	190	U	180	U	170	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	9	78	U	75	U	80	U	75	U	72	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	9	78	UJ	75	U	80	U	75	U	72	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	9	78	U	75	U	80	U	75	U	72	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	9	78	UJ	75	U	80	U	75	U	72	U
2-Methylphenol	UG/KG	0	0%	100	0	0	9	78	U	75	U	80	U	75	U	72	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	9	190	U	180	U	190	U	180	U	170	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	9	78	U	75	UJ	80	U	75	U	72	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	9	190	UJ	180	UJ	190	UJ	180	UJ	170	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	9	190	UJ	180	UJ	190	U	180	U	170	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	9	78	U	75	U	80	U	75	U	72	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	9	78	UJ	75	UJ	80	UJ	75	UJ	72	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
4-Methylphenol	UG/KG	0	0%	900	0	0	9	78	UJ	75	U	80	U	75	U	72	U
4-Nitroaniline	UG/KG	0	0%		0	0	9	190	UJ	180	U	190	U	180	U	170	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	9	190	UJ	180	UJ	190	UJ	180	UJ	170	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Acenaphthene	UG/KG	10	11%	50000	0	1	9	78	U	75	U	80	U	75	U	72	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	9	78	UJ	75	U	80	U	75	U	72	U
Anthracene	UG/KG	18	33%	50000	0	3	9	11	J	75	U	80	U	4.1	J	72	U
Benzo(a)anthracene	UG/KG	41	67%	224	0	6	9	34	J	11	J	80	U	22	J	72	U
Benzo(a)pyrene	UG/KG	34	67%	61	0	6	9	31	J	9.9	J	80	U	20	J	72	U
Benzo(b)fluoranthene	UG/KG	36	67%	1100	0	6	9	27	J	11	J	80	U	18	J	72	U
Benzo(ghi)perylene	UG/KG	27	78%	50000	0	7	9	23	J	11	J	80	U	17	J	11	J
Benzo(k)fluoranthene	UG/KG	41	67%	1100	0	6	9	34	J	15	J	80	U	22	J	72	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
Bis(2-Ethylhexyl)phthalate	UG/KG	16	44%	50000	0	4	9	9	J	75	U	80	UJ	14	J	16	J
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	9	78	UJ	75	UJ	80	UJ	75	UJ	72	U
Carbazole	UG/KG	22	33%		0	3	9	4.4	J	4.7	J	80	UJ	75	UJ	72	UJ
Chrysene	UG/KG	46	89%	400	0	8	9	36	J	18	J	80	U	24	J	4.4	J
Di-n-butylphthalate	UG/KG	4.5	11%	8100	0	1	9	4.5	J	75	UJ	80	U	75	U	72	U
Di-n-octylphthalate	UG/KG	21	44%	50000	0	4	9	6.5	J	75	U	80	UJ	11	J	9.5	J
Dibenz(a,h)anthracene	UG/KG	12	33%	14	0	3	9	12	J	4.2	J	80	U	75	U	72	U
Dibenzofuran	UG/KG	6.2	11%	6200	0	1	9	78	U	75	U	80	U	75	U	72	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	9	78	UJ	75	U	80	U	75	U	72	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	9	78	U	75	U	80	U	75	U	72	U
Fluoranthene	UG/KG	97	78%	50000	0	7	9	70	J	28	J	80	U	52	J	72	U
Fluorene	UG/KG	11	22%	50000	0	2	9	7.9	J	75	U	80	U	75	U	72	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	9	78	U	75	U	80	U	75	U	72	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	9	78	UJ	75	U	80	U	75	U	72	U
Hexachloroethane	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
Indeno(1,2,3-cd)pyrene	UG/KG	23	67%	3200	0	6	9	21	J	7.3	J	80	U	13	J	72	U
Isophorone	UG/KG	0	0%	4400	0	0	9	78	U	75	UJ	80	U	75	U	72	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	9	78	U	75	U	80	U	75	U	72	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Naphthalene	UG/KG	0	0%	13000	0	0	9	78	U	75	U	80	U	75	U	72	U
Nitrobenzene	UG/KG	0	0%	200	0	0	9	78	U	75	U	80	U	75	U	72	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	9	190	UJ	180	U	190	UJ	180	UJ	170	UJ
Phenanthrene	UG/KG	94	78%	50000	0	7	9	53	J	19	J	80	U	25	J	72	U
Phenol	UG/KG	0	0%	30	0	0	9	78	U	75	U	80	U	75	U	72	U
Pyrene	UG/KG	80	78%	50000	0	7	9	63	J	27	J	80	U	43	J	72	U
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Aldrin	UG/KG	0	0%	41	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Alpha-BHC	UG/KG	0	0%	110	0	0	6	2	U	1.9	U	2	U	1.9	U	1.8	U
Alpha-Chlordane	UG/KG	0	0%		0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	9	80	U	76	U	80	U	76	U	73	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	9	39	U	38	U	39	U	37	U	36	U
Beta-BHC	UG/KG	0	0%	200	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Delta-BHC	UG/KG	0	0%	300	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Dieldrin	UG/KG	0	0%	44	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Endosulfan I	UG/KG	0	0%	900	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Endosulfan II	UG/KG	0	0%	900	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Endrin	UG/KG	0	0%	100	0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Endrin aldehyde	UG/KG	0	0%		0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Endrin ketone	UG/KG	0	0%		0	0	9	3.9	U	3.8	U	3.9	U	3.7	U	3.6	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
Heptachlor	UG/KG	0	0%	100	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	9	2	U	1.9	U	2	U	1.9	U	1.8	U
Methoxychlor	UG/KG	0	0%		0	0	9	20	U	19	U	20	U	19	U	18	U
Toxaphene	UG/KG	0	0%		0	0	9	200	U	190	U	200	U	190	U	180	U
METALS																	
Aluminum	MG/KG	21200	100%	19520	1	9	9	10100		12200		21200		14500		8730	
Antimony	MG/KG	0	0%	6	0	0	9	1	R	0.97	R	1.1	R	0.98	R	1.2	R
Arsenic	MG/KG	5.8	100%	8.9	0	9	9	2.9		2.5		5.8		3.6		2.7	
Barium	MG/KG	127	100%	300	0	9	9	87.2		58.4		127		62		47.7	
Beryllium	MG/KG	0.96	100%	1.13	0	9	9	0.43	J	0.55	J	0.96		0.61	J	0.34	J
Cadmium	MG/KG	0	0%	2.46	0	0	9	0.05	U	0.05	U	0.05	U	0.05	U	0.06	U
Calcium	MG/KG	151000	100%	125300	1	9	9	74200	J	24300	J	3700	J	2010	J	75500	J
Chromium	MG/KG	30	100%	30	0	9	9	16.3		16.5	J	30	J	23.3	J	12.1	J
Cobalt	MG/KG	16	100%	30	0	9	9	7.6	J	10.4		16		13.3		10.8	
Copper	MG/KG	44.7	100%	33	1	9	9	17.5		27.5		44.7		28.8		25.2	
Cyanide	MG/KG	0	0%	0.35	0	0	9	0.63	UJ	0.57	U	0.61	U	0.57	U	0.57	U
Iron	MG/KG	44500	100%	37410	1	9	9	17700		25200		44500		29600		19200	
Lead	MG/KG	27.1	100%	24.4	1	9	9	6	J	16.1	J	27.1	J	19.1	J	9.7	J
Magnesium	MG/KG	21200	100%	21700	0	9	9	21200		6380		8040		6090		14300	
Manganese	MG/KG	747	100%	1100	0	9	9	359		278	J	517	J	287	J	347	J
Mercury	MG/KG	0.2	22%	0.1	2	2	9	0.05	U	0.06	UJ	0.06	UJ	0.11	J	0.05	UJ
Nickel	MG/KG	64.5	100%	50	1	9	9	21		36.4	J	64.5	J	49.1	J	28.6	J
Potassium	MG/KG	2320	100%	2623	0	9	9	1500		1550		2320		1640		1580	
Selenium	MG/KG	1.1	22%	2	0	2	9	0.75	UJ	0.37	U	0.42	U	0.37	U	0.44	U
Silver	MG/KG	0.32	11%	0.8	0	1	9	0.2	U	0.19	U	0.32	J	0.19	U	0.23	U
Sodium	MG/KG	125	56%	188	0	5	9	67.9	J	84.2	J	125	J	103	J	48.2	U
Thallium	MG/KG	0	0%	0.855	0	0	9	1.4	U	0.83	UJ	0.94	UJ	0.84	UJ	0.99	U
Vanadium	MG/KG	33.1	100%	150	0	9	9	18.8		18.1		33.1		19.2		14.9	
Zinc	MG/KG	143	100%	115	3	9	9	48.3		56	J	124	J	120	J	69.1	J

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123041		123042		123047		123048		123050	
DEPTH_TOP								6		8		4		6		4	
DEPTH_BOT								8		10		6		8		6	
SAMP_DATE								10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES										
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA army DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES								
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	9	11	U	12	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	9	11	U	12	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	9	11	U	12	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	9	11	U	12	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	9	11	U	12	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Acetone	UG/KG	8	22%	200	0	2	9	11	UJ	12	U	26	U	12	U
Benzene	UG/KG	0	0%	60	0	0	9	11	U	12	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	9	11	U	12	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	9	11	U	12	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	9	11	U	12	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	9	11	U	12	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	9	11	U	12	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	9	11	U	12	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	9	11	U	12	U	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	9	11	U	12	U	12	U	12	U
Methylene chloride	UG/KG	100	33%	100	0	3	9	11	U	100		99		64	
Styrene	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	9	11	U	12	U	12	U	12	U
Toluene	UG/KG	13	44%	1500	0	4	9	11	U	12	U	12	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	9	11	U	12	U	12	U	12	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES								
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	11	U	12	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	9	11	U	12	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	9	11	U	12	U	12	U	12	U
SEMI VOLATLE ORGANICS															
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	9	72	U	78	U	78	U	78	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	9	72	U	78	U	78	U	78	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	9	72	U	78	U	78	U	78	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	9	72	U	78	U	78	U	78	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	9	170	U	190	U	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	9	72	U	78	U	78	U	78	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	9	72	UJ	78	U	78	U	78	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	9	170	U	190	U	190	U	190	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	9	72	U	78	U	78	U	78	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	9	72	U	78	U	78	U	78	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	9	72	U	78	U	78	U	78	U
2-Methylphenol	UG/KG	0	0%	100	0	0	9	72	U	78	U	78	U	78	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	9	170	U	190	U	190	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	9	72	U	78	U	78	U	78	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	9	170	UJ	190	U	190	U	190	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	9	170	U	190	U	190	U	190	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	9	72	U	78	U	78	U	78	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	9	72	UJ	78	UJ	78	UJ	78	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
4-Methylphenol	UG/KG	0	0%	900	0	0	9	72	U	78	U	78	U	78	U
4-Nitroaniline	UG/KG	0	0%		0	0	9	170	U	190	U	190	U	190	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	9	170	UJ	190	U	190	U	190	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES								
Acenaphthene	UG/KG	10	11%	50000	0	1	9	72	U	78	U	10	J	78	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	9	72	U	78	U	78	U	78	U
Anthracene	UG/KG	18	33%	50000	0	3	9	72	U	78	U	18	J	78	U
Benzo(a)anthracene	UG/KG	41	67%	224	0	6	9	72	U	4.8	J	41	J	5.2	J
Benzo(a)pyrene	UG/KG	34	67%	61	0	6	9	72	U	5.8	J	34	J	6.4	J
Benzo(b)fluoranthene	UG/KG	36	67%	1100	0	6	9	72	U	6.6	J	36	J	8.6	J
Benzo(ghi)perylene	UG/KG	27	78%	50000	0	7	9	72	U	27	J	25	J	6.5	J
Benzo(k)fluoranthene	UG/KG	41	67%	1100	0	6	9	72	U	9.4	J	41	J	8.5	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
Bis(2-Ethylhexyl)phthalate	UG/KG	16	44%	50000	0	4	9	12	J	78	U	78	U	78	U
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	9	72	UJ	78	U	78	U	78	U
Carbazole	UG/KG	22	33%		0	3	9	72	UJ	78	UJ	22	J	78	UJ
Chrysene	UG/KG	46	89%	400	0	8	9	4.3	J	8.1	J	46	J	9	J
Di-n-butylphthalate	UG/KG	4.5	11%	8100	0	1	9	72	U	78	U	78	U	78	U
Di-n-octylphthalate	UG/KG	21	44%	50000	0	4	9	21	J	78	U	78	U	78	U
Dibenz(a,h)anthracene	UG/KG	12	33%	14	0	3	9	72	U	78	U	11	J	78	U
Dibenzofuran	UG/KG	6.2	11%	6200	0	1	9	72	U	78	U	6.2	J	78	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	9	72	U	78	U	78	U	78	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	9	72	U	78	U	78	U	78	U
Fluoranthene	UG/KG	97	78%	50000	0	7	9	3.7	J	10	J	97		13	J
Fluorene	UG/KG	11	22%	50000	0	2	9	72	U	78	U	11	J	78	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	9	72	U	78	U	78	U	78	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	9	72	U	78	UJ	78	UJ	78	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
Hexachloroethane	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
Indeno(1,2,3-cd)pyrene	UG/KG	23	67%	3200	0	6	9	72	U	5.4	J	23	J	7	J
Isophorone	UG/KG	0	0%	4400	0	0	9	72	U	78	U	78	U	78	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	9	72	U	78	U	78	U	78	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES								
Naphthalene	UG/KG	0	0%	13000	0	0	9	72	U	78	U	78	U	78	U
Nitrobenzene	UG/KG	0	0%	200	0	0	9	72	U	78	U	78	U	78	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	9	170	UJ	190	UJ	190	UJ	190	UJ
Phenanthrene	UG/KG	94	78%	50000	0	7	9	5.4	J	6.8	J	94		7.9	J
Phenol	UG/KG	0	0%	30	0	0	9	72	U	78	U	78	U	78	U
Pyrene	UG/KG	80	78%	50000	0	7	9	6.8	J	10	J	80		11	J
PESTICIDES/PCBS															
4,4'-DDD	UG/KG	0	0%	2900	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Aldrin	UG/KG	0	0%	41	0	0	9	1.8	U	2	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	6	1.8	U						
Alpha-Chlordane	UG/KG	0	0%		0	0	9	1.8	U	2	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	9	73	U	80	U	79	U	79	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	9	36	U	39	U	39	U	39	U
Beta-BHC	UG/KG	0	0%	200	0	0	9	1.8	U	2	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	9	1.8	U	2	U	2	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Endosulfan I	UG/KG	0	0%	900	0	0	9	1.8	U	2	U	2	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Endrin	UG/KG	0	0%	100	0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Endrin aldehyde	UG/KG	0	0%		0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Endrin ketone	UG/KG	0	0%		0	0	9	3.6	U	3.9	U	3.9	U	3.9	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	9	1.8	U	2	U	2	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	9	1.8	U	2	U	2	U	2	U

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES								
Heptachlor	UG/KG	0	0%	100	0	0	9	1.8	U	2	U	2	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	9	1.8	U	2	U	2	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	9	18	U	20	U	20	U	20	U
Toxaphene	UG/KG	0	0%		0	0	9	180	U	200	U	200	U	200	U
METALS															
Aluminum	MG/KG	21200	100%	19520	1	9	9	3760		11900		14400		11600	
Antimony	MG/KG	0	0%	6	0	0	9	0.99	R	1.1	R	1.3	R	1	R
Arsenic	MG/KG	5.8	100%	8.9	0	9	9	4.5		3.8		5		5	
Barium	MG/KG	127	100%	300	0	9	9	92.1		117		115		107	
Beryllium	MG/KG	0.96	100%	1.13	0	9	9	0.29	J	0.51	J	0.53	J	0.48	J
Cadmium	MG/KG	0	0%	2.46	0	0	9	0.05	U	0.05	U	0.06	U	0.05	U
Calcium	MG/KG	151000	100%	125300	1	9	9	**151000**	J	3840		3930		2920	
Chromium	MG/KG	30	100%	30	0	9	9	4.2	J	17.7		21.1		17.4	
Cobalt	MG/KG	16	100%	30	0	9	9	7.3	J	9.5		11		10	
Copper	MG/KG	44.7	100%	33	1	9	9	22		19.3		22.2		18.9	
Cyanide	MG/KG	0	0%	0.35	0	0	9	0.54	U	0.6	U	0.61	U	0.6	U
Iron	MG/KG	44500	100%	37410	1	9	9	17000		20100		28500		20900	
Lead	MG/KG	27.1	100%	24.4	1	9	9	17.6	J	16.3		18.3		16.9	
Magnesium	MG/KG	21200	100%	21700	0	9	9	6630		3150	J	3700	J	3180	J
Manganese	MG/KG	747	100%	1100	0	9	9	395	J	664		747		651	
Mercury	MG/KG	0.2	22%	0.1	2	2	9	0.05	UJ	**0.2**		0.06	U	0.06	U
Nickel	MG/KG	64.5	100%	50	1	9	9	21.5	J	23.4		27.7		23.1	
Potassium	MG/KG	2320	100%	2623	0	9	9	1050		1240		1560		956	
Selenium	MG/KG	1.1	22%	2	0	2	9	0.39	J	1.1	J	0.99	U	0.76	U
Silver	MG/KG	0.32	11%	0.8	0	1	9	0.2	U	0.21	U	0.26	U	0.2	U
Sodium	MG/KG	125	56%	188	0	5	9	84.6	J	44.3	U	54.2	U	41.6	U
Thallium	MG/KG	0	0%	0.855	0	0	9	0.85	U	0.91	U	1.1	U	0.86	U
Vanadium	MG/KG	33.1	100%	150	0	9	9	10.2		19.4		23.3		19.1	
Zinc	MG/KG	143	100%	115	3	9	9	53.1	J	67.6		**143**		63.2	

TABLE G-3
BLDG 819/EM-27 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-21		TP12-17A		TP12-17B		TP12-17C	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123051		123036		123034		123035	
DEPTH_TOP								6		2		0.5		3	
DEPTH_BOT								8		2		0.5		3	
SAMP_DATE								10/3/1998		10/6/1998		10/6/1998		10/6/1998	
QC_CODE								SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES								
WET CHEMISTRY															
Nitrate/Nitrite	%W/W														
Nitrate/Nitrite	MG/KG														
pH	SU														
TOC-Soil 9060	MG/KG														
Percent Solids	%W/W														
Percent Solids	MG/KG														
Cation exchange capacity	meq/100g														

TABLE G-4
BLDG 815/816/EM-28 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-29		MW12-30		MW12-30	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123133		123148		123136	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0 2		0 2		0 2	
SAMP_DATE								15-Oct-98		16-Oct-98		16-Oct-98	
QC_CODE								SA		DU		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES						
VOLATILE ORGANICS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	3	15	U	13	U	14	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	3	15	UJ	13	U	14	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	3	15	U	13	U	14	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	3	15	U	13	U	14	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	3	15	U	13	U	14	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Acetone	UG/KG	0	0%	200	0	0	3	15	UJ	13	UJ	14	UJ
Benzene	UG/KG	0	0%	60	0	0	3	15	U	13	U	14	U
Bromodichloromethane	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Bromoform	UG/KG	0	0%		0	0	3	15	UJ	13	U	14	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	3	15	U	13	U	14	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	3	15	U	13	U	14	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	3	15	UJ	13	U	14	U
Chlorodibromomethane	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Chloroethane	UG/KG	0	0%	1900	0	0	3	15	UJ	13	U	14	UJ
Chloroform	UG/KG	0	0%	300	0	0	3	15	U	13	U	14	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	3	15	UJ	13	U	14	U
Methyl bromide	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Methyl butyl ketone	UG/KG	0	0%		0	0	3	15	U	13	UJ	14	U
Methyl chloride	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	3	15	UJ	13	UJ	14	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	3	15	U	13	U	14	U
Methylene chloride	UG/KG	0	0%	100	0	0	3	15	U	13	U	14	U
Styrene	UG/KG	0	0%		0	0	3	15	UJ	13	U	14	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	3	15	U	13	U	14	U
Toluene	UG/KG	2	33%	1500	0	1	3	15	U	2	J	14	U
Total Xylenes	UG/KG	0	0%	1200	0	0	3	15	UJ	13	U	14	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	15	U	13	U	14	U
Trichloroethene	UG/KG	0	0%	700	0	0	3	15	U	13	U	14	U
Vinyl chloride	UG/KG	0	0%	200	0	0	3	15	U	13	U	14	U
SEMI VOLATILE ORGANICS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	3	100	U	94	U	96	U

TABLE G-4
BLDG 815/816/EM-28 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-29		MW12-30		MW12-30	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123133		123148		123136	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								15-Oct-98		16-Oct-98		16-Oct-98	
QC_CODE								SA		DU		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	3	100	U	94	U	96	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	3	100	U	94	U	96	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	3	100	U	94	U	96	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	3	250	U	230	U	230	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	3	100	U	94	U	96	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	3	100	U	94	UJ	96	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	3	250	UJ	230	UJ	230	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	3	100	U	94	U	96	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	3	100	U	94	UJ	96	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	3	100	U	94	U	96	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	3	100	U	94	UJ	96	UJ
2-Methylphenol	UG/KG	0	0%	100	0	0	3	100	U	94	U	96	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	3	250	U	230	U	230	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	3	100	U	94	U	96	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	3	100	U	94	UJ	96	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	3	250	U	230	UJ	230	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	3	250	U	230	U	230	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	3	100	U	94	U	96	UJ
4-Chloroaniline	UG/KG	0	0%	220	0	0	3	100	UJ	94	UJ	96	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
4-Methylphenol	UG/KG	0	0%	900	0	0	3	100	U	94	U	96	U
4-Nitroaniline	UG/KG	0	0%		0	0	3	250	UJ	230	UJ	230	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	3	250	U	230	UJ	230	UJ
Acenaphthene	UG/KG	0	0%	50000	0	0	3	100	U	94	U	96	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	3	100	U	94	U	96	U
Anthracene	UG/KG	0	0%	50000	0	0	3	100	U	94	UJ	96	UJ
Benzo(a)anthracene	UG/KG	16	100%	224	0	3	3	16	J	11	J	8.6	J
Benzo(a)pyrene	UG/KG	17	67%	61	0	2	3	17	J	12	J	96	UJ
Benzo(b)fluoranthene	UG/KG	22	67%	1100	0	2	3	22	J	18	J	96	U
Benzo(ghi)perylene	UG/KG	10	33%	50000	0	1	3	100	UJ	10	J	96	U
Benzo(k)fluoranthene	UG/KG	20	33%	1100	0	1	3	20	J	94	U	96	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	3	100	U	94	U	96	U

TABLE G-4
BLDG 815/816/EM-28 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-29		MW12-30		MW12-30	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123133		123148		123136	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0 2		0 2		0 2	
SAMP_DATE								15-Oct-98		16-Oct-98		16-Oct-98	
QC_CODE								SA		DU		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
Bis(2-Ethylhexyl)phthalate	UG/KG	0	0%	50000	0	0	3	100	U	94	U	96	U
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	3	100	U	94	U	96	U
Carbazole	UG/KG	0	0%		0	0	3	100	UJ	94	U	96	UJ
Chrysene	UG/KG	22	100%	400	0	3	3	22	J	17	J	9.7	J
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	3	100	U	94	U	96	U
Di-n-octylphthalate	UG/KG	0	0%	50000	0	0	3	100	UJ	94	U	96	UJ
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	3	100	UJ	94	U	96	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	3	100	U	94	UJ	96	UJ
Diethyl phthalate	UG/KG	0	0%	7100	0	0	3	100	U	94	U	96	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	3	100	U	94	U	96	U
Fluoranthene	UG/KG	36	100%	50000	0	3	3	36	J	23	J	13	J
Fluorene	UG/KG	0	0%	50000	0	0	3	100	U	94	U	96	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	3	100	U	94	U	96	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	3	100	UJ	94	UJ	96	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
Hexachloroethane	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
Indeno(1,2,3-cd)pyrene	UG/KG	8 2	33%	3200	0	1	3	100	UJ	8.2	J	96	U
Isophorone	UG/KG	0	0%	4400	0	0	3	100	U	94	UJ	96	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	3	100	U	94	U	96	UJ
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	3	100	U	94	U	96	U
Naphthalene	UG/KG	0	0%	13000	0	0	3	100	U	94	UJ	96	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	3	100	U	94	U	96	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	3	250	U	230	R	230	R
Phenanthrene	UG/KG	25	100%	50000	0	3	3	25	J	18	J	8.3	J
Phenol	UG/KG	0	0%	30	0	0	3	100	U	94	U	96	U
Pyrene	UG/KG	34	100%	50000	0	3	3	34	J	20	J	12	J
PESTICIDES/PCBS													
4,4'-DDD	UG/KG	0	0%	2900	0	0	3	5.1	U	4 7	U	4 8	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	3	5.1	U	4.7	U	4 8	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	3	5 1	U	4 7	U	4 8	U
Aldrin	UG/KG	0	0%	41	0	0	3	2 6	U	2 4	U	2 5	U
Alpha-BHC	UG/KG	0	0%	110	0	0	3	2 6	U	2 4	U	2 5	U
Alpha-Chlordane	UG/KG	0	0%		0	0	3	2 6	U	2.4	U	2 5	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	3	100	U	96	U	97	U

TABLE G-4
BLDG 815/816/EM-28 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-29		MW12-30		MW12-30	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123133		123148		123136	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								15-Oct-98		16-Oct-98		16-Oct-98	
QC_CODE								SA		DU		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Aroclor-1232	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	3	51	U	47	U	48	U
Beta-BHC	UG/KG	0	0%	200	0	0	3	2.6	U	2.4	U	2.5	U
Delta-BHC	UG/KG	0	0%	300	0	0	3	2.6	U	2.4	U	2.5	U
Dieldrin	UG/KG	0	0%	44	0	0	3	5.1	U	4.7	U	4.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	3	2.6	U	2.4	U	2.5	U
Endosulfan II	UG/KG	0	0%	900	0	0	3	5.1	U	4.7	U	4.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	3	5.1	U	4.7	U	4.8	U
Endrin	UG/KG	0	0%	100	0	0	3	5.1	U	4.7	U	4.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	3	5.1	U	4.7	U	4.8	U
Endrin ketone	UG/KG	0	0%		0	0	3	5.1	U	4.7	U	4.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	3	2.6	U	2.4	U	2.5	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	3	2.6	U	2.4	U	2.5	U
Heptachlor	UG/KG	0	0%	100	0	0	3	2.6	U	2.4	U	2.5	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	3	2.6	U	2.4	U	2.5	U
Methoxychlor	UG/KG	0	0%		0	0	3	26	U	24	U	25	U
Toxaphene	UG/KG	0	0%		0	0	3	260	U	240	U	250	U
METALS													
Aluminum	MG/KG	14900	100%	19520	0	3	3	14900	J	13500	J	12300	J
Antimony	MG/KG	0	0%	6	0	0	3	1.9	R	1.6	R	1.9	R
Arsenic	MG/KG	5	100%	8.9	0	3	3	5		4.1		4.6	
Barium	MG/KG	113	100%	300	0	3	3	106	J	113	J	106	J
Beryllium	MG/KG	0.76	100%	1.13	0	3	3	0.7	J	0.76	J	0.74	J
Cadmium	MG/KG	17.7	33%	2.46	1	1	3	17.7		0.08	U	0.06	U
Calcium	MG/KG	13500	100%	125300	0	3	3	13500		6010		5850	
Chromium	MG/KG	22.6	100%	30	0	3	3	22.6		18.6		17.7	
Cobalt	MG/KG	10.6	100%	30	0	3	3	10.6	J	8.8	J	8.4	J
Copper	MG/KG	23.1	100%	33	0	3	3	21.1		22.1		23.1	
Cyanide	MG/KG	0	0%	0.35	0	0	3	0.87	U	0.7	U	0.76	U
Iron	MG/KG	28600	100%	37410	0	3	3	28600	J	22300	J	23500	J
Lead	MG/KG	25	100%	24.4	1	3	3	25	J	22.6	J	22.4	J
Magnesium	MG/KG	10300	100%	21700	0	3	3	10300	J	3580	J	3430	J
Manganese	MG/KG	772	100%	1100	0	3	3	733		650		772	

TABLE G-4
BLDG 815/816/EM-28 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12	
LOC_ID							MW12-29			MW12-30			MW12-30	
MATRIX							SOIL			SOIL			SOIL	
SAMP_ID							123133			123148			123136	
DEPTH_TOP							0			0			0	
DEPTH_BOT							0.2			0.2			0.2	
SAMP_DATE							15-Oct-98			16-Oct-98			16-Oct-98	
QC_CODE							SA			DU			SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1			RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES							
Mercury	MG/KG	0.1	100%	0.1	0	3	3	0.08	J	0.1	J		0.09	J
Nickel	MG/KG	30.6	100%	50	0	3	3	30.6	J	26.3	J		25.1	J
Potassium	MG/KG	1790	100%	2623	0	3	3	1790		1620			1380	
Selenium	MG/KG	1.4	100%	2	0	3	3	1.4	J	1.2	J		1.1	J
Silver	MG/KG	0	0%	0.8	0	0	3	0.36	U	0.32	U		0.26	U
Sodium	MG/KG	0	0%	188	0	0	3	76.5	U	66.3	U		54.2	U
Thallium	MG/KG	0	0%	0.855	0	0	3	1.6	U	1.4	U		1.1	U
Vanadium	MG/KG	24.6	100%	150	0	3	3	24.6		22			20.4	
Zinc	MG/KG	93.3	100%	115	0	3	3	93.3	J	79.1	J		73.9	J
WET CHEMISTRY														
Nitrate/Nitrite	%W/W													
Nitrate/Nitrite	MG/KG													
pH	SU													
TOC-Soil 9060	MG/KG													
Percent Solids	%W/W													
Percent Solids	MG/KG													
Cation exchange capacity	meq/100g													

TABLE G-5
BLDG 815/816/EM-28 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12	SEAD-12	SEAD-12	SEAD-12	SEAD-12	SEAD-12	SEAD-12
LOC_ID								MW12-30	TP12-18A	TP12-18B	TP12-18C	TP12-19A	TP12-19B	TP12-19C
MATRIX								SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
SAMP_ID								123138	123022	123023	123024	123025	123026	123027
DEPTH_TOP								2	0 5	4	4 5	0.5	2	5.5
DEPTH_BOT								3.5	0 5	4	4 5	0.5	2	5 5
SAMP_DATE								16-Oct-98	10/1/1998	10/1/1998	10/1/1998	10/1/1998	10/1/1998	10/1/1998
QC_CODE								SA	SA	SA	SA	SA	SA	SA
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1	RI Phase 1 Step 1	RI Phase 1 Step 1	RI Phase 1 Step 1	RI Phase 1 Step 1	RI Phase 1 Step 1	RI Phase 1 Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES							
VOLATILE ORGANICS														
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Acetone	UG/KG	4	14%	200	0	1	7	4 J	12 UJ	11 UJ	11 UJ	11 UJ	11 UJ	12 UJ
Benzene	UG/KG	0	0%	60	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Bromodichloromethane	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Bromoform	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Carbon disulfide	UG/KG	0	0%	2700	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Chlorobenzene	UG/KG	0	0%	1700	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Chlorodibromomethane	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Chloroethane	UG/KG	0	0%	1900	0	0	7	12 UJ	12 U	11 U	11 U	11 U	11 U	12 U
Chloroform	UG/KG	0	0%	300	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Ethyl benzene	UG/KG	0	0%	5500	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Methyl bromide	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Methyl butyl ketone	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Methyl chloride	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	7	12 UJ	12 U	11 U	11 U	11 U	11 U	12 U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Methylene chloride	UG/KG	0	0%	100	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Styrene	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Toluene	UG/KG	4	14%	1500	0	1	7	4 J	12 U	11 U	11 U	11 U	11 U	12 U
Total Xylenes	UG/KG	0	0%	1200	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Trichloroethene	UG/KG	0	0%	700	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
Vinyl chloride	UG/KG	0	0%	200	0	0	7	12 U	12 U	11 U	11 U	11 U	11 U	12 U
SEMI VOLATILE ORGANICS														
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	7	77 U	77 U	73 U	76 U	76 U	77 U	76 U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	7	77 U	77 U	150 U	76 U	76 U	77 U	76 U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	7	77 U	77 U	150 U	76 U	76 U	77 U	76 U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	7	77 U	77 U	150 U	76 U	76 U	77 U	76 U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	7	190 U	190 U	360 U	180 U	180 U	190 U	180 U

TABLE G-5
BLDG 815/816/EM-28 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-30		TP12-18A		TP12-18B		TP12-18C		TP12-19A		TP12-19B		TP12-19C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123138		123022		123023		123024		123025		123026		123027	
DEPTH_TOP								2		0.5		4		4.5		0.5		2		5.5	
DEPTH_BOT								3.5		0.5		4		4.5		0.5		2		5.5	
SAMP_DATE								16-Oct-98		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998	
QC_CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES														
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	7	77	UJ	77	UJ	150	U	76	UJ	76	UJ	77	UJ	76	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	7	190	U	190	R	360	U	180	R	180	R	190	R	180	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	7	77	UJ	77	UJ	150	U	76	UJ	76	UJ	77	UJ	76	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2-Methylnaphthalene	UG/KG	4.4	14%	36400	0	1	7	77	UJ	4.4	J	150	U	76	UJ	76	UJ	77	UJ	76	UJ
2-Methylphenol	UG/KG	0	0%	100	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	7	190	U	190	U	360	U	180	U	180	U	190	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	7	77	U	77	U	150	U	78	U	76	U	77	U	76	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	78	U	76	U	77	U	76	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	7	190	UJ	190	UJ	360	U	180	UJ	180	UJ	190	UJ	180	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	7	190	U	190	UJ	360	U	180	UJ	180	UJ	190	UJ	180	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	7	77	UJ	77	UJ	150	UJ	76	UJ	76	UJ	77	UJ	76	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
4-Methylphenol	UG/KG	0	0%	900	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
4-Nitroaniline	UG/KG	0	0%		0	0	7	190	UJ	190	U	360	UJ	180	U	180	U	190	U	180	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	7	190	UJ	190	UJ	360	U	180	UJ	180	UJ	190	UJ	180	UJ
Acenaphthene	UG/KG	0	0%	50000	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	7	77	U	77	UJ	150	U	76	UJ	76	UJ	77	UJ	76	UJ
Anthracene	UG/KG	0	0%	50000	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Benzo(a)anthracene	UG/KG	0	0%	224	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Benzo(a)pyrene	UG/KG	0	0%	61	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Benzo(b)fluoranthene	UG/KG	4.7	29%	1100	0	2	7	77	U	4.7	J	150	U	76	U	4.4	J	77	U	76	U
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Benzo(k)fluoranthene	UG/KG	5.2	29%	1100	0	2	7	77	U	5.2	J	150	U	76	U	4	J	77	U	76	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Bis(2-Ethylhexyl)phthalate	UG/KG	11	43%	50000	0	3	7	77	U	11	J	150	U	76	U	5.8	J	5.6	J	76	U
Butylbenzylphthalate	UG/KG	93	14%	50000	0	1	7	77	U	77	U	93	J	76	U	76	U	77	U	76	U
Carbazole	UG/KG	0	0%		0	0	7	77	UJ	77	UJ	150	UJ	76	UJ	76	UJ	77	UJ	76	UJ
Chrysene	UG/KG	6.1	29%	400	0	2	7	77	U	6.1	J	150	U	76	U	5.1	J	77	U	76	U
Di-n-butylphthalate	UG/KG	880	86%	8100	0	6	7	77	U	4	J	880		5.9	J	3.9	J	4.6	J	4.6	J
Di-n-octylphthalate	UG/KG	5.5	14%	50000	0	1	7	5.5	J	77	U	150	U	76	U	76	U	77	U	76	U
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U

TABLE G-5
BLDG 815/816/EM-28 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-30		TP12-18A		TP12-18B		TP12-18C		TP12-19A		TP12-19B		TP12-19C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123138		123022		123023		123024		123025		123026		123027	
DEPTH_TOP								2		0.5		4		4.5		0.5		2		5.5	
DEPTH_BOT								3.5		0.5		4		4.5		0.5		2		5.5	
SAMP_DATE								16-Oct-98		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998	
QC_CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES														
Dibenzofuran	UG/KG	0	0%	6200	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Diethyl phthalate	UG/KG	28	14%	7100	0	1	7	77	U	77	UJ	28	J	76	UJ	76	UJ	77	UJ	76	UJ
Dimethylphthalate	UG/KG	29	14%	2000	0	1	7	77	U	77	U	29	J	76	U	76	U	77	U	76	U
Fluoranthene	UG/KG	7.6	29%	50000	0	2	7	77	U	7.6	J	150	U	76	U	7.4	J	77	U	76	U
Fluorene	UG/KG	0	0%	50000	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Hexachloroethane	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Isophorone	UG/KG	0	0%	4400	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	7	77	U	77	U	150	U	76	U	76	U	77	U	76	U
Naphthalene	UG/KG	0	0%	13000	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Nitrobenzene	UG/KG	0	0%	200	0	0	7	77	UJ	77	U	150	U	76	U	76	U	77	U	76	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	7	190	R	190	U	360	U	180	U	180	U	190	U	180	U
Phenanthrene	UG/KG	7.7	29%	50000	0	2	7	77	U	7.7	J	150	U	76	U	5.6	J	77	U	76	U
Phenol	UG/KG	7.2	14%	30	0	1	7	77	U	7.2	J	150	U	76	U	76	U	77	U	76	U
Pyrene	UG/KG	6.9	29%	50000	0	2	7	77	UJ	6.9	J	150	U	76	U	5.6	J	77	U	76	U
PESTICIDES/PCBS																					
4,4'-DDD	UG/KG	0	0%	2900	0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
4,4'-DDT	UG/KG	21	29%	2100	0	2	7	3.8	U	3.8	U	3.7	U	3.8	U	2.9	J	21		3.8	U
Aldrin	UG/KG	0	0%	41	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	7	38	U	38	U	37	U	38	U	38	U	38	U	38	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	7	78	U	78	U	75	U	77	U	77	U	78	U	77	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	7	38	U	38	U	37	U	38	U	38	U	38	U	38	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	7	38	U	38	U	37	U	38	U	38	U	38	U	38	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	7	38	U	38	U	37	U	38	U	38	U	38	U	38	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	7	38	U	38	U	37	U	38	U	38	U	38	U	38	U
Aroclor-1260	UG/KG	440	29%	10000	0	2	7	38	U	38	U	37	U	38	U	52		440		38	U
Beta-BHC	UG/KG	0	0%	200	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Dieldrin	UG/KG	5.9	14%	44	0	1	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	5.9	J	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
Endrin	UG/KG	3.8	14%	100	0	1	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	J	3.8	U

TABLE G-5
BLDG 815/816/EM-28 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-30		TP12-18A		TP12-18B		TP12-18C		TP12-19A		TP12-19B		TP12-19C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123138		123022		123023		123024		123025		123026		123027	
DEPTH_TOP								2		0.5		4		4.5		0.5		2		5.5	
DEPTH_BOT								3.5		0.5		4		4.5		0.5		2		5.5	
SAMP_DATE								16-Oct-98		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998	
QC_CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES														
Endrin aldehyde	UG/KG	0	0%		0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	7	3.8	U	3.8	U	3.7	U	3.8	U	3.8	U	3.8	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Heptachlor	UG/KG	0	0%	100	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	7	2	U	2	U	1.9	U	2	U	2	U	2	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	7	20	U	20	U	19	U	20	U	20	U	20	U	20	U
Toxaphene	UG/KG	0	0%		0	0	7	200	U	200	U	190	U	200	U	200	U	200	U	200	U
METALS																					
Aluminum	MG/KG	15300	100%	19520	0	7	7	12700	J	12800		13500		14800		12200		12300		15300	
Antimony	MG/KG	1.8	29%	6	0	2	7	1.1	R	1.8	J	1.2	R	1.1	R	1.2	R	1.3	R	1.1	J
Arsenic	MG/KG	4.7	100%	8.9	0	7	7	4.7		3.4		4.4		4.1		3.1		3.5		4	
Barium	MG/KG	104	100%	300	0	7	7	104	J	95.8		84.8		79.3		80.6		88.8		99.6	
Beryllium	MG/KG	0.71	100%	1.13	0	7	7	0.47	J	0.55	J	0.55	J	0.54	J	0.52	J	0.53	J	0.71	J
Cadmium	MG/KG	0	0%	2.46	0	0	7	0.05	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.05	U
Calcium	MG/KG	13800	100%	125300	0	7	7	2710		13800	J	2550	J	3280	J	13100	J	2480	J	4810	J
Chromium	MG/KG	26	100%	30	0	7	7	19		19.3		23.7		26		18.8		17.4		25.9	
Cobalt	MG/KG	18	100%	30	0	7	7	12.2		10.7		13.8		16.2		10.5		9	J	18	
Copper	MG/KG	30.2	100%	33	0	7	7	28.3		19.8		30.2		27.2		20.7		12.9		28.8	
Cyanide	MG/KG	0	0%	0.35	0	0	7	0.59	U	0.59	UJ	0.56	UJ	0.6	UJ	0.58	UJ	0.58	UJ	0.57	UJ
Iron	MG/KG	33800	100%	37410	0	7	7	21900	J	23200		29200		33800		22600		21400		31600	
Lead	MG/KG	14.7	100%	24.4	0	7	7	11.8	J	12.6	J	12.2	J	14.7	J	11.8	J	11	J	10.8	J
Magnesium	MG/KG	5960	100%	21700	0	7	7	4940	J	5910		5300		5960		5230		3070		5720	
Manganese	MG/KG	667	100%	1100	0	7	7	589		667		632		657		549		519		513	
Mercury	MG/KG	0.07	43%	0.1	0	3	7	0.06	J	0.07	J	0.05	U	0.05	U	0.05	U	0.06	U	0.07	J
Nickel	MG/KG	50.5	100%	50	1	7	7	36	J	29.1		48.7		50.5		30.1		21.4		47.7	
Potassium	MG/KG	1330	100%	2623	0	7	7	1090		1330		1140		1140		1020		821	J	1110	
Selenium	MG/KG	0	0%	2	0	0	7	0.84	UJ	0.9	UJ	0.91	UJ	0.85	UJ	0.93	UJ	0.96	U	0.8	UJ
Silver	MG/KG	0	0%	0.8	0	0	7	0.22	U	0.24	U	0.24	U	0.22	U	0.24	U	0.25	U	0.21	U
Sodium	MG/KG	66.7	43%	188	0	3	7	46	U	63.9	J	66.7	J	46.6	U	50.9	U	52.6	U	54.5	J
Thallium	MG/KG	1.1	14%	0.855	1	1	7	1.1	J	1.4	U	1.4	U	1.5	U	1.4	U	1.3	U	1.3	U
Vanadium	MG/KG	21.2	100%	150	0	7	7	20.2		20.7		19.9		20.9		18.3		19.4		21.2	
Zinc	MG/KG	113	100%	115	0	7	7	68.1	J	79.5		99.2		113		81.8		62.1		109	
WET CHEMISTRY																					
Nitrate/Nitrite	%W/W																				
Nitrate/Nitrite	MG/KG																				
pH	SU																				
TOC-Soil 9060	MG/KG																				
Percent Solids	%W/W																				
Percent Solids	MG/KG																				

p:/pit/projects/seneca/s12ri/report/draft/section4/appendices/slcomb.xls/d
5/8/2000

TABLE G-5
BLDG 815/816/EM-28 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-30		TP12-18A		TP12-18B		TP12-18C		TP12-19A		TP12-19B		TP12-19C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123138		123022		123023		123024		123025		123026		123027	
DEPTH_TOP								2		0.5		4		4.5		0.5		2		5.5	
DEPTH_BOT								3.5		0.5		4		4.5		0.5		2		5.5	
SAMP_DATE								16-Oct-98		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998		10/1/1998	
QC_CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES														
Cation exchange capacity	meq/100g																				

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-11		MW12-12		MW12-13	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123007		123010		123013		123016	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								29-Sep-98		29-Sep-98		30-Sep-98		01-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	15	11	U	11	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	15	11	U	11	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	15	11	U	11	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	15	11	U	11	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	15	11	U	11	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Acetone	UG/KG	52	47%	200	0	7	15	11	U	11	U	12	U	12	UJ
Benzene	UG/KG	0	0%	60	0	0	15	11	U	11	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	15	11	U	11	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	15	11	U	11	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	15	11	U	11	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	15	11	U	11	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	15	11	U	11	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	15	11	U	11	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Methyl butyl ketone	UG/KG	1	7%		0	1	15	11	U	11	U	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	15	11	U	11	U	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	15	11	U	11	U	12	U	12	U
Methylene chloride	UG/KG	1	7%	100	0	1	15	11	U	11	U	1	J	12	U
Styrene	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	15	11	U	11	U	12	U	12	U
Toluene	UG/KG	4	27%	1500	0	4	15	11	U	11	U	12	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	15	11	U	11	U	12	U	12	U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-11		MW12-12		MW12-13	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123007		123010		123013		123016	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								29-Sep-98		29-Sep-98		30-Sep-98		01-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1	STEP	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	11	U	11	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	15	11	U	11	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	15	11	U	11	U	12	U	12	U
SEMI VOLATILE ORGANICS															
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	15	77	UJ	72	UJ	80	UJ	78	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	15	77	UJ	72	UJ	80	UJ	78	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	15	77	UJ	72	UJ	80	UJ	78	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	15	77	U	72	U	80	U	78	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	15	190	U	180	U	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	15	77	U	72	U	80	U	78	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	15	77	U	72	U	80	U	78	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	15	77	UJ	72	UJ	80	UJ	78	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	15	190	U	180	U	190	U	190	UR
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	15	77	U	72	U	80	U	78	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	15	77	U	72	U	80	U	78	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	15	77	UJ	72	UJ	80	UJ	78	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	15	77	U	72	U	80	U	78	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	15	77	UJ	72	UJ	80	UJ	78	UJ
2-Methylphenol	UG/KG	0	0%	100	0	0	15	77	U	72	U	80	U	78	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	15	190	U	180	U	190	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	15	77	U	72	U	80	U	78	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	15	77	U	72	U	80	U	78	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	15	190	U	180	U	190	UJ	190	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	15	190	U	180	U	190	U	190	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	15	77	U	72	U	80	U	78	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	15	77	U	72	U	80	U	78	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	15	77	UJ	72	UJ	80	UJ	78	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	15	77	U	72	U	80	U	78	U
4-Methylphenol	UG/KG	0	0%	900	0	0	15	77	U	72	U	80	U	78	U
4-Nitroaniline	UG/KG	0	0%		0	0	15	190	UJ	180	UJ	190	U	190	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	15	190	U	180	U	190	U	190	UJ

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID									MW12-10		MW12-11		MW12-12		MW12-13	
MATRIX									SOIL		SOIL		SOIL		SOIL	
SAMPLE ID									123007		123010		123013		123016	
SAMPLE DEPTH TO TOP OF SAMPLE									0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2		0.2		0.2	
SAMPLE DATE									29-Sep-98		29-Sep-98		30-Sep-98		01-Oct-98	
QC CODE									SA		SA		SA		SA	
STUDY ID									RI PHASE 1	STEP	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N			N		N		N	
Acenaphthene	UG/KG	0	0%	50000	0	0	15	77	UJ		72	UJ	80	UJ	78	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	15	77	UJ		72	UJ	80	UJ	78	UJ
Anthracene	UG/KG	0	0%	50000	0	0	15	77	UJ		72	UJ	80	UJ	78	U
Benzo(a)anthracene	UG/KG	27	33%	224	0	5	15	77	U		72	U	80	U	4.5	J
Benzo(a)pyrene	UG/KG	18	33%	61	0	5	15	77	UJ		72	UJ	80	UJ	5	J
Benzo(b)fluoranthene	UG/KG	36	40%	1100	0	6	15	77	U		72	U	80	U	5.9	J
Benzo(ghi)perylene	UG/KG	23	33%	50000	0	5	15	77	U		72	U	80	U	4	J
Benzo(k)fluoranthene	UG/KG	26	27%	1100	0	4	15	77	U		72	U	80	U	7.6	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U
Bis(2-Ethylhexyl)phthalate	UG/KG	210	20%	50000	0	3	15	77	U		72	U	210		11	J
Butylbenzylphthalate	UG/KG	6.7	7%	50000	0	1	15	77	U		72	U	80	U	78	U
Carbazole	UG/KG	16	7%		0	1	15	77	UJ		72	UJ	80	UJ	78	UJ
Chrysene	UG/KG	51	47%	400	0	7	15	4.3	J		72	UJ	80	UJ	6.8	J
Di-n-butylphthalate	UG/KG	68	20%	8100	0	3	15	77	UJ		72	UJ	80	UJ	78	UJ
Di-n-octylphthalate	UG/KG	7.8	13%	50000	0	2	15	77	U		72	U	80	U	78	U
Dibenz(a,h)anthracene	UG/KG	16	13%	14	1	2	15	77	U		72	U	80	U	78	U
Dibenzofuran	UG/KG	5.6	7%	6200	0	1	15	77	UJ		72	UJ	80	UJ	78	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	15	77	UJ		72	UJ	80	UJ	78	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	15	77	UJ		72	UJ	80	UJ	78	U
Fluoranthene	UG/KG	24	53%	50000	0	8	15	5.5	J		72	UJ	80	UJ	9.1	J
Fluorene	UG/KG	5.4	7%	50000	0	1	15	77	U		72	U	80	U	78	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	15	77	U		72	U	80	U	78	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	15	77	UJ		72	UJ	80	UJ	78	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U
Hexachloroethane	UG/KG	0	0%		0	0	15	77	UJ		72	UJ	80	UJ	78	U
Indeno(1,2,3-cd)pyrene	UG/KG	18	27%	3200	0	4	15	77	U		72	U	80	U	78	U
Isophorone	UG/KG	0	0%	4400	0	0	15	77	UJ		72	UJ	80	UJ	78	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	15	77	U		72	U	80	U	78	U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-11		MW12-12		MW12-13	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123007		123010		123013		123016	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								29-Sep-98		29-Sep-98		30-Sep-98		01-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1	STEP	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N	
Naphthalene	UG/KG	0	0%	13000	0	0	15	77	UJ	72	UJ	80	UJ	78	U
Nitrobenzene	UG/KG	0	0%	200	0	0	15	77	UJ	72	UJ	80	UJ	78	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	15	190	U	180	U	190	UR	190	U
Phenanthrene	UG/KG	8.5	33%	50000	0	5	15	77	U	72	U	80	U	6.5	J
Phenol	UG/KG	0	0%	30	0	0	15	77	U	72	U	80	U	78	U
Pyrene	UG/KG	22	53%	50000	0	8	15	4.2	J	72	U	80	U	9.1	J
PESTICIDES/PCBS															
4,4'-DDD	UG/KG	0	0%	2900	0	0	15	3.8	U	3.6	U	4	U	4	U
4,4'-DDE	UG/KG	15	13%	2100	0	2	15	3.8	U	3.6	U	4	U	4	U
4,4'-DDT	UG/KG	42	13%	2100	0	2	15	3.8	U	3.6	U	4	U	4	U
Aldrin	UG/KG	0	0%	41	0	0	15	2	U	1.9	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	15	2	U	1.9	U	2	U	2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	15	2	U	1.9	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%		0	0	15	38	U	36	U	40	U	40	U
Aroclor-1221	UG/KG	0	0%		0	0	15	78	U	74	U	81	U	81	U
Aroclor-1232	UG/KG	0	0%		0	0	15	38	U	36	U	40	U	40	U
Aroclor-1242	UG/KG	0	0%		0	0	15	38	U	36	U	40	U	40	U
Aroclor-1248	UG/KG	0	0%		0	0	15	38	U	36	U	40	U	40	U
Aroclor-1254	UG/KG	670	20%	10000	0	3	15	38	U	36	U	40	U	40	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	15	38	U	36	U	40	U	40	U
Beta-BHC	UG/KG	0	0%	200	0	0	15	2	U	1.9	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	15	2	U	1.9	U	2	U	2	U
Dieldrin	UG/KG	14	13%	44	0	2	15	3.8	U	3.6	U	4	U	4	U
Endosulfan I	UG/KG	1.8	7%	900	0	1	15	2	U	1.9	U	2	U	2	U
Endosulfan II	UG/KG	2.7	7%	900	0	1	15	3.8	U	3.6	U	4	U	4	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	15	3.8	U	3.6	U	4	U	4	U
Endrin	UG/KG	4.2	13%	100	0	2	15	3.8	U	3.6	U	4	U	4	U
Endrin aldehyde	UG/KG	5.6	13%		0	2	15	3.8	U	3.6	U	4	U	4	U
Endrin ketone	UG/KG	0	0%		0	0	15	3.8	U	3.6	U	4	U	4	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	15	2	U	1.9	U	2	U	2	U
Gamma-Chlordane	UG/KG	11	20%	540	0	3	15	2	U	1.9	U	2	U	2	U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-11		MW12-12		MW12-13	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123007		123010		123013		123016	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								29-Sep-98		29-Sep-98		30-Sep-98		01-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N	
Heptachlor	UG/KG	0	0%	100	0	0	15	2	U	1.9	U	2	U	2	U
Heptachlor epoxide	UG/KG	4.6	13%	20	0	2	15	2	U	1.9	U	2	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	15	20	U	19	U	20	U	20	U
Toxaphene	UG/KG	0	0%		0	0	15	200	U	190	U	200	U	200	U
METALS															
Aluminum	MG/KG	15800	100%	19520	0	15	15	10100		10600		11800		9960	
Antimony	MG/KG	0.87	13%	6	0	2	15	1.1	UR	1.1	UR	1.3	UR	1.2	UR
Arsenic	MG/KG	4.9	100%	8.9	0	15	15	3.5		4		3.3		3.2	
Barium	MG/KG	89.2	100%	300	0	15	15	64.5		50.3		58.9		78.6	
Beryllium	MG/KG	0.59	100%	1.13	0	15	15	0.38	J	0.39	J	0.44	J	0.32	J
Cadmium	MG/KG	3.2	20%	2.46	1	3	15	0.06	U	0.05	U	0.06	U	0.06	U
Calcium	MG/KG	77600	100%	125300	0	15	15	46500		1230		11800		1640	J
Chromium	MG/KG	23.3	100%	30	0	15	15	15.2		14.4		21.5		13	
Cobalt	MG/KG	17.5	100%	30	0	15	15	8.9	J	8.2	J	13.1		8	J
Copper	MG/KG	32.5	100%	33	0	15	15	20.1		14.9		32.5		13.4	
Cyanide	MG/KG	1.6	13%	0.35	2	2	15	0.58	U	0.56	U	0.64	U	**1.2**	J
Iron	MG/KG	27100	100%	37410	0	15	15	20800	J	19700	J	27100	J	16300	
Lead	MG/KG	22.2	100%	24.4	0	15	15	11.4		13.1		15.5		15.2	J
Magnesium	MG/KG	21500	100%	21700	0	15	15	9420		3150		6460		2340	
Manganese	MG/KG	1420	100%	1100	1	15	15	478		327		501		783	
Mercury	MG/KG	0.11	20%	0.1	1	3	15	**0.11**	J	0.05	UJ	0.06	UJ	0.09	J
Nickel	MG/KG	39.9	93%	50	0	14	15	24		17.6		39.9		16.2	
Potassium	MG/KG	1740	100%	2623	0	15	15	1190		925		1270		806	J
Selenium	MG/KG	2.5	13%	2	2	2	15	0.86	U	0.83	U	0.94	U	0.89	UJ
Silver	MG/KG	0.2	7%	0.8	0	1	15	0.22	U	0.22	U	0.25	U	0.23	U
Sodium	MG/KG	207	27%	188	1	4	15	47	U	45.7	U	51.7	U	48.9	U
Thallium	MG/KG	1.8	33%	0.855	5	5	15	0.97	U	0.94	U	1.1	U	1.6	U
Vanadium	MG/KG	24	100%	150	0	15	15	17.6		18.3		17.7		17.6	
Zinc	MG/KG	83.7	100%	115	0	15	15	50.1		45		81.4		46.1	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								MW12-8		SB12-1		SB12-1		SB12-2		SB12-2B
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								123183		12209		12534		123112		123064
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2
SAMPLE DATE								28-Oct-98		########		11-Nov-97		14-Oct-98		04-Oct-98
QC CODE								SA		DU		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N
VOLATILE ORGANICS																
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	15	13	U	12	U	12	U	11	U	12
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	15	13	U	12	U	12	U	11	U	12
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	15	13	U	12	U	12	U	11	U	12
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	15	13	U	12	U	12	U	11	U	12
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	15	13	U	12	U	12	U	11	U	12
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
1,2-Dichloropropane	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Acetone	UG/KG	52	47%	200	0	7	15	52		3	J	10	J	12	U	12
Benzene	UG/KG	0	0%	60	0	0	15	13	U	12	U	12	U	11	U	12
Bromodichloromethane	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Bromoform	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Carbon disulfide	UG/KG	0	0%	2700	0	0	15	13	U	12	U	12	U	11	U	12
Carbon tetrachloride	UG/KG	0	0%	600	0	0	15	13	U	12	U	12	U	11	U	12
Chlorobenzene	UG/KG	0	0%	1700	0	0	15	13	U	12	U	12	U	11	U	12
Chlorodibromomethane	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Chloroethane	UG/KG	0	0%	1900	0	0	15	13	U	12	U	12	U	11	U	12
Chloroform	UG/KG	0	0%	300	0	0	15	13	U	12	U	12	U	11	U	12
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Ethyl benzene	UG/KG	0	0%	5500	0	0	15	13	U	12	U	12	U	11	U	12
Methyl bromide	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Methyl butyl ketone	UG/KG	1	7%		0	1	15	13	U	12	U	12	U	11	U	12
Methyl chloride	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	15	13	U	12	U	12	U	11	U	12
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	15	13	U	12	U	12	U	11	U	12
Methylene chloride	UG/KG	1	7%	100	0	1	15	13	U	12	U	12	U	11	U	12
Styrene	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12
Tetrachloroethene	UG/KG	0	0%	1400	0	0	15	13	U	12	U	12	U	11	U	12
Toluene	UG/KG	4	27%	1500	0	4	15	13	U	12	U	12	U	11	U	12
Total Xylenes	UG/KG	0	0%	1200	0	0	15	13	U	12	U	12	U	11	U	12

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-8		SB12-1		SB12-1		SB12-2		SB12-2B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123183		12209		12534		123112		123064	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								28-Oct-98		########		11-Nov-97		14-Oct-98		04-Oct-98	
QC CODE								SA		DU		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	13	U	12	U	12	U	11	U	12	
Trichloroethene	UG/KG	0	0%	700	0	0	15	13	U	12	U	12	U	11	U	12	
Vinyl chloride	UG/KG	0	0%	200	0	0	15	13	U	12	U	12	U	11	U	12	
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	15	83	U	78	U	78	U	75	U	73	
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	15	83	U	78	U	78	U	75	U	73	
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	15	83	U	78	U	78	U	75	U	73	
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	15	83	U	78	U	78	U	75	U	73	
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	15	200	U	190	U	190	U	180	U	180	
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	15	83	U	78	U	78	U	75	U	73	
2,4-Dimethylphenol	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	UJ	73	
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	15	200	U	190	U	190	U	180	UJ	180	
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	15	83	U	78	U	78	U	75	U	73	
2-Chloronaphthalene	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
2-Chlorophenol	UG/KG	0	0%	800	0	0	15	83	U	78	U	78	U	75	U	73	
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	15	83	U	78	U	78	U	75	U	73	
2-Methylphenol	UG/KG	0	0%	100	0	0	15	83	U	78	U	78	U	75	U	73	
2-Nitroaniline	UG/KG	0	0%	430	0	0	15	200	U	190	U	190	U	180	U	180	
2-Nitrophenol	UG/KG	0	0%	330	0	0	15	83	U	78	U	78	U	75	U	73	
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
3-Nitroaniline	UG/KG	0	0%	500	0	0	15	200	U	190	U	190	U	180	U	180	
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	15	200	U	190	U	190	U	180	U	180	
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	15	83	U	78	U	78	U	75	U	73	
4-Chloroaniline	UG/KG	0	0%	220	0	0	15	83	UJ	78	U	78	U	75	UJ	73	
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73	
4-Methylphenol	UG/KG	0	0%	900	0	0	15	83	U	78	U	78	U	75	U	73	
4-Nitroaniline	UG/KG	0	0%		0	0	15	200	U	190	U	190	U	180	UJ	180	
4-Nitrophenol	UG/KG	0	0%	100	0	0	15	200	U	190	U	190	U	180	U	180	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								MW12-8		SB12-1		SB12-1		SB12-2		SB12-2B
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								123183		12209		12534		123112		123064
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2
SAMPLE DATE								28-Oct-98		########		11-Nov-97		14-Oct-98		04-Oct-98
QC CODE								SA		DU		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N
Acenaphthene	UG/KG	0	0%	50000	0	0	15	83	U	78	U	78	U	75	U	73
Acenaphthylene	UG/KG	0	0%	41000	0	0	15	83	U	78	U	78	U	75	U	73
Anthracene	UG/KG	0	0%	50000	0	0	15	83	U	78	U	78	U	75	U	73
Benzo(a)anthracene	UG/KG	27	33%	224	0	5	15	6.4	J	11	J	78	U	75	U	4
Benzo(a)pyrene	UG/KG	18	33%	61	0	5	15	8	J	15	J	78	U	75	U	5.7
Benzo(b)fluoranthene	UG/KG	36	40%	1100	0	6	15	9.7	J	30	J	78	U	75	U	6.2
Benzo(ghi)perylene	UG/KG	23	33%	50000	0	5	15	6.6	J	23	J	78	U	75	UJ	4.6
Benzo(k)fluoranthene	UG/KG	26	27%	1100	0	4	15	7.4	J	78	U	78	U	75	U	7
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
Bis(2-Ethylhexyl)phthalate	UG/KG	210	20%	50000	0	3	15	83	U	78	U	78	U	75	U	73
Butylbenzylphthalate	UG/KG	6.7	7%	50000	0	1	15	83	U	6.7	J	78	U	75	U	73
Carbazole	UG/KG	16	7%		0	1	15	83	U	16	J	78	U	75	UJ	73
Chrysene	UG/KG	51	47%	400	0	7	15	9.1	J	17	J	78	U	75	U	7
Di-n-butylphthalate	UG/KG	68	20%	8100	0	3	15	83	U	68	J	78	U	75	U	73
Di-n-octylphthalate	UG/KG	7.8	13%	50000	0	2	15	83	U	7.8	J	78	U	6	J	73
Dibenz(a,h)anthracene	UG/KG	16	13%	14	1	2	15	83	U	16	J	78	U	75	UJ	73
Dibenzofuran	UG/KG	5.6	7%	6200	0	1	15	83	U	5.6	J	78	U	75	U	73
Diethyl phthalate	UG/KG	0	0%	7100	0	0	15	83	U	78	U	78	U	75	U	73
Dimethylphthalate	UG/KG	0	0%	2000	0	0	15	83	U	78	U	78	U	75	U	73
Fluoranthene	UG/KG	24	53%	50000	0	8	15	14	J	9.7	J	78	U	75	U	8.2
Fluorene	UG/KG	5.4	7%	50000	0	1	15	83	U	5.4	J	78	U	75	U	73
Hexachlorobenzene	UG/KG	0	0%	410	0	0	15	83	U	78	U	78	U	75	U	73
Hexachlorobutadiene	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	UJ	73
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
Hexachloroethane	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
Indeno(1,2,3-cd)pyrene	UG/KG	18	27%	3200	0	4	15	6.1	J	18	J	78	U	75	UJ	4.3
Isophorone	UG/KG	0	0%	4400	0	0	15	83	U	78	U	78	U	75	U	73
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	15	83	U	78	U	78	U	75	U	73

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-8		SB12-1		SB12-1		SB12-2		SB12-2B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123183		12209		12534		123112		123064	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								28-Oct-98		########		11-Nov-97		14-Oct-98		04-Oct-98	
QC CODE								SA		DU		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Naphthalene	UG/KG	0	0%	13000	0	0	15	83	U	78	U	78	U	75	U	73	
Nitrobenzene	UG/KG	0	0%	200	0	0	15	83	U	78	U	78	U	75	U	73	
Pentachlorophenol	UG/KG	0	0%	1000	0	0	15	200	U	190	U	190	U	180	UJ	180	
Phenanthrene	UG/KG	8.5	33%	50000	0	5	15	7.8	J	8.5	J	78	U	75	U	5.8	
Phenol	UG/KG	0	0%	30	0	0	15	83	U	78	U	78	U	75	U	73	
Pyrene	UG/KG	22	53%	50000	0	8	15	22	J	10	J	4.5	J	75	U	10	
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
4,4'-DDE	UG/KG	15	13%	2100	0	2	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
4,4'-DDT	UG/KG	42	13%	2100	0	2	15	4.2	U	3.9	U	1.8	J	3.8	U	4.1	
Aldrin	UG/KG	0	0%	41	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Alpha-BHC	UG/KG	0	0%	110	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Alpha-Chlordane	UG/KG	0	0%		0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Aroclor-1016	UG/KG	0	0%		0	0	15	42	U	39	U	39	U	38	U	41	
Aroclor-1221	UG/KG	0	0%		0	0	15	85	U	80	U	79	U	76	U	84	
Aroclor-1232	UG/KG	0	0%		0	0	15	42	U	39	U	39	U	38	U	41	
Aroclor-1242	UG/KG	0	0%		0	0	15	42	U	39	U	39	U	38	U	41	
Aroclor-1248	UG/KG	0	0%		0	0	15	42	U	39	U	39	U	38	U	41	
Aroclor-1254	UG/KG	670	20%	10000	0	3	15	42	U	39	U	39	U	38	U	41	
Aroclor-1260	UG/KG	0	0%	10000	0	0	15	42	U	39	U	39	U	38	U	41	
Beta-BHC	UG/KG	0	0%	200	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Delta-BHC	UG/KG	0	0%	300	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Dieldrin	UG/KG	14	13%	44	0	2	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Endosulfan I	UG/KG	1.8	7%	900	0	1	15	2.2	U	2	U	2	U	1.9	U	2.1	
Endosulfan II	UG/KG	2.7	7%	900	0	1	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Endrin	UG/KG	4.2	13%	100	0	2	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Endrin aldehyde	UG/KG	5.6	13%		0	2	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Endrin ketone	UG/KG	0	0%		0	0	15	4.2	U	3.9	U	3.9	U	3.8	U	4.1	
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1	
Gamma-Chlordane	UG/KG	11	20%	540	0	3	15	2.2	U	3.2		2	U	1.9	U	2.1	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								MW12-8		SB12-1		SB12-1		SB12-2		SB12-2B
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								123183		12209		12534		123112		123064
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2
SAMPLE DATE								28-Oct-98		########		11-Nov-97		14-Oct-98		04-Oct-98
QC CODE								SA		DU		SA		SA		SA
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N		N
Heptachlor	UG/KG	0	0%	100	0	0	15	2.2	U	2	U	2	U	1.9	U	2.1
Heptachlor epoxide	UG/KG	4.6	13%	20	0	2	15	2.2	U	2	U	2	U	1.9	U	2.1
Methoxychlor	UG/KG	0	0%		0	0	15	22	U	20	U	20	U	19	U	21
Toxaphene	UG/KG	0	0%		0	0	15	220	U	200	U	200	U	190	U	210
METALS																
Aluminum	MG/KG	15800	100%	19520	0	15	15	11700		10200		8590		7160	J	15800
Antimony	MG/KG	0.87	13%	6	0	2	15	1.5	UR	0.81	J	0.87	J	0.96	UR	1.4
Arsenic	MG/KG	4.9	100%	8.9	0	15	15	3.1		4.9		3.9		4	J	4.9
Barium	MG/KG	89.2	100%	300	0	15	15	76.1		89.2		74.2		75.2		86.2
Beryllium	MG/KG	0.59	100%	1.13	0	15	15	0.58	J	0.38		0.38		0.25	J	0.43
Cadmium	MG/KG	3.2	20%	2.46	1	3	15	0.43	U	1.1		0.86		3.2		0.07
Calcium	MG/KG	77600	100%	125300	0	15	15	4240		30600		52700		77600	J	3140
Chromium	MG/KG	23.3	100%	30	0	15	15	15.1	J	22.8		16.7		18.2		23.3
Cobalt	MG/KG	17.5	100%	30	0	15	15	8.6	J	9.5		8.3		9.2		17.5
Copper	MG/KG	32.5	100%	33	0	15	15	15.1		27.5		21.3		23.6		13.4
Cyanide	MG/KG	1.6	13%	0.35	2	2	15	[illegible]		0.66	UJ	0.67	UJ	0.56	U	0.63
Iron	MG/KG	27100	100%	37410	0	15	15	19500		22700		17900		16400		26900
Lead	MG/KG	22.2	100%	24.4	0	15	15	15.7	J	16.3	J	13.4	J	12	J	22.2
Magnesium	MG/KG	21500	100%	21700	0	15	15	3120		7050		7270		21500	J	3820
Manganese	MG/KG	1420	100%	1100	1	15	15	701		536		499		417		1420
Mercury	MG/KG	0.11	20%	0.1	1	3	15	0.06	U	0.05	U	0.05	U	0.06	U	0.06
Nickel	MG/KG	39.9	93%	50	0	14	15	16.3	UJ	30.4		22.7		24.4	J	27.1
Potassium	MG/KG	1740	100%	2623	0	15	15	1170	J	1320		993		1540		1020
Selenium	MG/KG	2.5	13%	2	2	2	15	0.55	U	2.1		2.5		0.72	U	1.1
Silver	MG/KG	0.2	7%	0.8	0	1	15	0.29	U	0.48	U	0.49	U	0.2	J	0.28
Sodium	MG/KG	207	27%	188	1	4	15	60	U	115		207		56.1	J	59.8
Thallium	MG/KG	1.8	33%	0.855	5	5	15	1.8	J	1.5		1.5	U	1.2	J	1.2
Vanadium	MG/KG	24	100%	150	0	15	15	20.8		17.6		14.7		13.6		23.4
Zinc	MG/KG	83.7	100%	115	0	15	15	53.6	J	64.2		60.7		83.7	J	66.5

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-3		SB12-4		SS12-15		SS12-16	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12524		12530		123211		123102	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								09-Nov-97		10-Nov-97		03-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID							1 STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	15 U	12	U	12	U	12	U	12	
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	15 U	12	U	12	U	12	U	12	
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	15 U	12	U	12	U	12	U	12	
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	15 U	12	U	12	U	12	U	12	
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	15 UJ	12	U	12	U	12	U	12	
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
1,2-Dichloropropane	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Acetone	UG/KG	52	47%	200	0	7	15 UJ	4	J	5	J	12	U	12	
Benzene	UG/KG	0	0%	60	0	0	15 U	12	U	12	U	12	U	12	
Bromodichloromethane	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Bromoform	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Carbon disulfide	UG/KG	0	0%	2700	0	0	15 U	12	U	12	U	12	U	12	
Carbon tetrachloride	UG/KG	0	0%	600	0	0	15 U	12	U	12	U	12	U	12	
Chlorobenzene	UG/KG	0	0%	1700	0	0	15 U	12	U	12	U	12	U	12	
Chlorodibromomethane	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Chloroethane	UG/KG	0	0%	1900	0	0	15 UJ	12	U	12	U	12	U	12	
Chloroform	UG/KG	0	0%	300	0	0	15 U	12	U	12	U	12	U	12	
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Ethyl benzene	UG/KG	0	0%	5500	0	0	15 U	12	U	12	U	12	U	12	
Methyl bromide	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Methyl butyl ketone	UG/KG	1	7%		0	1	15 U	12	U	1	J	12	U	12	
Methyl chloride	UG/KG	0	0%		0	0	15 UJ	12	U	12	U	12	U	12	
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	15 U	12	U	12	U	12	U	12	
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	15 U	12	U	12	U	12	U	12	
Methylene chloride	UG/KG	1	7%	100	0	1	15 U	12	U	12	U	12	U	12	
Styrene	UG/KG	0	0%		0	0	15 U	12	U	12	U	12	U	12	
Tetrachloroethene	UG/KG	0	0%	1400	0	0	15 U	12	U	12	U	12	U	12	
Toluene	UG/KG	4	27%	1500	0	4	15 U	3	J	4	J	12	U	1	
Total Xylenes	UG/KG	0	0%	1200	0	0	15 U	12	U	12	U	12	U	12	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									SB12-3		SB12-4		SS12-15		SS12-16
MATRIX									SOIL		SOIL		SOIL		SOIL
SAMPLE ID									12524		12530		123211		123102
SAMPLE DEPTH TO TOP OF SAMPLE									0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2		0.2		0.2
SAMPLE DATE									09-Nov-97		10-Nov-97		03-Nov-98		13-Oct-98
QC CODE									SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	1 STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	U	12	U	12	U	12	U	12
Trichloroethene	UG/KG	0	0%	700	0	0	15	U	12	U	12	U	12	U	12
Vinyl chloride	UG/KG	0	0%	200	0	0	15	UJ	12	U	12	U	12	U	12
SEMI VOLATILE ORGANICS															
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	15	UJ	82	U	84	U	80	UJ	80
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	15	UJ	82	U	84	U	80	UJ	80
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	15	UJ	82	U	84	U	80	UJ	80
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	15	UJ	82	U	84	U	80	UJ	80
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	15	U	200	U	200	U	200	U	190
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	U	80
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	15	U	82	U	84	U	80	U	80
2,4-Dimethylphenol	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	UJ	80
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	15	U	200	UJ	200	UJ	200	UR	190
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	UJ	80
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	15	U	82	U	84	U	80	UJ	80
2-Chloronaphthalene	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	UJ	80
2-Chlorophenol	UG/KG	0	0%	800	0	0	15	U	82	U	84	U	80	U	80
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	15	U	82	U	84	U	80	UJ	80
2-Methylphenol	UG/KG	0	0%	100	0	0	15	U	82	U	84	U	80	U	80
2-Nitroaniline	UG/KG	0	0%	430	0	0	15	U	200	U	200	U	200	UJ	190
2-Nitrophenol	UG/KG	0	0%	330	0	0	15	UJ	82	U	84	U	80	U	80
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	15	U	82	UJ	84	UJ	80	UJ	80
3-Nitroaniline	UG/KG	0	0%	500	0	0	15	U	200	UJ	200	UJ	200	UJ	190
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	15	U	200	U	200	U	200	UJ	190
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	U	80
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	15	U	82	U	84	U	80	U	80
4-Chloroaniline	UG/KG	0	0%	220	0	0	15	UJ	82	UJ	84	UJ	80	U	80
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	15	U	82	U	84	U	80	UJ	80
4-Methylphenol	UG/KG	0	0%	900	0	0	15	U	82	U	84	U	80	U	80
4-Nitroaniline	UG/KG	0	0%		0	0	15	UJ	200	UJ	200	UJ	200	UJ	190
4-Nitrophenol	UG/KG	0	0%	100	0	0	15	U	200	U	200	U	200	U	190

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-3		SB12-4		SS12-15		SS12-16	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12524		12530		123211		123102	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2	
SAMPLE DATE								09-Nov-97		10-Nov-97		03-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA		SA	
STUDY ID							1 STEP 1	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
Acenaphthene	UG/KG	0	0%	50000	0	0	15	82	U	84	U	80	UJ	80	
Acenaphthylene	UG/KG	0	0%	41000	0	0	15	82	U	84	U	80	UJ	80	
Anthracene	UG/KG	0	0%	50000	0	0	15	82	U	84	U	80	UJ	80	
Benzo(a)anthracene	UG/KG	27	33%	224	0	5	15	82	U	84	U	80	UJ	80	
Benzo(a)pyrene	UG/KG	18	33%	61	0	5	15	82	U	84	U	80	UJ	80	
Benzo(b)fluoranthene	UG/KG	36	40%	1100	0	6	15	82	U	84	U	4.2	J	80	
Benzo(ghi)perylene	UG/KG	23	33%	50000	0	5	15	82	U	84	U	80	U	80	
Benzo(k)fluoranthene	UG/KG	26	27%	1100	0	4	15	82	U	84	U	80	U	80	
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	15	82	U	84	U	80	UJ	80	
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	15	82	U	84	U	80	UJ	80	
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	15	82	U	84	U	80	U	80	
Bis(2-Ethylhexyl)phthalate	UG/KG	210	20%	50000	0	3	15	82	U	84	U	80	UJ	80	
Butylbenzylphthalate	UG/KG	6.7	7%	50000	0	1	15	82	U	84	U	80	UJ	80	
Carbazole	UG/KG	16	7%		0	1	15	82	U	84	U	80	UJ	80	
Chrysene	UG/KG	51	47%	400	0	7	15	82	U	5.1	J	80	UJ	80	
Di-n-butylphthalate	UG/KG	68	20%	8100	0	3	15	82	U	84	U	7.2	J	80	
Di-n-octylphthalate	UG/KG	7.8	13%	50000	0	2	15	82	U	84	U	80	U	80	
Dibenz(a,h)anthracene	UG/KG	16	13%	14	1	2	15	82	U	84	U	80	U	80	
Dibenzofuran	UG/KG	5.6	7%	6200	0	1	15	82	U	84	U	80	UJ	80	
Diethyl phthalate	UG/KG	0	0%	7100	0	0	15	82	U	84	U	80	UJ	80	
Dimethylphthalate	UG/KG	0	0%	2000	0	0	15	82	U	84	U	80	UJ	80	
Fluoranthene	UG/KG	24	53%	50000	0	8	15	82	U	7	J	80	UJ	80	
Fluorene	UG/KG	5.4	7%	50000	0	1	15	82	U	84	U	80	U	80	
Hexachlorobenzene	UG/KG	0	0%	410	0	0	15	82	U	84	U	80	UJ	80	
Hexachlorobutadiene	UG/KG	0	0%		0	0	15	82	U	84	U	80	UJ	80	
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	15	82	U	84	U	80	UJ	80	
Hexachloroethane	UG/KG	0	0%		0	0	15	82	U	84	U	80	U	80	
Indeno(1,2,3-cd)pyrene	UG/KG	18	27%	3200	0	4	15	82	U	84	U	80	U	80	
Isophorone	UG/KG	0	0%	4400	0	0	15	82	U	84	U	80	UJ	80	
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	15	82	U	84	U	80	U	80	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	15	82	U	84	U	80	U	80	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									SB12-3		SB12-4		SS12-15		SS12-16
MATRIX									SOIL		SOIL		SOIL		SOIL
SAMPLE ID									12524		12530		123211		123102
SAMPLE DEPTH TO TOP OF SAMPLE									0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2		0.2		0.2
SAMPLE DATE									09-Nov-97		10-Nov-97		03-Nov-98		13-Oct-98
QC CODE									SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	1 STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N
Naphthalene	UG/KG	0	0%	13000	0	0	15	U	82	U	84	U	80	UJ	80
Nitrobenzene	UG/KG	0	0%	200	0	0	15	U	82	U	84	U	80	UJ	80
Pentachlorophenol	UG/KG	0	0%	1000	0	0	15	U	200	U	200	U	200	U	190
Phenanthrene	UG/KG	8.5	33%	50000	0	5	15	J	82	U	84	U	80	UJ	80
Phenol	UG/KG	0	0%	30	0	0	15	U	82	U	84	U	80	U	80
Pyrene	UG/KG	22	53%	50000	0	8	15	J	82	U	6.1	J	80	U	80
PESTICIDES/PCBS															
4,4'-DDD	UG/KG	0	0%	2900	0	0	15	U	4.1	U	4.2	U	4	U	4
4,4'-DDE	UG/KG	15	13%	2100	0	2	15	U	4.8	J	4.2	U	4	U	4
4,4'-DDT	UG/KG	42	13%	2100	0	2	15	U	4.1	U	4.2	U	4	U	4
Aldrin	UG/KG	0	0%	41	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Alpha-BHC	UG/KG	0	0%	110	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Alpha-Chlordane	UG/KG	0	0%		0	0	15	U	2.1	U	2.2	U	2.1	U	2
Aroclor-1016	UG/KG	0	0%		0	0	15	U	41	U	42	U	40	U	40
Aroclor-1221	UG/KG	0	0%		0	0	15	U	84	U	85	U	82	U	81
Aroclor-1232	UG/KG	0	0%		0	0	15	U	41	U	42	U	40	U	40
Aroclor-1242	UG/KG	0	0%		0	0	15	U	41	U	42	U	40	U	40
Aroclor-1248	UG/KG	0	0%		0	0	15	U	41	U	42	U	40	U	40
Aroclor-1254	UG/KG	670	20%	10000	0	3	15	U	440		24	J	40	U	40
Aroclor-1260	UG/KG	0	0%	10000	0	0	15	U	41	U	42	U	40	U	40
Beta-BHC	UG/KG	0	0%	200	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Delta-BHC	UG/KG	0	0%	300	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Dieldrin	UG/KG	14	13%	44	0	2	15	U	5.8	J	4.2	U	4	U	4
Endosulfan I	UG/KG	1.8	7%	900	0	1	15	U	2.1	U	2.2	U	2.1	U	2
Endosulfan II	UG/KG	2.7	7%	900	0	1	15	U	2.7	J	4.2	U	4	U	4
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	15	U	4.1	U	4.2	U	4	U	4
Endrin	UG/KG	4.2	13%	100	0	2	15	U	2.6	J	4.2	U	4	U	4
Endrin aldehyde	UG/KG	5.6	13%		0	2	15	U	3.5	J	4.2	U	4	U	4
Endrin ketone	UG/KG	0	0%		0	0	15	U	4.1	U	4.2	U	4	U	4
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Gamma-Chlordane	UG/KG	11	20%	540	0	3	15	U	9	J	2.2	U	2.1	U	2

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									SB12-3		SB12-4		SS12-15		SS12-16
MATRIX									SOIL		SOIL		SOIL		SOIL
SAMPLE ID									12524		12530		123211		123102
SAMPLE DEPTH TO TOP OF SAMPLE									0		0		0		0
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2		0.2		0.2
SAMPLE DATE									09-Nov-97		10-Nov-97		03-Nov-98		13-Oct-98
QC CODE									SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	1 STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N
Heptachlor	UG/KG	0	0%	100	0	0	15	U	2.1	U	2.2	U	2.1	U	2
Heptachlor epoxide	UG/KG	4.6	13%	20	0	2	15	U	3.3	J	2.2	U	2.1	U	2
Methoxychlor	UG/KG	0	0%		0	0	15	U	21	U	22	U	21	U	20
Toxaphene	UG/KG	0	0%		0	0	15	U	210	U	220	U	210	U	200
METALS															
Aluminum	MG/KG	15800	100%	19520	0	15	15		10500		14400		10200		11900
Antimony	MG/KG	0.87	13%	6	0	2	15	UR	0.83	UJ	0.86	UJ	1.2	UJ	1.4
Arsenic	MG/KG	4.9	100%	8.9	0	15	15		3.6		4.2		3.5		3.8
Barium	MG/KG	89.2	100%	300	0	15	15		67.4		84		67.5		85.9
Beryllium	MG/KG	0.59	100%	1.13	0	15	15	J	0.35	J	0.38		0.44	J	0.44
Cadmium	MG/KG	3.2	20%	2.46	1	3	15	U	0.07	U	0.07	U	0.06	U	0.07
Calcium	MG/KG	77600	100%	125300	0	15	15		32300		12800		30700		15200
Chromium	MG/KG	23.3	100%	30	0	15	15		16.9		18.7		15.8		17.5
Cobalt	MG/KG	17.5	100%	30	0	15	15		9.5		10.7		9.1	J	9.8
Copper	MG/KG	32.5	100%	33	0	15	15		19.3		16.7		22.3		19.6
Cyanide	MG/KG	1.6	13%	0.35	2	2	15	UJ	0.75	U	0.68	U	0.62	U	0.62
Iron	MG/KG	27100	100%	37410	0	15	15		18400		20900		20500	J	21700
Lead	MG/KG	22.2	100%	24.4	0	15	15		11.3		15.9		13.2		14.6
Magnesium	MG/KG	21500	100%	21700	0	15	15	J	6950		5420		7330		5160
Manganese	MG/KG	1420	100%	1100	1	15	15		584		781		555	J	641
Mercury	MG/KG	0.11	20%	0.1	1	3	15	U	0.06	U	0.06	U	0.06	U	0.07
Nickel	MG/KG	39.9	93%	50	0	14	15		25.4		23.2		27.2		24.7
Potassium	MG/KG	1740	100%	2623	0	15	15	J	1660	J	1740	J	1210		1250
Selenium	MG/KG	2.5	13%	2	2	2	15	U	1.1	U	1.2	U	0.89	U	1
Silver	MG/KG	0.2	7%	0.8	0	1	15	U	0.5	U	0.52	U	0.23	U	0.27
Sodium	MG/KG	207	27%	188	1	4	15	U	144	U	150	U	48.5	U	60.2
Thallium	MG/KG	1.8	33%	0.855	5	5	15	U	1.5	U	1.6	U	**1.2**	J	1.2
Vanadium	MG/KG	24	100%	150	0	15	15		17.7		24		18.3		20.2
Zinc	MG/KG	83.7	100%	115	0	15	15		61.9	J	63.5	J	54.3	J	57

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12	
LOCATION ID									SS12-17		SS12-183	
MATRIX									SOIL		SOIL	
SAMPLE ID									123212		123377	
SAMPLE DEPTH TO TOP OF SAMPLE									0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2	
SAMPLE DATE									03-Nov-98		17-Nov-98	
QC CODE									SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES		N		N	
VOLATILE ORGANICS												
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	15	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	15	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	15	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	15	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	15	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	15	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	15	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	15	U	12	U	12	U
Acetone	UG/KG	52	47%	200	0	7	15	U	9	J	7	J
Benzene	UG/KG	0	0%	60	0	0	15	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	15	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	15	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	15	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	15	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	15	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	15	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	15	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	15	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	15	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	15	U	12	U	12	U
Methyl butyl ketone	UG/KG	1	7%		0	1	15	U	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	15	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	15	U	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	15	U	12	U	12	U
Methylene chloride	UG/KG	1	7%	100	0	1	15	U	12	U	12	U
Styrene	UG/KG	0	0%		0	0	15	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	15	U	12	U	12	U
Toluene	UG/KG	4	27%	1500	0	4	15	J	12	U	2	J
Total Xylenes	UG/KG	0	0%	1200	0	0	15	U	12	U	12	U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOCATION ID								SS12-17		SS12-183	
MATRIX								SOIL		SOIL	
SAMPLE ID								123212		123377	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2	
SAMPLE DATE								03-Nov-98		17-Nov-98	
QC CODE								SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	15	U	12	U	12 U
Trichloroethene	UG/KG	0	0%	700	0	0	15	U	12	U	12 U
Vinyl chloride	UG/KG	0	0%	200	0	0	15	U	12	U	12 U
SEMI VOLATILE ORGANICS											
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	15	U	80	UJ	82 U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	15	U	80	UJ	82 U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	15	U	80	UJ	82 U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	15	U	80	UJ	82 U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	15	U	200	U	200 U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	15	U	80	U	82 U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	15	U	80	U	82 U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	15	U	80	UJ	82 UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	15	UJ	200	UR	200 UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	15	U	80	UJ	82 U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	15	U	80	UJ	82 U
2-Chloronaphthalene	UG/KG	0	0%		0	0	15	U	80	UJ	82 U
2-Chlorophenol	UG/KG	0	0%	800	0	0	15	U	80	U	82 U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	15	U	80	UJ	82 U
2-Methylphenol	UG/KG	0	0%	100	0	0	15	U	80	U	82 U
2-Nitroaniline	UG/KG	0	0%	430	0	0	15	U	200	UJ	200 U
2-Nitrophenol	UG/KG	0	0%	330	0	0	15	U	80	U	82 UJ
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	15	UJ	80	UJ	82 U
3-Nitroaniline	UG/KG	0	0%	500	0	0	15	U	200	UJ	200 UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	15	U	200	UJ	200 UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	15	U	80	UJ	82 U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	15	U	80	U	82 U
4-Chloroaniline	UG/KG	0	0%	220	0	0	15	U	80	U	82 UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	15	U	80	UJ	82 U
4-Methylphenol	UG/KG	0	0%	900	0	0	15	U	80	U	82 U
4-Nitroaniline	UG/KG	0	0%		0	0	15	UJ	200	UJ	200 UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	15	UJ	200	U	200 U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		
LOCATION ID									SS12-17		SS12-183		
MATRIX									SOIL		SOIL		
SAMPLE ID									123212		123377		
SAMPLE DEPTH TO TOP OF SAMPLE									0		0		
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2		
SAMPLE DATE									03-Nov-98		17-Nov-98		
QC CODE									SA		SA		
STUDY ID									RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	STEP 1	N		N		
Acenaphthene	UG/KG	0	0%	50000	0	0	15	U	80	UJ	82	U	
Acenaphthylene	UG/KG	0	0%	41000	0	0	15	U	80	UJ	82	U	
Anthracene	UG/KG	0	0%	50000	0	0	15	U	80	UJ	82	U	
Benzo(a)anthracene	UG/KG	27	33%	224	0	5	15	U	80	UJ	27	J	
Benzo(a)pyrene	UG/KG	18	33%	61	0	5	15	UJ	80	UJ	18	J	
Benzo(b)fluoranthene	UG/KG	36	40%	1100	0	6	15	U	80	U	36	J	
Benzo(ghi)perylene	UG/KG	23	33%	50000	0	5	15	U	80	U	14	J	
Benzo(k)fluoranthene	UG/KG	26	27%	1100	0	4	15	U	80	U	26	J	
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	15	U	80	UJ	82	U	
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	15	U	80	UJ	82	U	
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	15	U	80	U	82	U	
Bis(2-Ethylhexyl)phthalate	UG/KG	210	20%	50000	0	3	15	U	10	J	82	UJ	
Butylbenzylphthalate	UG/KG	6.7	7%	50000	0	1	15	U	80	UJ	82	UJ	
Carbazole	UG/KG	16	7%		0	1	15	U	80	UJ	82	U	
Chrysene	UG/KG	51	47%	400	0	7	15	U	80	UJ	51	J	
Di-n-butylphthalate	UG/KG	68	20%	8100	0	3	15	U	6	J	82	U	
Di-n-octylphthalate	UG/KG	7.8	13%	50000	0	2	15	U	80	U	82	U	
Dibenz(a,h)anthracene	UG/KG	16	13%	14	1	2	15	U	80	U	6.3	J	
Dibenzofuran	UG/KG	5.6	7%	6200	0	1	15	U	80	UJ	82	U	
Diethyl phthalate	UG/KG	0	0%	7100	0	0	15	U	80	UJ	82	U	
Dimethylphthalate	UG/KG	0	0%	2000	0	0	15	U	80	UJ	82	U	
Fluoranthene	UG/KG	24	53%	50000	0	8	15	U	4.1	J	24	J	
Fluorene	UG/KG	5.4	7%	50000	0	1	15	U	80	U	82	U	
Hexachlorobenzene	UG/KG	0	0%	410	0	0	15	U	80	UJ	82	U	
Hexachlorobutadiene	UG/KG	0	0%		0	0	15	U	80	UJ	82	U	
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	15	U	80	U	82	UJ	
Hexachloroethane	UG/KG	0	0%		0	0	15	U	80	U	82	U	
Indeno(1,2,3-cd)pyrene	UG/KG	18	27%	3200	0	4	15	U	80	UJ	12	J	
Isophorone	UG/KG	0	0%	4400	0	0	15	U	80	UJ	82	U	
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	15	U	80	U	82	U	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	15	U	80	U	82	U	

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		
LOCATION ID								SS12-17		SS12-183		
MATRIX								SOIL		SOIL		
SAMPLE ID								123212		123377		
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		
SAMPLE DATE								03-Nov-98		17-Nov-98		
QC CODE								SA		SA		
STUDY ID								RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES			N		N	
Naphthalene	UG/KG	0	0%	13000	0	0	15	U		80	UJ	82	U
Nitrobenzene	UG/KG	0	0%	200	0	0	15	U		80	UJ	82	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	15	UJ		200	U	200	UR
Phenanthrene	UG/KG	8.5	33%	50000	0	5	15	U		80	U	5.1	J
Phenol	UG/KG	0	0%	30	0	0	15	U		80	U	82	U
Pyrene	UG/KG	22	53%	50000	0	8	15	U		80	U	21	J
PESTICIDES/PCBS													
4,4'-DDD	UG/KG	0	0%	2900	0	0	15	U		4	U	4.1	U
4,4'-DDE	UG/KG	15	13%	2100	0	2	15	U		15		4.1	U
4,4'-DDT	UG/KG	42	13%	2100	0	2	15	U		42		4.1	U
Aldrin	UG/KG	0	0%	41	0	0	15	U		2.1	U	2.1	U
Alpha-BHC	UG/KG	0	0%	110	0	0	15	U		2.1	U	2.1	U
Alpha-Chlordane	UG/KG	0	0%		0	0	15	U		2.1	U	2.1	U
Aroclor-1016	UG/KG	0	0%		0	0	15	U		40	U	41	U
Aroclor-1221	UG/KG	0	0%		0	0	15	U		82	U	84	U
Aroclor-1232	UG/KG	0	0%		0	0	15	U		40	U	41	U
Aroclor-1242	UG/KG	0	0%		0	0	15	U		40	U	41	U
Aroclor-1248	UG/KG	0	0%		0	0	15	U		40	U	41	U
Aroclor-1254	UG/KG	670	20%	10000	0	3	15	U		670	J	41	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	15	U		40	U	41	U
Beta-BHC	UG/KG	0	0%	200	0	0	15	U		2.1	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	15	U		2.1	U	2.1	U
Dieldrin	UG/KG	14	13%	44	0	2	15	U		14	J	4.1	U
Endosulfan I	UG/KG	1.8	7%	900	0	1	15	U		1.8	J	2.1	U
Endosulfan II	UG/KG	2.7	7%	900	0	1	15	U		4	U	4.1	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	15	U		4	U	4.1	U
Endrin	UG/KG	4.2	13%	100	0	2	15	U		4.2	J	4.1	U
Endrin aldehyde	UG/KG	5.6	13%		0	2	15	U		5.6	J	4.1	U
Endrin ketone	UG/KG	0	0%		0	0	15	U		4	U	4.1	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	15	U		2.1	U	2.1	U
Gamma-Chlordane	UG/KG	11	20%	540	0	3	15	U		11	J	2.1	U

TABLE G-6
DISPOSAL PIT A/B METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12	
LOCATION ID									SS12-17		SS12-183	
MATRIX									SOIL		SOIL	
SAMPLE ID									123212		123377	
SAMPLE DEPTH TO TOP OF SAMPLE									0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.2		0.2	
SAMPLE DATE									03-Nov-98		17-Nov-98	
QC CODE									SA		SA	
STUDY ID									RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	STEP 1	N		N	
Heptachlor	UG/KG	0	0%	100	0	0	15	U	2.1	U	2.1	U
Heptachlor epoxide	UG/KG	4.6	13%	20	0	2	15	U	4.6	J	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	15	U	21	U	21	U
Toxaphene	UG/KG	0	0%		0	0	15	U	210	U	210	U
METALS												
Aluminum	MG/KG	15800	100%	19520	0	15	15		10500		13900	J
Antimony	MG/KG	0.87	13%	6	0	2	15	UR	1.1	UJ	1.4	UR
Arsenic	MG/KG	4.9	100%	8.9	0	15	15		2.8		3.9	J
Barium	MG/KG	89.2	100%	300	0	15	15		70.8		86.2	
Beryllium	MG/KG	0.59	100%	1.13	0	15	15	J	0.4	J	0.59	J
Cadmium	MG/KG	3.2	20%	2.46	1	3	15	U	0.05	U	0.4	U
Calcium	MG/KG	77600	100%	125300	0	15	15	J	23600		16200	
Chromium	MG/KG	23.3	100%	30	0	15	15		15.6		19.4	
Cobalt	MG/KG	17.5	100%	30	0	15	15	J	10.7		15	
Copper	MG/KG	32.5	100%	33	0	15	15		21.4		23.7	
Cyanide	MG/KG	1.6	13%	0.35	2	2	15	U	0.6	U	0.66	U
Iron	MG/KG	27100	100%	37410	0	15	15	J	19900	J	26000	J
Lead	MG/KG	22.2	100%	24.4	0	15	15		13.6		13.6	
Magnesium	MG/KG	21500	100%	21700	0	15	15		7070		5780	
Manganese	MG/KG	1420	100%	1100	1	15	15		607	J	663	
Mercury	MG/KG	0.11	20%	0.1	1	3	15	J	0.06	U	0.06	U
Nickel	MG/KG	39.9	93%	50	0	14	15		26.3		29.2	J
Potassium	MG/KG	1740	100%	2623	0	15	15		1260		1310	
Selenium	MG/KG	2.5	13%	2	2	2	15	U	0.82	U	0.52	UJ
Silver	MG/KG	0.2	7%	0.8	0	1	15	U	0.21	U	0.27	U
Sodium	MG/KG	207	27%	188	1	4	15	J	44.8	U	56.6	U
Thallium	MG/KG	1.8	33%	0.855	5	5	15	U	1.4	J	1.2	U
Vanadium	MG/KG	24	100%	150	0	15	15		18.1		21.2	
Zinc	MG/KG	83.7	100%	115	0	15	15	J	58	J	63.8	J

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-10		MW12-11		MW12-11		MW12-12	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123008		123009		123011		123012		123014	
SAMPLE DEPTH TO TOP OF SAMPLE								4		8		4		8		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								5.7		9.8		5.6		10		6	
SAMPLE DATE								9/29/1998		9/29/1998		9/29/1998		9/29/1998		9/30/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	11	U	12	U	11	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	11	U	12	U	11	U	11	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	11	U	12	U	11	U	11	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	11	U	12	U	11	U	11	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	11	U	12	U	11	U	11	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Acetone	UG/KG	34	41%	200	0	12	29	3	J	4	J	4	J	4	J	12	U
Benzene	UG/KG	6	3%	60	0	1	29	11	U	12	U	11	U	11	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Bromoform	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	11	U	12	U	11	U	11	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	11	U	12	U	11	U	11	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	11	U	12	U	11	U	11	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	29	11	U	12	U	11	U	11	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	29	11	U	12	U	11	U	11	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	11	U	12	U	11	U	11	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	11	U	12	U	11	U	11	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	11	U	12	U	11	U	11	U	12	U
Methylene chloride	UG/KG	3	7%	100	0	2	29	11	U	12	U	11	U	11	U	12	U
Styrene	UG/KG	33	3%		0	1	29	11	U	12	U	11	U	11	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	11	U	12	U	11	U	11	U	12	U
Toluene	UG/KG	15	34%	1500	0	10	29	11	U	12	U	11	U	11	U	12	U
Total Xylenes	UG/KG	520	10%	1200	0	3	29	11	U	12	U	11	U	11	U	12	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-10		MW12-11		MW12-11		MW12-12	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123008		123009		123011		123012		123014	
SAMPLE DEPTH TO TOP OF SAMPLE								4		8		4		8		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								5.7		9.8		5.6		10		6	
SAMPLE DATE								9/29/1998		9/29/1998		9/29/1998		9/29/1998		9/30/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	11	U	12	U	11	U	11	U	12	U
Trichloroethene	UG/KG	26	14%	700	0	4	29	11	U	12	U	11	U	11	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	29	11	U	12	U	11	U	11	U	12	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	73	U	74	U	72	U	70	U	81	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4										
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	180	U	180	U	180	U	170	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	73	U	74	U	72	U	70	U	81	U
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	180	U	180	U	180	U	170	U	200	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	73	U	74	U	72	U	70	U	81	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	73	U	74	U	72	U	70	U	81	U
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
2-Methylphenol	UG/KG	0	0%	100	0	0	28	73	U	74	U	72	U	70	U	81	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	180	U	180	U	180	U	170	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	73	U	74	U	72	U	70	U	81	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	180	U	180	U	180	UJ	170	UJ	200	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	180	U	180	U	180	U	170	U	200	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	73	U	74	U	72	U	70	U	81	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
4-Methylphenol	UG/KG	140	4%	900	0	1	28	73	U	74	U	72	U	70	U	81	U
4-Nitroaniline	UG/KG	0	0%		0	0	28	180	UJ	180	UJ	180	U	170	U	200	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-10		MW12-11		MW12-11		MW12-12	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123008		123009		123011		123012		123014	
SAMPLE DEPTH TO TOP OF SAMPLE								4		8		4		8		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								5.7		9.8		5.6		10		6	
SAMPLE DATE								9/29/1998		9/29/1998		9/29/1998		9/29/1998		9/30/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	180	U	180	U	180	U	170	U	200	U
Acenaphthene	UG/KG	23	4%	50000	0	1	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Anthracene	UG/KG	96	11%	50000	0	3	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	73	UJ	74	U	72	U	70	U	81	U
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	73	U	74	UJ	72	UJ	70	UJ	81	UJ
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	73	UJ	74	U	72	U	70	U	81	U
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	73	U	74	U	72	U	70	U	81	U
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	73	U	74	U	72	U	70	U	81	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	73	U	74	U	72	U	70	U	81	U
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	73	U	74	U	72	U	180		81	U
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	73	U	74	U	72	U	70	U	81	U
Carbazole	UG/KG	0	0%		0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Chrysene	UG/KG	240	14%	400	0	4	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	73	U	74	U	72	U	13	J	81	U
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	73	U	74	U	72	U	70	U	81	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Fluoranthene	UG/KG	420	21%	50000	0	6	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Fluorene	UG/KG	52	7%	50000	0	2	28	73	U	74	U	72	U	70	U	81	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	73	U	74	U	72	U	70	U	81	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
Hexachloroethane	UG/KG	0	0%		0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	73	U	74	U	72	U	70	U	81	U
Isophorone	UG/KG	0	0%	4400	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-10		MW12-10		MW12-11		MW12-11		MW12-12	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123008		123009		123011		123012		123014	
SAMPLE DEPTH TO TOP OF SAMPLE								4		8		4		8		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								5.7		9.8		5.6		10		6	
SAMPLE DATE								9/29/1998		9/29/1998		9/29/1998		9/29/1998		9/30/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	73	U	74	U	72	U	70	U	81	U
Naphthalene	UG/KG	600	7%	13000	0	2	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	28	73	UJ	74	UJ	72	UJ	70	UJ	81	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	180	U	180	U	180	UR	170	UR	200	UR
Phenanthrene	UG/KG	340	18%	50000	0	5	28	73	U	74	U	72	U	4.6	J	81	U
Phenol	UG/KG	300	7%	30	2	2	28	73	U	74	U	72	U	70	U	81	U
Pyrene	UG/KG	380	18%	50000	0	5	28	73	U	74	U	72	U	70	U	81	U
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Aldrin	UG/KG	0.79	4%	41	0	1	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Alpha-BHC	UG/KG	24	7%	110	0	2	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Aroclor-1016	UG/KG	0	0%		0	0	28	37	U	37	U	36	U	35	U	41	U
Aroclor-1221	UG/KG	0	0%		0	0	28	74	U	75	U	73	U	71	U	83	U
Aroclor-1232	UG/KG	0	0%		0	0	28	37	U	37	U	36	U	35	U	41	U
Aroclor-1242	UG/KG	0	0%		0	0	28	37	U	37	U	36	U	35	U	41	U
Aroclor-1248	UG/KG	0	0%		0	0	28	37	U	37	U	36	U	35	U	41	U
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	37	U	37	U	36	U	35	U	41	U
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	37	U	37	U	36	U	35	U	41	U
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Dieldrin	UG/KG	40	7%	44	0	2	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Endosulfan I	UG/KG	0	0%	900	0	0	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U
Endosulfan II	UG/KG	19	7%	900	0	2	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Endrin	UG/KG	20	14%	100	0	4	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Endrin aldehyde	UG/KG	0	0%		0	0	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Endrin ketone	UG/KG	0	0%		0	0	28	3.7	U	3.7	U	3.6	U	3.5	U	4.1	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	1.9	U	1.9	U	1.9	U	1.8	U	2.1	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID								MW12-10			MW12-10			MW12-11			MW12-11			MW12-12	
MATRIX								SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID								123008			123009			123011			123012			123014	
SAMPLE DEPTH TO TOP OF SAMPLE								4			8			4			8			4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								5.7			9.8			5.6			10			6	
SAMPLE DATE								9/29/1998			9/29/1998			9/29/1998			9/29/1998			9/30/1998	
QC CODE								SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1			RI PHASE 1 STEP 1			RI PHASE 1 STEP 1			RI PHASE 1 STEP 1			RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N			N			N			N			N	
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	1.9	U		1.9	U		1.9	U		1.8	U		2.1	U
Heptachlor	UG/KG	13	7%	100	0	2	28	1.9	U		1.9	U		1.9	U		1.8	U		2.1	U
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	1.9	U		1.9	U		1.9	U		1.8	U		2.1	U
Methoxychlor	UG/KG	0	0%		0	0	28	19	U		19	U		19	U		18	U		21	U
Toxaphene	UG/KG	0	0%		0	0	28	190	U		190	U		190	U		180	U		210	U
METALS																					
Aluminum	MG/KG	17100	100%	19520	0	28	28	8370			7210			10900			4460			14200	
Antimony	MG/KG	7.2	25%	6	1	7	28	1.3	UR		1.2	UR		1	UR		0.9	UR		1.5	UR
Arsenic	MG/KG	5.9	100%	8.9	0	28	28	3.5			3.4			2.9			0.88	J		5.9	
Barium	MG/KG	125	100%	300	0	28	28	63.9			68.7			55			17	J		112	
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	0.31	J		0.27	J		0.44	J		0.17	J		0.51	J
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	0.06	U		0.06	U		0.05	U		0.04	U		0.07	U
Calcium	MG/KG	142000	100%	125300	1	28	28	83200			73900			46100			6980			54600	
Chromium	MG/KG	83.3	100%	30	4	28	28	13.9			12.4			20.4			8.5			21.1	
Cobalt	MG/KG	26.5	100%	30	0	28	28	7.7	J		7	J		12.9			9.1			14.3	
Copper	MG/KG	215	100%	33	5	28	28	20.3			20.5			**33.7**			11.5			28.4	
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	0.55	U		0.6	U		0.53	U		0.53	U		0.63	U
Iron	MG/KG	35700	100%	37410	0	28	28	19100	J		18100	J		27000	J		11000	J		27800	J
Lead	MG/KG	366	100%	24.4	3	28	28	7.3			6.6			16			9			11.9	
Magnesium	MG/KG	34300	100%	21700	1	28	28	13200			17200			9010			2090			13200	
Manganese	MG/KG	631	100%	1100	0	28	28	408			364			383			169			631	
Mercury	MG/KG	0.06	18%	0.1	0	5	28	0.05	UJ		0.06	UJ		0.05	UJ		0.06	J		0.06	UJ
Nickel	MG/KG	201	93%	50	2	26	28	23.2			20.3			44			20			34.1	J
Potassium	MG/KG	2090	100%	2623	0	28	28	1270			1250			1240			397	J		1980	
Selenium	MG/KG	1.2	18%	2	0	5	28	0.95	U		0.92	U		0.76	U		0.68	U		1.1	U
Silver	MG/KG	11.9	14%	0.8	2	4	28	0.25	U		0.24	U		0.2	U		0.18	U		0.29	U
Sodium	MG/KG	134	57%	188	0	16	28	96.5	J		84.9	J		81.8	J		37.1	U		61.3	U
Thallium	MG/KG	1.7	25%	0.855	5	7	28	1.1	U		1	U		0.86	U		0.77	U		1.3	U
Vanadium	MG/KG	25.6	100%	150	0	28	28	14.7			13.1			16.5			5.8	J		25.6	
Zinc	MG/KG	424	100%	115	3	28	28	50.3			51.6			94.9			41.5			66.8	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-12		MW12-13		MW12-13		MW12-8		MW12-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123015		123017		123018		123184		123185	
SAMPLE DEPTH TO TOP OF SAMPLE								9		4		8		4		8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								11		6		9.6		6		10	
SAMPLE DATE								9/30/1998		10/1/1998		10/1/1998		10/28/1998		10/28/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	12	U	11	U	12	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	12	U	11	U	12	U	11	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	12	U	11	U	12	U	11	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	12	U	11	U	12	U	11	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	12	U	11	U	12	U	11	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Acetone	UG/KG	34	41%	200	0	12	29	12	U	11	UJ	12	UJ	11	U	12	
Benzene	UG/KG	6	3%	60	0	1	29	12	U	11	U	12	U	11	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Bromoform	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	12	U	11	U	12	U	11	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	12	U	11	U	12	U	11	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	12	U	11	U	12	U	11	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	29	12	U	11	U	12	U	11	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	29	12	U	11	U	12	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	12	U	11	U	12	U	11	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	12	U	11	U	12	U	11	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	12	U	11	U	12	U	11	U	11	U
Methylene chloride	UG/KG	3	7%	100	0	2	29	12	U	11	U	12	U	11	U	11	U
Styrene	UG/KG	33	3%		0	1	29	12	U	11	U	12	U	11	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	12	U	11	U	12	U	11	U	11	U
Toluene	UG/KG	15	34%	1500	0	10	29	12	U	8	J	14		11	U	11	U
Total Xylenes	UG/KG	520	10%	1200	0	3	29	12	U	11	U	12	U	11	U	11	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-12		MW12-13		MW12-13		MW12-8		MW12-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123015		123017		123018		123184		123185	
SAMPLE DEPTH TO TOP OF SAMPLE								9		4		8		4		8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								11		6		9.6		6		10	
SAMPLE DATE								9/30/1998		10/1/1998		10/1/1998		10/28/1998		10/28/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	12	U	11	U	11	U
Trichloroethene	UG/KG	26	14%	700	0	4	29	12	U	11	U	12	U	11	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	29	12	U	11	U	12	U	11	U	11	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	81	UJ	73	U	76	U	73	U	72	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	81	UJ	73	U	76	U	73	U	72	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	81	UJ	73	U	76	U	73	U	72	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	81	U	73	U	76	U	73	U	72	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4										
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	200	U	180	U	180	U	180	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	81	U	73	U	76	U	73	U	72	U
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	81	UJ	73	UJ	76	UJ	73	U	72	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	200	U	180	UR	180	UR	180	U	180	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	81	U	73	U	76	U	73	U	72	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	81	UJ	73	UJ	76	UJ	73	U	72	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	81	U	73	U	76	U	73	U	72	U
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	81	UJ	73	UJ	76	UJ	73	U	72	U
2-Methylphenol	UG/KG	0	0%	100	0	0	28	81	U	73	U	76	U	73	U	72	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	200	U	180	U	180	U	180	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	81	U	73	U	76	U	73	U	72	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	200	UJ	180	UJ	180	UJ	180	U	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	200	U	180	UJ	180	UJ	180	U	180	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	81	U	73	U	76	U	73	U	72	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	81	UJ	73	UJ	76	UJ	73	UJ	72	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
4-Methylphenol	UG/KG	140	4%	900	0	1	28	81	U	73	U	76	U	73	U	72	U
4-Nitroaniline	UG/KG	0	0%		0	0	28	200	U	180	U	180	U	180	U	180	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-12		MW12-13		MW12-13		MW12-8		MW12-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123015		123017		123018		123184		123185	
SAMPLE DEPTH TO TOP OF SAMPLE								9		4		8		4		8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								11		6		9.6		6		10	
SAMPLE DATE								9/30/1998		10/1/1998		10/1/1998		10/28/1998		10/28/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	200	U	180	UJ	180	UJ	180	U	180	U
Acenaphthene	UG/KG	23	4%	50000	0	1	28	81	UJ	73	U	76	U	73	U	72	U
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	81	UJ	73	UJ	76	UJ	73	U	72	U
Anthracene	UG/KG	96	11%	50000	0	3	28	81	UJ	73	U	76	U	73	U	72	U
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	81	U	73	U	76	U	73	U	72	U
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	81	UJ	73	U	76	U	73	U	72	U
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	81	U	73	U	76	U	73	U	72	U
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	81	U	73	U	76	U	73	U	72	U
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	81	U	73	U	76	U	73	U	72	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	81	U	73	U	76	U	73	U	72	U
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	81	U	83		11	J	73	U	72	U
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	81	U	73	U	76	U	73	U	72	U
Carbazole	UG/KG	0	0%		0	0	28	81	UJ	73	UJ	76	UJ	73	U	72	U
Chrysene	UG/KG	240	14%	400	0	4	28	81	UJ	73	U	76	U	73	U	72	U
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	81	UJ	73	UJ	4	J	73	U	72	U
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	4.9	J	12	J	6.9	J	19	J	45	J
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	81	U	73	U	76	U	73	U	72	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	81	UJ	73	U	76	U	73	U	72	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	81	UJ	73	UJ	76	UJ	73	U	72	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	81	UJ	73	U	76	U	73	U	72	U
Fluoranthene	UG/KG	420	21%	50000	0	6	28	81	UJ	73	U	76	U	73	U	72	U
Fluorene	UG/KG	52	7%	50000	0	2	28	81	U	73	U	76	U	73	U	72	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	81	U	73	U	76	U	73	U	72	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	81	UJ	73	U	76	U	73	U	72	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
Hexachloroethane	UG/KG	0	0%		0	0	28	81	UJ	73	U	76	U	73	U	72	U
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	81	U	73	U	76	U	73	U	72	U
Isophorone	UG/KG	0	0%	4400	0	0	28	81	UJ	73	U	76	U	73	U	72	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-12		MW12-13		MW12-13		MW12-8		MW12-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123015		123017		123018		123184		123185	
SAMPLE DEPTH TO TOP OF SAMPLE								9		4		8		4		8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								11		6		9.6		6		10	
SAMPLE DATE								9/30/1998		10/1/1998		10/1/1998		10/28/1998		10/28/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	81	U	73	U	76	U	73	U	72	U
Naphthalene	UG/KG	600	7%	13000	0	2	28	81	UJ	73	U	76	U	73	U	72	U
Nitrobenzene	UG/KG	0	0%	200	0	0	28	81	UJ	73	U	76	U	73	U	72	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	200	UR	180	U	180	U	180	U	180	U
Phenanthrene	UG/KG	340	18%	50000	0	5	28	81	U	73	U	76	U	73	U	72	U
Phenol	UG/KG	300	7%	30	2	2	28	81	U	73	U	76	U	73	U	72	U
Pyrene	UG/KG	380	18%	50000	0	5	28	81	U	73	U	76	U	73	U	72	U
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Aldrin	UG/KG	0.79	4%	41	0	1	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Alpha-BHC	UG/KG	24	7%	110	0	2	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Aroclor-1016	UG/KG	0	0%		0	0	28	41	U	37	U	38	U	37	U	36	U
Aroclor-1221	UG/KG	0	0%		0	0	28	83	U	74	U	77	U	74	U	74	U
Aroclor-1232	UG/KG	0	0%		0	0	28	41	U	37	U	38	U	37	U	36	U
Aroclor-1242	UG/KG	0	0%		0	0	28	41	U	37	U	38	U	37	U	36	U
Aroclor-1248	UG/KG	0	0%		0	0	28	41	U	37	U	38	U	37	U	36	U
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	41	U	37	U	38	U	37	U	36	U
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	41	U	37	U	38	U	37	U	36	U
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Dieldrin	UG/KG	40	7%	44	0	2	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Endosulfan I	UG/KG	0	0%	900	0	0	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Endosulfan II	UG/KG	19	7%	900	0	2	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Endrin	UG/KG	20	14%	100	0	4	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Endrin aldehyde	UG/KG	0	0%		0	0	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Endrin ketone	UG/KG	0	0%		0	0	28	4.1	U	3.7	U	3.8	U	3.7	U	3.6	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-12		MW12-13		MW12-13		MW12-8		MW12-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123015		123017		123018		123184		123185	
SAMPLE DEPTH TO TOP OF SAMPLE								9		4		8		4		8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								11		6		9.6		6		10	
SAMPLE DATE								9/30/1998		10/1/1998		10/1/1998		10/28/1998		10/28/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Heptachlor	UG/KG	13	7%	100	0	2	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	2.1	U	1.9	U	2	U	1.9	U	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	28	21	U	19	U	20	U	19	U	19	U
Toxaphene	UG/KG	0	0%		0	0	28	210	U	190	U	200	U	190	U	190	U
METALS																	
Aluminum	MG/KG	17100	100%	19520	0	28	28	11200		4820		11200		7440		7550	
Antimony	MG/KG	7.2	25%	6	1	7	28	1.3	UR	1.2	UR	1.2	UR	1.2	UR	1.2	UR
Arsenic	MG/KG	5.9	100%	8.9	0	28	28	5.8		2.5		3.9		3.1		3.3	
Barium	MG/KG	125	100%	300	0	28	28	100		51.3		63.4		73.2		65.8	
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	0.38	J	0.14	J	0.46	J	0.45	J	0.43	J
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	0.06	U	0.06	U	0.06	U	0.36	U	0.35	U
Calcium	MG/KG	142000	100%	125300	1	28	28	42900		75600	J	43100	J	87500		64400	
Chromium	MG/KG	83.3	100%	30	4	28	28	16.2		8.2		20.5		12	J	13.3	J
Cobalt	MG/KG	26.5	100%	30	0	28	28	12.9		5.1	J	15.2		8.1	J	12.1	
Copper	MG/KG	215	100%	33	5	28	28	23.9		13.3		31.5		20		21.9	
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	0.64	U	0.57	UJ	0.64	UJ	[illegible]		[illegible]	
Iron	MG/KG	35700	100%	37410	0	28	28	22800	J	10100		25500		16500		17300	
Lead	MG/KG	366	100%	24.4	3	28	28	9.1		3.4	J	11.5	J	5.9	J	7.6	J
Magnesium	MG/KG	34300	100%	21700	1	28	28	13700		34300		8350		16500		13400	
Manganese	MG/KG	631	100%	1100	0	28	28	540		339		393		406		416	
Mercury	MG/KG	0.06	18%	0.1	0	5	28	0.06	UJ	0.05	U	0.06	U	0.05	U	0.05	U
Nickel	MG/KG	201	93%	50	2	26	28	25.8	J	12.1		44.2		22.9	UJ	27.6	UJ
Potassium	MG/KG	2090	100%	2623	0	28	28	1770		760	J	1340		1300		1260	
Selenium	MG/KG	1.2	18%	2	0	5	28	0.97	U	0.94	UJ	0.92	UJ	0.46	U	0.57	J
Silver	MG/KG	11.9	14%	0.8	2	4	28	0.25	U	0.24	U	0.24	U	0.24	U	0.23	U
Sodium	MG/KG	134	57%	188	0	16	28	53	U	51.4	U	84	J	99	J	49.2	U
Thallium	MG/KG	1.7	25%	0.855	5	7	28	1.1	U	1.4	U	1.2	U	[illegible]	J	1.5	J
Vanadium	MG/KG	25.6	100%	150	0	28	28	21.3		10.5		17		13.9		13.5	
Zinc	MG/KG	424	100%	115	3	28	28	52.4		31.6		105		45.4	J	57.2	J

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-2		SB12-2		SB12-2		SB12-2	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12532		123113		12533		123114	
SAMPLE DEPTH TO TOP OF SAMPLE								0.2		6		8		10	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								2		8		10		12	
SAMPLE DATE								11/10/1997 10:55		10/14/1998		11/10/1997 12:15		10/14/1998	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	12	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	12	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	12	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	12	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	12	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Acetone	UG/KG	34	41%	200	0	12	29	5	J	11	U	17	J	11	U
Benzene	UG/KG	6	3%	60	0	1	29	12	U	11	U	11	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Bromoform	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	12	U	11	U	11	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	12	U	11	U	11	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	12	U	11	U	11	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	29	12	U	11	U	11	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	29	12	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	12	U	11	U	11	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	12	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	12	U	11	U	11	U	11	U
Methylene chloride	UG/KG	3	7%	100	0	2	29	12	U	11	U	1	J	11	U
Styrene	UG/KG	33	3%		0	1	29	12	U	11	U	11	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	12	U	11	U	11	U	11	U
Toluene	UG/KG	15	34%	1500	0	10	29	15		11	U	10	J	11	U
Total Xylenes	UG/KG	520	10%	1200	0	3	29	12	U	11	U	11	U	11	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-2		SB12-2		SB12-2		SB12-2	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12532		123113		12533		123114	
SAMPLE DEPTH TO TOP OF SAMPLE								0.2		6		8		10	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								2		8		10		12	
SAMPLE DATE								11/10/1997 10:55		10/14/1998		11/10/1997 12:15		10/14/1998	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	11	U
Trichloroethene	UG/KG	26	14%	700	0	4	29	12	U	11	U	11	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	29	12	U	11	U	11	U	11	U
SEMI VOLATILE ORGANICS															
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	77	U	72	U	74	U	73	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	77	U	72	U	74	U	73	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	77	U	72	U	74	U	73	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	77	U	72	U	74	U	73	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4								
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	190	U	180	UJ	180	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	77	U	72	UJ	74	U	73	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	77	U	72	UJ	74	U	73	U
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	77	U	72	UJ	74	U	73	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	190	UJ	180	UJ	180	UJ	180	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	77	U	72	U	74	U	73	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	77	U	72	UJ	74	U	73	U
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	77	U	72	U	74	U	73	U
2-Methylphenol	UG/KG	0	0%	100	0	0	28	77	U	72	UJ	74	U	73	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	190	U	180	U	180	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	77	U	72	UJ	74	U	73	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	77	UJ	72	U	74	UJ	73	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	190	UJ	180	U	180	UJ	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	190	U	180	UJ	180	U	180	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	77	U	72	UJ	74	U	73	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	77	UJ	72	UJ	74	UJ	73	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
4-Methylphenol	UG/KG	140	4%	900	0	1	28	77	U	72	UJ	74	U	73	U
4-Nitroaniline	UG/KG	0	0%		0	0	28	190	UJ	180	U	180	UJ	180	UJ

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-2		SB12-2		SB12-2		SB12-2	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12532		123113		12533		123114	
SAMPLE DEPTH TO TOP OF SAMPLE								0.2		6		8		10	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								2		8		10		12	
SAMPLE DATE								11/10/1997 10:55		10/14/1998		11/10/1997 12:15		10/14/1998	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	190	U	180	UJ	180	U	180	UJ
Acenaphthene	UG/KG	23	4%	50000	0	1	28	77	U	72	U	74	U	73	U
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	77	U	72	U	74	U	73	U
Anthracene	UG/KG	96	11%	50000	0	3	28	77	U	72	U	74	U	73	U
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	77	U	72	U	74	U	73	U
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	77	U	72	U	74	U	73	U
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	77	U	72	U	74	U	73	U
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	77	U	72	UJ	74	U	73	U
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	77	U	72	U	74	U	73	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	77	U	72	U	74	U	73	U
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	77	U	72	UJ	74	U	73	UJ
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	77	U	72	UJ	74	U	73	UJ
Carbazole	UG/KG	0	0%		0	0	28	77	U	72	UJ	74	U	73	UJ
Chrysene	UG/KG	240	14%	400	0	4	28	77	U	72	U	74	U	73	U
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	77	U	72	UJ	74	U	73	U
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	77	U	6.2	J	74	U	10	J
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	77	U	72	UJ	74	U	73	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	77	U	72	U	74	U	73	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	77	U	72	U	74	U	73	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	77	U	72	U	74	U	73	U
Fluoranthene	UG/KG	420	21%	50000	0	6	28	4	J	72	U	74	U	73	U
Fluorene	UG/KG	52	7%	50000	0	2	28	77	U	72	U	74	U	73	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	77	U	72	U	74	U	73	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	77	U	72	UJ	74	U	73	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
Hexachloroethane	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	77	U	72	UJ	74	U	73	U
Isophorone	UG/KG	0	0%	4400	0	0	28	77	U	72	U	74	U	73	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-2		SB12-2		SB12-2		SB12-2	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12532		123113		12533		123114	
SAMPLE DEPTH TO TOP OF SAMPLE								0.2		6		8		10	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								2		8		10		12	
SAMPLE DATE								11/10/1997 10:55		10/14/1998		11/10/1997 12:15		10/14/1998	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	77	U	72	U	74	U	73	U
Naphthalene	UG/KG	600	7%	13000	0	2	28	77	U	72	U	74	U	73	U
Nitrobenzene	UG/KG	0	0%	200	0	0	28	77	U	72	U	74	U	73	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	190	U	180	UJ	180	U	180	UJ
Phenanthrene	UG/KG	340	18%	50000	0	5	28	77	U	72	U	74	U	73	U
Phenol	UG/KG	300	7%	30	2	2	28	77	U	72	UJ	74	U	73	U
Pyrene	UG/KG	380	18%	50000	0	5	28	77	U	72	U	74	U	73	U
PESTICIDES/PCBS															
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	3.8	U	3.6	U	3.7	U	3.7	U
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	3.8	U	3.6	U	3.7	U	3.7	U
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	3.8	U	3.6	U	3.7	U	3.7	U
Aldrin	UG/KG	0.79	4%	41	0	1	28	2	U	1.9	U	1.9	U	1.9	U
Alpha-BHC	UG/KG	24	7%	110	0	2	28	2	U	1.9	U	1.9	U	1.9	U
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	2	U	1.9	U	1.9	U	1.9	U
Aroclor-1016	UG/KG	0	0%		0	0	28	38	U	36	U	37	U	37	U
Aroclor-1221	UG/KG	0	0%		0	0	28	78	U	74	U	75	U	74	U
Aroclor-1232	UG/KG	0	0%		0	0	28	38	U	36	U	37	U	37	U
Aroclor-1242	UG/KG	0	0%		0	0	28	38	U	36	U	37	U	37	U
Aroclor-1248	UG/KG	0	0%		0	0	28	38	U	36	U	37	U	37	U
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	38	U	36	U	37	U	37	U
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	38	U	36	U	37	U	37	U
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	2	U	1.9	U	1.9	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	28	2	U	1.9	U	1.9	U	1.9	U
Dieldrin	UG/KG	40	7%	44	0	2	28	3.8	U	3.6	U	3.7	U	3.7	U
Endosulfan I	UG/KG	0	0%	900	0	0	28	2	U	1.9	U	1.9	U	1.9	U
Endosulfan II	UG/KG	19	7%	900	0	2	28	3.8	U	3.6	U	3.7	U	3.7	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	3.8	U	3.6	U	3.7	U	3.7	U
Endrin	UG/KG	20	14%	100	0	4	28	3.8	U	3.6	U	3.7	U	3.7	U
Endrin aldehyde	UG/KG	0	0%		0	0	28	3.8	U	3.6	U	3.7	U	3.7	U
Endrin ketone	UG/KG	0	0%		0	0	28	3.8	U	3.6	U	3.7	U	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	2	U	1.9	U	1.9	U	1.9	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-2		SB12-2		SB12-2		SB12-2	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12532		123113		12533		123114	
SAMPLE DEPTH TO TOP OF SAMPLE								0.2		6		8		10	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								2		8		10		12	
SAMPLE DATE								11/10/1997 10:55		10/14/1998		11/10/1997 12:15		10/14/1998	
QC CODE								SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N	
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	2	U	1.9	U	1.9	U	1.9	U
Heptachlor	UG/KG	13	7%	100	0	2	28	2	U	1.9	U	1.9	U	1.9	U
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	2	U	1.9	U	1.9	U	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	28	20	U	19	U	19	U	19	U
Toxaphene	UG/KG	0	0%		0	0	28	200	U	190	U	190	U	190	U
METALS															
Aluminum	MG/KG	17100	100%	19520	0	28	28	13200		7890	J	9570		7010	J
Antimony	MG/KG	7.2	25%	6	1	7	28	0.73	J	1.1	UR	0.74	UJ	1.2	UR
Arsenic	MG/KG	5.9	100%	8.9	0	28	28	4.3		3.8	J	4		3.7	J
Barium	MG/KG	125	100%	300	0	28	28	125		63.3		90.5		76.4	
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	0.39		0.3	J	0.36		0.24	J
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	3.9		0.05	U	0.06	U	0.06	U
Calcium	MG/KG	142000	100%	125300	1	28	28	46100		97000	J	90900		82100	J
Chromium	MG/KG	83.3	100%	30	4	28	28	53.5		14.2		14.9		11.8	
Cobalt	MG/KG	26.5	100%	30	0	28	28	9.9		7.6	J	7.5		7.9	J
Copper	MG/KG	215	100%	33	5	28	28	24.9		22.5		19.6		24.6	
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	0.68	U	0.58	U	0.64	U	0.59	U
Iron	MG/KG	35700	100%	37410	0	28	28	22300		16300		18400		16500	
Lead	MG/KG	366	100%	24.4	3	28	28	27.2		9.4	J	7.4		7.2	J
Magnesium	MG/KG	34300	100%	21700	1	28	28	12500		16400	J	18200		17100	J
Manganese	MG/KG	631	100%	1100	0	28	28	507		448		375		451	
Mercury	MG/KG	0.06	18%	0.1	0	5	28	0.06	U	0.05	U	0.05	U	0.05	U
Nickel	MG/KG	201	93%	50	2	26	28	42.5		22.7	J	21		24.4	J
Potassium	MG/KG	2090	100%	2623	0	28	28	1840	J	1120		2090	J	1220	
Selenium	MG/KG	1.2	18%	2	0	5	28	0.94	U	0.84	U	1	U	0.89	U
Silver	MG/KG	11.9	14%	0.8	2	4	28	0.42	U	0.22	U	0.45	U	0.23	U
Sodium	MG/KG	134	57%	188	0	16	28	121	U	134	J	129	U	78.9	J
Thallium	MG/KG	1.7	25%	0.855	5	7	28	1.3	U	0.95	U	1.3	U	1.1	J
Vanadium	MG/KG	25.6	100%	150	0	28	28	22.4		13.5		18.2		12.7	
Zinc	MG/KG	424	100%	115	3	28	28	104	J	45.3	J	45.3	J	51.3	J

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-3		SB12-3		SB12-3		SB12-4	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12525		12527		12526		12528	
SAMPLE DEPTH TO TOP OF SAMPLE								1		8		10		2	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		10		11.9		4	
SAMPLE DATE								11/9/1997 11:10		11/9/1997 12:15		11/9/1997 12:55		11/9/1997 14:40	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	12	U	16	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	12	U	16	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	12	U	16	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	12	U	16	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	12	U	16	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Acetone	UG/KG	34	41%	200	0	12	29	9	J	30	J	20	J	17	J
Benzene	UG/KG	6	3%	60	0	1	29	12	U	6	J	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	12	U	16	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	12	U	16	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	12	U	16	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	29	12	U	16	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	29	12	U	16	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	12	U	66		12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	29	12	U	16	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	12	U	16	U	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	12	U	16	U	12	U	12	U
Methylene chloride	UG/KG	3	7%	100	0	2	29	12	U	3	J	12	U	12	U
Styrene	UG/KG	33	3%		0	1	29	12	U	33		12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	12	U	16	U	12	U	12	U
Toluene	UG/KG	15	34%	1500	0	10	29	12	U	2	J	6	J	6	J
Total Xylenes	UG/KG	520	10%	1200	0	3	29	12	U	10	J	12	U	12	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			
LOCATION ID							SB12-3			SB12-3			SB12-3			SB12-4			
MATRIX							SOIL			SOIL			SOIL			SOIL			
SAMPLE ID							12525			12527			12526			12528			
SAMPLE DEPTH TO TOP OF SAMPLE							1			8			10			2			
SAMPLE DEPTH TO BOTTOM OF SAMPLE							4			10			11.9			4			
SAMPLE DATE							11/9/1997 11:10			11/9/1997 12:15			11/9/1997 12:55			11/9/1997 14:40			
QC CODE							SA			SA			SA			SA			
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1			RI PHASE 1 STEP 1			RI PHASE 1 STEP 1			RI PHASE 1 STEP 1		
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N			N			N			N		
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U		16	U		12	U		12	U	
Trichloroethene	UG/KG	26	14%	700	0	4	29	12	U		16	U		12	U		12	U	
Vinyl chloride	UG/KG	0	0%	200	0	0	29	12	U		16	U		12	U		12	U	
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	85	U					77	U		80	U	
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	85	U					77	U		80	U	
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	85	U					77	U		80	U	
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	85	U					77	U		80	U	
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4												
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	200	U					190	U		190	U	
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	85	U					77	U		80	U	
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	85	U					77	U		80	U	
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	85	U					77	U		80	U	
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	200	UJ					190	UJ		190	UJ	
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	85	U					77	U		80	U	
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	85	U					77	U		80	U	
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	85	U					77	U		80	U	
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	85	U					77	U		80	U	
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	85	U					77	U		80	U	
2-Methylphenol	UG/KG	0	0%	100	0	0	28	85	U					77	U		80	U	
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	200	U					190	U		190	U	
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	85	U					77	U		80	U	
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	85	UJ					77	UJ		80	UJ	
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	200	UJ					190	UJ		190	UJ	
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	200	U					190	U		190	U	
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	85	U					77	U		80	U	
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	85	U					77	U		80	U	
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	85	UJ					77	UJ		80	UJ	
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	85	U					77	U		80	U	
4-Methylphenol	UG/KG	140	4%	900	0	1	28	85	U					77	U		80	U	
4-Nitroaniline	UG/KG	0	0%		0	0	28	200	UJ					190	UJ		190	UJ	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-3		SB12-3		SB12-3		SB12-4	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12525		12527		12526		12528	
SAMPLE DEPTH TO TOP OF SAMPLE								1		8		10		2	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		10		11.9		4	
SAMPLE DATE								11/9/1997 11:10		11/9/1997 12:15		11/9/1997 12:55		11/9/1997 14:40	
QC CODE								SA		SA		SA		SA	
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N	
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	200	U			190	U	190	U
Acenaphthene	UG/KG	23	4%	50000	0	1	28	85	U			77	U	80	U
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	85	U			77	U	80	U
Anthracene	UG/KG	96	11%	50000	0	3	28	85	U			77	U	80	U
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	85	U			77	U	80	U
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	85	U			77	U	80	U
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	85	U			77	U	80	U
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	85	U			77	U	80	U
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	85	U			77	U	80	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	85	U			77	U	80	U
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	85	U			390		80	U
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	85	U			77	U	80	U
Carbazole	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Chrysene	UG/KG	240	14%	400	0	4	28	85	U			77	U	80	U
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	85	U			77	U	80	U
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	7.9	J			54	J	5.2	J
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	85	U			77	U	80	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	85	U			77	U	80	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	85	U			77	U	80	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	85	U			77	U	80	U
Fluoranthene	UG/KG	420	21%	50000	0	6	28	4.5	J			77	U	80	U
Fluorene	UG/KG	52	7%	50000	0	2	28	85	U			77	U	80	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	85	U			77	U	80	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Hexachloroethane	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	85	U			77	U	80	U
Isophorone	UG/KG	0	0%	4400	0	0	28	85	U			77	U	80	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	85	U			77	U	80	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID							SB12-3		SB12-3		SB12-3		SB12-4	
MATRIX							SOIL		SOIL		SOIL		SOIL	
SAMPLE ID							12525		12527		12526		12528	
SAMPLE DEPTH TO TOP OF SAMPLE							1		8		10		2	
SAMPLE DEPTH TO BOTTOM OF SAMPLE							4		10		11.9		4	
SAMPLE DATE							11/9/1997 11:10		11/9/1997 12:15		11/9/1997 12:55		11/9/1997 14:40	
QC CODE							SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	85	U			77	U	80	U
Naphthalene	UG/KG	600	7%	13000	0	2	28	85	U			77	U	80	U
Nitrobenzene	UG/KG	0	0%	200	0	0	28	85	U			77	U	80	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	200	U			77	U	190	U
Phenanthrene	UG/KG	340	18%	50000	0	5	28	85	U			77	U	80	U
Phenol	UG/KG	300	7%	30	2	2	28	85	U			77	U	80	U
Pyrene	UG/KG	380	18%	50000	0	5	28	4.6	J			77	U	80	U
PESTICIDES/PCBS															
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	13	U			3.8	U	4	U
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	42	J			26	J	4	U
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	13	U			3.8	U	4	U
Aldrin	UG/KG	0.79	4%	41	0	1	28	6.5	U			2	U	2	U
Alpha-BHC	UG/KG	24	7%	110	0	2	28	6.5	U			2	U	2	U
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	6.5	U			4.6	J	2	U
Aroclor-1016	UG/KG	0	0%		0	0	28	130	U			38	U	40	U
Aroclor-1221	UG/KG	0	0%		0	0	28	260	U			78	U	81	U
Aroclor-1232	UG/KG	0	0%		0	0	28	130	U			38	U	40	U
Aroclor-1242	UG/KG	0	0%		0	0	28	130	U			38	U	40	U
Aroclor-1248	UG/KG	0	0%		0	0	28	130	U			38	U	40	U
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	3000				1900		40	U
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	130	U			38	U	40	U
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	6.5	U			2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	28	6.5	U			2	U	2	U
Dieldrin	UG/KG	40	7%	44	0	2	28	40	J			25	J	4	U
Endosulfan I	UG/KG	0	0%	900	0	0	28	6.5	U			2	U	2	U
Endosulfan II	UG/KG	19	7%	900	0	2	28	19	J			9.5	J	4	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	13	U			3.8	U	4	U
Endrin	UG/KG	20	14%	100	0	4	28	16	J			8.6	J	4	U
Endrin aldehyde	UG/KG	0	0%		0	0	28	13	U			3.8	U	4	U
Endrin ketone	UG/KG	0	0%		0	0	28	13	U			3.8	U	4	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	6.5	U			2	U	2	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		
LOCATION ID								SB12-3		SB12-3		SB12-3		SB12-4		
MATRIX								SOIL		SOIL		SOIL		SOIL		
SAMPLE ID								12525		12527		12526		12528		
SAMPLE DEPTH TO TOP OF SAMPLE								1		8		10		2		
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		10		11.9		4		
SAMPLE DATE								11/9/1997 11:10		11/9/1997 12:15		11/9/1997 12:55		11/9/1997 14:40		
QC CODE								SA		SA		SA		SA		
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	58	J			44	J	2	U	
Heptachlor	UG/KG	13	7%	100	0	2	28	6.5	U			2	U	2	U	
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	22	J			2	U	2	U	
Methoxychlor	UG/KG	0	0%		0	0	28	65	U			20	U	20	U	
Toxaphene	UG/KG	0	0%		0	0	28	650	U			200	U	200	U	
METALS																
Aluminum	MG/KG	17100	100%	19520	0	28	28	12900				15700		11900		
Antimony	MG/KG	7.2	25%	6	1	7	28	1.3	J			0.76	UJ	0.75	UJ	
Arsenic	MG/KG	5.9	100%	8.9	0	28	28	4.3				3.6		5.5		
Barium	MG/KG	125	100%	300	0	28	28	86.1				74.5		67.4		
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	0.43	J			0.72	J	0.36		
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	1.1						0.06	U	
Calcium	MG/KG	142000	100%	125300	1	28	28	37200				5510		35900		
Chromium	MG/KG	83.3	100%	30	4	28	28	19.5				30.2		16.6		
Cobalt	MG/KG	26.5	100%	30	0	28	28	11				15.4		11.9		
Copper	MG/KG	215	100%	33	5	28	28	27.8				63.2		18.6		
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	0.76	U			0.7	U	0.73	U	
Iron	MG/KG	35700	100%	37410	0	28	28	21900				35700		20500		
Lead	MG/KG	366	100%	24.4	3	28	28	15				63.9		11.8		
Magnesium	MG/KG	34300	100%	21700	1	28	28	8000				7120		8050		
Manganese	MG/KG	631	100%	1100	0	28	28	619				395		561		
Mercury	MG/KG	0.06	18%	0.1	0	5	28	0.06	U			0.05	U	0.06	U	
Nickel	MG/KG	201	93%	50	2	26	28	29				76.4		23.6		
Potassium	MG/KG	2090	100%	2623	0	28	28	1650	J			1740	J	1380	J	
Selenium	MG/KG	1.2	18%	2	0	5	28	1.1	U			1	U	1	U	
Silver	MG/KG	11.9	14%	0.8	2	4	28	0.5	U			1.6		0.45	U	
Sodium	MG/KG	134	57%	188	0	16	28	145	U			131	U	129	U	
Thallium	MG/KG	1.7	25%	0.855	5	7	28	1.5	U			1.4	U	1.3	U	
Vanadium	MG/KG	25.6	100%	150	0	28	28	21.2				21		20.3		
Zinc	MG/KG	424	100%	115	3	28	28	79.4	J			160	J	61.7	J	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA army DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								SB12-4		TP12-1A		TP12-1B		TP12-1C		TP12-2A
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								12529		123142		123143		123144		123145
SAMPLE DEPTH TO TOP OF SAMPLE								4		0.5		3		6		3
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		0.5		3		6		3
SAMPLE DATE								11/9/1997 15:50		10/16/1998		10/16/1998		10/16/1998		10/16/1998
QC CODE								SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N
VOLATILE ORGANICS																
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	12	U	11	U	11	U	12	U	11
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	12	U	11	U	11	U	12	U	11
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	12	U	11	U	11	U	12	U	11
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	12	U	11	U	11	U	12	U	11
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	12	U	11	U	11	U	12	U	11
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Acetone	UG/KG	34	41%	200	0	12	29	34	J	11	UJ	11	UJ	12	UJ	11
Benzene	UG/KG	6	3%	60	0	1	29	12	U	11	U	11	U	12	U	11
Bromodichloromethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Bromoform	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	12	U	11	U	11	U	12	U	11
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	12	U	11	U	11	U	12	U	11
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	12	U	11	U	11	U	12	U	11
Chlorodibromomethane	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Chloroethane	UG/KG	0	0%	1900	0	0	29	12	U	11	U	11	U	12	U	11
Chloroform	UG/KG	0	0%	300	0	0	29	12	U	11	U	11	U	12	U	11
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	12	U	11	U	11	U	12	U	11
Methyl bromide	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Methyl butyl ketone	UG/KG	0	0%		0	0	29	12	U	11	UJ	11	UJ	12	UJ	11
Methyl chloride	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	12	U	11	UJ	11	UJ	12	UJ	11
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	12	U	11	U	11	U	12	U	11
Methylene chloride	UG/KG	3	7%	100	0	2	29	12	U	11	U	11	U	12	U	11
Styrene	UG/KG	33	3%		0	1	29	12	U	11	U	11	U	12	U	11
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	12	U	11	U	11	U	12	U	11
Toluene	UG/KG	15	34%	1500	0	10	29	2	J	11	U	11	U	12	U	11
Total Xylenes	UG/KG	520	10%	1200	0	3	29	12	U	11	U	11	U	12	U	11

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								SB12-4		TP12-1A		TP12-1B		TP12-1C		TP12-2A
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								12529		123142		123143		123144		123145
SAMPLE DEPTH TO TOP OF SAMPLE								4		0.5		3		6		3
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		0.5		3		6		3
SAMPLE DATE								11/9/1997 15:50		10/16/1998		10/16/1998		10/16/1998		10/16/1998
QC CODE								SA		SA		SA		SA		SA
STUDY ID								RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N		N
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	12	U	11	U	11	U	12	U	11
Trichloroethene	UG/KG	26	14%	700	0	4	29	1	J	11	U	11	U	12	U	11
Vinyl chloride	UG/KG	0	0%	200	0	0	29	12	U	11	U	11	U	12	U	11
SEMI VOLATILE ORGANICS																
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	75	U	77	U	73	U	75	U	74
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	75	U	77	U	73	U	75	U	74
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	75	U	77	U	73	U	75	U	74
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	75	U	77	U	73	U	75	U	74
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4									
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	180	U	190	U	180	U	180	U	180
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	75	U	77	U	73	U	75	U	74
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	75	U	77	UJ	73	UJ	75	UJ	74
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	180	UJ	190	U	180	U	180	U	180
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	75	U	77	U	73	U	75	U	74
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	75	U	77	UJ	73	UJ	75	UJ	74
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	75	U	77	U	73	U	75	U	74
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	75	U	77	UJ	73	UJ	75	UJ	74
2-Methylphenol	UG/KG	0	0%	100	0	0	28	75	U	77	U	73	U	75	U	74
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	180	U	190	U	180	U	180	U	180
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	75	U	77	U	73	U	75	U	74
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	75	UJ	77	U	73	U	75	U	74
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	180	UJ	190	UJ	180	UJ	180	UJ	180
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	180	U	190	U	180	U	180	U	180
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	75	U	77	UJ	73	UJ	75	UJ	74
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	75	UJ	77	UJ	73	UJ	75	UJ	74
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74
4-Methylphenol	UG/KG	140	4%	900	0	1	28	75	U	77	U	73	U	75	U	74
4-Nitroaniline	UG/KG	0	0%		0	0	28	180	UJ	190	UJ	180	UJ	180	UJ	180

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-4		TP12-1A		TP12-1B		TP12-1C		TP12-2A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12529		123142		123143		123144		123145	
SAMPLE DEPTH TO TOP OF SAMPLE								4		0.5		3		6		3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		0.5		3		6		3	
SAMPLE DATE								11/9/1997 15:50		10/16/1998		10/16/1998		10/16/1998		10/16/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	180	U	190	UJ	180	UJ	180	UJ	180	
Acenaphthene	UG/KG	23	4%	50000	0	1	28	75	U	77	U	73	U	75	U	74	
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	75	U	77	U	73	U	75	U	74	
Anthracene	UG/KG	96	11%	50000	0	3	28	4.4	J	77	UJ	73	UJ	75	UJ	74	
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	5.8	J	77	U	73	U	75	U	74	
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	7.1	J	77	UJ	73	UJ	75	UJ	74	
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	6	J	77	U	73	U	75	U	74	
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	6.7	J	77	U	73	U	75	U	74	
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	6.4	J	77	U	73	U	75	U	74	
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74	
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74	
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	75	U	77	U	73	U	75	U	74	
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	75	U	77	U	73	U	75	U	74	
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	5.1	J	77	U	73	U	75	U	74	
Carbazole	UG/KG	0	0%		0	0	28	75	U	77	UJ	73	UJ	75	UJ	74	
Chrysene	UG/KG	240	14%	400	0	4	28	5.7	J	77	U	73	U	75	U	74	
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	75	U	77	U	73	U	75	U	74	
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	7	J	77	UJ	73	UJ	75	UJ	74	
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	6	J	77	U	73	U	75	U	74	
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	75	U	77	UJ	73	UJ	75	UJ	74	
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	75	U	77	U	73	U	75	U	74	
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	75	U	77	U	73	U	75	U	74	
Fluoranthene	UG/KG	420	21%	50000	0	6	28	5.1	J	77	U	73	U	75	U	74	
Fluorene	UG/KG	52	7%	50000	0	2	28	75	U	77	U	73	U	75	U	74	
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	75	U	77	U	73	U	75	U	74	
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	75	U	77	UJ	73	UJ	75	UJ	74	
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74	
Hexachloroethane	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74	
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	5.7	J	77	U	73	U	75	U	74	
Isophorone	UG/KG	0	0%	4400	0	0	28	75	U	77	UJ	73	UJ	75	UJ	74	
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	75	U	77	UJ	73	UJ	75	UJ	74	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID								SB12-4		TP12-1A		TP12-1B		TP12-1C		TP12-2A
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID								12529		123142		123143		123144		123145
SAMPLE DEPTH TO TOP OF SAMPLE								4		0.5		3		6		3
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		0.5		3		6		3
SAMPLE DATE								11/9/1997 15:50		10/16/1998		10/16/1998		10/16/1998		10/16/1998
QC CODE								SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	75	U	77	U	73	U	75	U	74
Naphthalene	UG/KG	600	7%	13000	0	2	28	75	U	77	UJ	73	UJ	75	UJ	74
Nitrobenzene	UG/KG	0	0%	200	0	0	28	75	U	77	UJ	73	UJ	75	UJ	74
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	180	U	190	UR	180	UR	180	UR	180
Phenanthrene	UG/KG	340	18%	50000	0	5	28	4.7	J	77	U	73	U	75	U	74
Phenol	UG/KG	300	7%	30	2	2	28	75	U	77	U	73	U	75	U	74
Pyrene	UG/KG	380	18%	50000	0	5	28	4.4	J	77	UJ	73	UJ	75	UJ	74
PESTICIDES/PCBS																
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Aldrin	UG/KG	0.79	4%	41	0	1	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Alpha-BHC	UG/KG	24	7%	110	0	2	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Aroclor-1016	UG/KG	0	0%		0	0	28	38	U	38	U	36	U	37	U	37
Aroclor-1221	UG/KG	0	0%		0	0	28	76	U	78	U	74	U	75	U	75
Aroclor-1232	UG/KG	0	0%		0	0	28	38	U	38	U	36	U	37	U	37
Aroclor-1242	UG/KG	0	0%		0	0	28	38	U	38	U	36	U	37	U	37
Aroclor-1248	UG/KG	0	0%		0	0	28	38	U	38	U	36	U	37	U	37
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	38	U	38	U	36	U	37	U	37
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	38	U	38	U	36	U	37	U	37
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Delta-BHC	UG/KG	0	0%	300	0	0	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Dieldrin	UG/KG	40	7%	44	0	2	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Endosulfan I	UG/KG	0	0%	900	0	0	28	1.9	U	2	U	1.9	U	1.9	U	1.9
Endosulfan II	UG/KG	19	7%	900	0	2	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Endrin	UG/KG	20	14%	100	0	4	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Endrin aldehyde	UG/KG	0	0%		0	0	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Endrin ketone	UG/KG	0	0%		0	0	28	3.8	U	3.8	U	3.6	U	3.7	U	3.7
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	1.9	U	2	U	1.9	U	1.9	U	1.9

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-4		TP12-1A		TP12-1B		TP12-1C		TP12-2A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12529		123142		123143		123144		123145	
SAMPLE DEPTH TO TOP OF SAMPLE								4		0.5		3		6		3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		0.5		3		6		3	
SAMPLE DATE								11/9/1997 15:50		10/16/1998		10/16/1998		10/16/1998		10/16/1998	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	1.9	U	2	U	1.9	U	1.9	U	1.9	
Heptachlor	UG/KG	13	7%	100	0	2	28	1.9	U	2	U	1.9	U	1.9	U	1.9	
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	1.9	U	2	U	1.9	U	1.9	U	1.9	
Methoxychlor	UG/KG	0	0%		0	0	28	19	U	20	U	19	U	19	U	19	
Toxaphene	UG/KG	0	0%		0	0	28	190	U	200	U	190	U	190	U	190	
METALS																	
Aluminum	MG/KG	17100	100%	19520	0	28	28	13100		8910	J	6100	J	6650	J	9100	
Antimony	MG/KG	7.2	25%	6	1	7	28	0.81	J	1.2	UR	1.2	UR	84	UR	1.2	
Arsenic	MG/KG	5.9	100%	8.9	0	28	28	3.8		3.7		3.4		3.2		3.4	
Barium	MG/KG	125	100%	300	0	28	28	82.1		65	J	79.2	J	58.2	J	70.7	
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	0.52		0.33	J	0.24	J	0.29	J	0.37	
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	0.07	U	0.06	U	0.06	U	3		0.06	
Calcium	MG/KG	142000	100%	125300	1	28	28	52000		43000		102000		88400		59900	
Chromium	MG/KG	83.3	100%	30	4	28	28	23.4		13		9.5		10.9		13.8	
Cobalt	MG/KG	26.5	100%	30	0	28	28	15		9.4	J	7.5	J	8.6		7.8	
Copper	MG/KG	215	100%	33	5	28	28	32.2		20.2		21.4		31.5		18.1	
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	0.66	U	0.59	U	0.57	U	0.57	U	0.56	
Iron	MG/KG	35700	100%	37410	0	28	28	27800		19600	J	15800		17300	J	18000	
Lead	MG/KG	366	100%	24.4	3	28	28	17.9		11	J	6.9	J	12.8	J	9	
Magnesium	MG/KG	34300	100%	21700	1	28	28	9610		8410	J	14400	J	11700	J	11900	
Manganese	MG/KG	631	100%	1100	0	28	28	430		569		358		427		402	
Mercury	MG/KG	0.06	18%	0.1	0	5	28	0.04	U	0.06	U	0.06	U	0.05	U	0.06	
Nickel	MG/KG	201	93%	50	2	26	28	48.9		24.9	J	21.1	J	34.1	J	23.3	
Potassium	MG/KG	2090	100%	2623	0	28	28	1740	J	897	J	945	J	801		1010	
Selenium	MG/KG	1.2	18%	2	0	5	28	1.1	U	0.88	UJ	0.94	UJ	0.63	UJ	0.93	
Silver	MG/KG	11.9	14%	0.8	2	4	28	0.48	U	0.23	U	0.25	U	0.17	U	0.24	
Sodium	MG/KG	134	57%	188	0	16	28	138	U	48.4	U	70.1	J	70.2	J	69.9	
Thallium	MG/KG	1.7	25%	0.855	5	7	28	1.4	U	1	U	1.1	U	0.94	J	1.1	
Vanadium	MG/KG	25.6	100%	150	0	28	28	19.5		14.7		11.3		11.8		14.7	
Zinc	MG/KG	424	100%	115	3	28	28	110	J	50.9	J	42.4	J	54.5	J	51.9	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									TP12-2B		TP12-2C		TP12A-1		TP12A-1		TP12A-2
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID									123146		123147		TP12A-1-1		TP12A-1-2		TP12A-2-2
SAMPLE DEPTH TO TOP OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DEPTH TO BOTTOM OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DATE									10/16/1998		10/16/1998		6/24/1994		6/24/1994		6/22/1994
QC CODE									SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	ESI		ESI		ESI
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N		N
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	U	28	U	30	U	12	U	11	U	12
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	U	28	U	30	U	12	U	11	U	12
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	U	28	U	30	U	12	U	11	U	12
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	U	28	U	30	U	12	U	11	U	12
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	U	28	U	30	U	12	U	11	U	12
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Acetone	UG/KG	34	41%	200	0	12	29	UJ	28	UJ	30	UJ	12	U	11	U	12
Benzene	UG/KG	6	3%	60	0	1	29	U	28	U	30	U	12	U	11	U	12
Bromodichloromethane	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Bromoform	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	U	28	U	30	U	12	U	11	U	12
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	U	28	U	30	U	12	U	11	U	12
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	U	28	U	30	U	12	U	11	U	12
Chlorodibromomethane	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Chloroethane	UG/KG	0	0%	1900	0	0	29	U	28	U	30	U	12	U	11	U	12
Chloroform	UG/KG	0	0%	300	0	0	29	U	28	U	30	U	12	U	11	U	12
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	U	49		24	J	12	U	11	U	12
Methyl bromide	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Methyl butyl ketone	UG/KG	0	0%		0	0	29	UJ	28	UJ	30	UJ	12	U	11	U	12
Methyl chloride	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	UJ	28	UJ	30	UJ	12	U	11	U	12
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	U	28	U	30	U	12	U	11	U	12
Methylene chloride	UG/KG	3	7%	100	0	2	29	U	28	U	30	U	12	U	11	U	12
Styrene	UG/KG	33	3%		0	1	29	U	28	U	30	U	12	U	11	U	12
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	U	28	U	30	U	12	U	11	U	12
Toluene	UG/KG	15	34%	1500	0	10	29	U	15	J	6	J	12	U	11	U	12
Total Xylenes	UG/KG	520	10%	1200	0	3	29	U	520		260		12	U	11	U	12

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-2B		TP12-2C		TP12A-1		TP12A-1		TP12A-2	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123146		123147		TP12A-1-1		TP12A-1-2		TP12A-2-2	
SAMPLE DEPTH TO TOP OF SAMPLE								3.5		6		2.5		3		5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								3.5		6		2.5		3		5	
SAMPLE DATE								10/16/1998		10/16/1998		6/24/1994		6/24/1994		6/22/1994	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI		ESI		ESI	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	U	28	U	30	U	12	U	11	U	12	
Trichloroethene	UG/KG	26	14%	700	0	4	29	U	11	J	30	U	3	J	26		12	
Vinyl chloride	UG/KG	0	0%	200	0	0	29	U	28	U	30	U	12	U	11	U	12	
SEMI VOLATILE ORGANICS																		
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	U	75	U	79	U	400	U	380	U	390	
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	U	75	U	79	U	400	U	380	U	390	
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	U	75	U	79	U	400	U	380	U	390	
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	U	75	U	79	U	400	U	380	U	390	
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4						400	U	380	U	390	
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	U	180	U	190	U	980	U	920	U	940	
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390	
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	U	75	U	79	U	400	U	380	U	390	
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	UJ	75	UJ	79	UJ	25	J	380	U	390	
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	U	180	UJ	190	UJ	980	U	920	U	940	
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390	
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	U	75	U	79	U	400	U	380	U	390	
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	UJ	75	UJ	79	UJ	400	U	380	U	390	
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	U	75	U	79	U	400	U	380	U	390	
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	UJ	56	J	10	J	400	U	21	J	390	
2-Methylphenol	UG/KG	0	0%	100	0	0	28	U	75	U	79	U	400	U	380	U	390	
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	U	180	U	190	UJ	980	U	920	U	940	
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	U	75	U	79	U	400	U	380	U	390	
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	U	75	UJ	79	U	400	U	380	U	390	
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	UJ	180	UJ	190	UJ	980	U	920	U	940	
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	U	180	U	190	U	980	U	920	U	940	
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390	
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	UJ	75	U	79	U	400	U	380	U	390	
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	UJ	75	U	79	U	400	U	380	U	390	
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390	
4-Methylphenol	UG/KG	140	4%	900	0	1	28	U	75	U	79	U	140	J	380	U	390	
4-Nitroaniline	UG/KG	0	0%		0	0	28	UJ	180	UJ	190	UJ	980	U	920	U	940	

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									TP12-2B		TP12-2C		TP12A-1		TP12A-1		TP12A-2
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID									123146		123147		TP12A-1-1		TP12A-1-2		TP12A-2-2
SAMPLE DEPTH TO TOP OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DEPTH TO BOTTOM OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DATE									10/16/1998		10/16/1998		6/24/1994		6/24/1994		6/22/1994
QC CODE									SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	ESI		ESI		ESI
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N		N
4-Nitrophenol	UG/KG	0	0%	100	0	0	28	UJ	180	U	190	U	980	U	920	U	940
Acenaphthene	UG/KG	23	4%	50000	0	1	28	U	75	U	23	J	400	U	380	U	390
Acenaphthylene	UG/KG	33	4%	41000	0	1	28	U	75	U	79	U	400	U	33	J	390
Anthracene	UG/KG	96	11%	50000	0	3	28	UJ	75	UJ	40	J	400	U	96	J	390
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28	U	75	UJ	74	J	21	J	180	J	390
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28	UJ	75	UJ	41	J	30	J	[illegible]	J	390
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28	U	75	UJ	23	J	28	J	190	J	390
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28	U	75	UJ	79	U	400	U	120	J	390
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28	U	75	UJ	79	U	32	J	160	J	390
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	U	75	U	79	U					
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28	U	930	J	79	U	230	J	860		390
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28	U	75	UJ	79	U	400	U	380	U	390
Carbazole	UG/KG	0	0%		0	0	28	UJ	75	U	79	U	400	U	380	U	390
Chrysene	UG/KG	240	14%	400	0	4	28	U	75	UJ	98		28	J	240	J	390
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28	U	75	U	79	U	79	J	1700		390
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28	UJ	75	UJ	79	U	400	U	380	U	390
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28	U	75	UJ	79	U	400	U	[illegible]	J	390
Dibenzofuran	UG/KG	0	0%	6200	0	0	28	UJ	75	UJ	79	UJ	400	U	380	U	390
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28	U	75	U	79	U	400	U	380	U	390
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28	U	75	U	79	U	400	U	380	U	390
Fluoranthene	UG/KG	420	21%	50000	0	6	28	U	75	U	69	J	40	J	420		390
Fluorene	UG/KG	52	7%	50000	0	2	28	U	75	U	10	J	400	U	52	J	390
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28	U	75	U	79	U	400	U	380	U	390
Hexachlorobutadiene	UG/KG	0	0%		0	0	28	UJ	75	UJ	79	UJ	400	U	380	U	390
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390
Hexachloroethane	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28	U	75	UJ	79	U	400	U	120	J	390
Isophorone	UG/KG	0	0%	4400	0	0	28	UJ	75	UJ	79	UJ	400	U	380	U	390
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28	UJ	75	U	79	U	400	U	380	U	390

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									TP12-2B		TP12-2C		TP12A-1		TP12A-1		TP12A-2
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID									123146		123147		TP12A-1-1		TP12A-1-2		TP12A-2-2
SAMPLE DEPTH TO TOP OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DEPTH TO BOTTOM OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DATE									10/16/1998		10/16/1998		6/24/1994		6/24/1994		6/22/1994
QC CODE									SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	ESI		ESI		ESI
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N		N
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	U	75	U	79	U	400	U	380	U	390
Naphthalene	UG/KG	600	7%	13000	0	2	28	UJ	600	J	72	J	400	U	380	U	390
Nitrobenzene	UG/KG	0	0%	200	0	0	28	UJ	75	U	79	U	400	U	380	U	390
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	UR	180	UR	190	UR	980	U	920	U	940
Phenanthrene	UG/KG	340	18%	50000	0	5	28	U	75	U	130		27	J	340	J	390
Phenol	UG/KG	300	7%	30	2	2	28	U	75	U	79	U	300	J	48	J	390
Pyrene	UG/KG	380	18%	50000	0	5	28	UJ	75	UJ	260		37	J	380		390
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	U	3.8	U	4	U	4	U	3.8	U	3.9
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	U	3.8	U	4	U	4	U	2.2	J	3.9
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	U	3.8	U	4	U	4	U	3.8	U	2.1
Aldrin	UG/KG	0.79	4%	41	0	1	28	U	1.9	U	2	U	0.79	J	2	U	2
Alpha-BHC	UG/KG	24	7%	110	0	2	28	U	2.8		24		2.1	U	2	U	2
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	U	1.9	U	2	U	2.1	U	1.5	J	2
Aroclor-1016	UG/KG	0	0%		0	0	28	U	38	U	40	U	40	U	38	U	39
Aroclor-1221	UG/KG	0	0%		0	0	28	U	76	U	81	U	82	U	77	U	79
Aroclor-1232	UG/KG	0	0%		0	0	28	U	38	U	40	U	40	U	38	U	39
Aroclor-1242	UG/KG	0	0%		0	0	28	U	38	U	40	U	40	U	38	U	39
Aroclor-1248	UG/KG	0	0%		0	0	28	U	38	U	40	U	40	U	38	U	39
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28	U	38	U	40	U	49		73		500
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	U	38	U	40	U	40	U	38	U	31
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	U	1.9	U	2.2	J	2.1	U	2	U	2
Delta-BHC	UG/KG	0	0%	300	0	0	28	U	1.9	U	2	U	2.1	U	2	U	2
Dieldrin	UG/KG	40	7%	44	0	2	28	U	3.8	U	4	U	4	U	3.8	U	3.9
Endosulfan I	UG/KG	0	0%	900	0	0	28	U	1.9	U	2	U	2.1	U	2	U	2
Endosulfan II	UG/KG	19	7%	900	0	2	28	U	3.8	U	4	U	4	U	3.8	U	3.9
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	U	3.8	U	4	U	4	U	3.8	U	3.9
Endrin	UG/KG	20	14%	100	0	4	28	U	3.8	U	4	U	4	U	3.8	U	3.8
Endrin aldehyde	UG/KG	0	0%		0	0	28	U	3.8	U	4	U	4	U	3.8	U	3.9
Endrin ketone	UG/KG	0	0%		0	0	28	U	3.8	U	4	U	4	U	3.8	U	3.9
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	U	1.9	U	2	U	2.1	U	2	U	2

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12
LOCATION ID									TP12-2B		TP12-2C		TP12A-1		TP12A-1		TP12A-2
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL
SAMPLE ID									123146		123147		TP12A-1-1		TP12A-1-2		TP12A-2-2
SAMPLE DEPTH TO TOP OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DEPTH TO BOTTOM OF SAMPLE									3.5		6		2.5		3		5
SAMPLE DATE									10/16/1998		10/16/1998		6/24/1994		6/24/1994		6/22/1994
QC CODE									SA		SA		SA		SA		SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	STEP 1	RI PHASE 1	STEP 1	RI PHASE 1	STEP 1	ESI		ESI		ESI
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES		N		N		N		N		N
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	U	1.9	U	2	U	2.1	U	2	U	2.1
Heptachlor	UG/KG	13	7%	100	0	2	28	U	2.6		13		2.1	U	2	U	2
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	U	1.9	U	1.7	J	2.1	U	2	U	2
Methoxychlor	UG/KG	0	0%		0	0	28	U	19	U	20	U	21	U	20	U	20
Toxaphene	UG/KG	0	0%		0	0	28	U	190	U	200	U	210	U	200	U	200
METALS																	
Aluminum	MG/KG	17100	100%	19520	0	28	28	J	7410	J	6500	J	11400		11400		17100
Antimony	MG/KG	7.2	25%	6	1	7	28	UR	1.1	UR	1.3	UR	0.31	J	1.9	J	1.9
Arsenic	MG/KG	5.9	100%	8.9	0	28	28		3		2.9		3.8		5.2		4.9
Barium	MG/KG	125	100%	300	0	28	28	J	65.3	J	55.3	J	96.3		93.3		73.6
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	J	0.3	J	0.26	J	0.5	J	0.62	J	0.74
Cadmium	MG/KG	94.3	36%	2.46	7	10	28	U	1.3		1.2		7.8		94.3		37.3
Calcium	MG/KG	142000	100%	125300	1	28	28		106000		142000		38900	J	81800	J	10900
Chromium	MG/KG	83.3	100%	30	4	28	28		15.7		12.5		27.5		83.3		32.4
Cobalt	MG/KG	26.5	100%	30	0	28	28	J	8.4	J	8	J	9.9		9.4	J	26.5
Copper	MG/KG	215	100%	33	5	28	28		22.6		16.9		25.7		215		128
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	U	0.57	U	0.65	U	0.48	U	0.54	U	0.48
Iron	MG/KG	35700	100%	37410	0	28	28	J	26700	J	18300	J	20100		24200		27500
Lead	MG/KG	366	100%	24.4	3	28	28	J	8.9	J	8.7	J	18.9	J	366	J	20.2
Magnesium	MG/KG	34300	100%	21700	1	28	28	J	12400	J	11300	J	8390		9310		5290
Manganese	MG/KG	631	100%	1100	0	28	28		411		394		518		495		428
Mercury	MG/KG	0.06	18%	0.1	0	5	28	U	0.05	U	0.06	U	0.04	J	0.05	J	0.03
Nickel	MG/KG	201	93%	50	2	26	28	J	24.7	J	22.2	J	25.3		29.9		201
Potassium	MG/KG	2090	100%	2623	0	28	28	J	951		887	J	1640	J	1490	J	1370
Selenium	MG/KG	1.2	18%	2	0	5	28	UJ	0.81	UJ	0.98	UJ	1.1		0.6	J	1
Silver	MG/KG	11.9	14%	0.8	2	4	28	U	0.21	U	0.25	U	0.1	U	11.9		0.33
Sodium	MG/KG	134	57%	188	0	16	28	J	107	J	108	J	45.2	J	101	J	66.8
Thallium	MG/KG	1.7	25%	0.855	5	7	28	U	0.91	U	1.1	U	0.37	U	0.44	J	0.59
Vanadium	MG/KG	25.6	100%	150	0	28	28		12.4		11.2		17.9		19.2		19.6
Zinc	MG/KG	424	100%	115	3	28	28	J	56.6	J	58.6	J	95.4		285		424

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12	
LOCATION ID								TP12A-2	
MATRIX								SOIL	
SAMPLE ID								TP12A-2-1	
SAMPLE DEPTH TO TOP OF SAMPLE								6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6	
SAMPLE DATE								6/22/1994	
QC CODE								SA	
STUDY ID								ESI	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	N	
VOLATILE ORGANICS									
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	29	U 14	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	29	U 14	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	29	U 14	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	29	U 14	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	29	U 14	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	29	U 14	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	29	U 14	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	29	U 14	U
Acetone	UG/KG	34	41%	200	0	12	29	U 14	U
Benzene	UG/KG	6	3%	60	0	1	29	U 14	U
Bromodichloromethane	UG/KG	0	0%		0	0	29	U 14	U
Bromoform	UG/KG	0	0%		0	0	29	U 14	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	29	U 14	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	29	U 14	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	29	U 14	U
Chlorodibromomethane	UG/KG	0	0%		0	0	29	U 14	U
Chloroethane	UG/KG	0	0%	1900	0	0	29	U 14	U
Chloroform	UG/KG	0	0%	300	0	0	29	U 14	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	U 14	U
Ethyl benzene	UG/KG	66	10%	5500	0	3	29	U 14	U
Methyl bromide	UG/KG	0	0%		0	0	29	U 14	U
Methyl butyl ketone	UG/KG	0	0%		0	0	29	U 14	U
Methyl chloride	UG/KG	0	0%		0	0	29	U 14	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	29	U 14	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	29	U 14	U
Methylene chloride	UG/KG	3	7%	100	0	2	29	U 14	U
Styrene	UG/KG	33	3%		0	1	29	U 14	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	29	U 14	U
Toluene	UG/KG	15	34%	1500	0	10	29	U 14	U
Total Xylenes	UG/KG	520	10%	1200	0	3	29	U 14	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12	
LOCATION ID									TP12A-2	
MATRIX									SOIL	
SAMPLE ID									TP12A-2-1	
SAMPLE DEPTH TO TOP OF SAMPLE									6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									6	
SAMPLE DATE									6/22/1994	
QC CODE									SA	
STUDY ID									ESI	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES		N	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	29	U	14	U
Trichloroethene	UG/KG	26	14%	700	0	4	29	U	14	U
Vinyl chloride	UG/KG	0	0%	200	0	0	29	U	14	U
SEMI VOLATILE ORGANICS										
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	28	U	4500	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	28	U	4500	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	28	U	4500	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	28	U	4500	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	4	U	4500	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	28	U	11000	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	28	U	4500	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	28	U	4500	U
2,4-Dimethylphenol	UG/KG	25	4%		0	1	28	U	4500	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	28	U	11000	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	28	U	4500	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	28	U	4500	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	28	U	4500	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	28	U	4500	U
2-Methylnaphthalene	UG/KG	56	11%	36400	0	3	28	U	4500	U
2-Methylphenol	UG/KG	0	0%	100	0	0	28	U	4500	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	28	U	11000	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	28	U	4500	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	28	U	4500	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	28	U	11000	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	28	U	11000	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	28	U	4500	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	28	U	4500	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	28	U	4500	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	28	U	4500	U
4-Methylphenol	UG/KG	140	4%	900	0	1	28	U	4500	U
4-Nitroaniline	UG/KG	0	0%		0	0	28	U	11000	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12
LOCATION ID								TP12A-2
MATRIX								SOIL
SAMPLE ID								TP12A-2-1
SAMPLE DEPTH TO TOP OF SAMPLE								6
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6
SAMPLE DATE								6/22/1994
QC CODE								SA
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	ESI
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N
4-Nitrophenol	UG/KG	0	0%	100	0	0	28 U	11000 U
Acenaphthene	UG/KG	23	4%	50000	0	1	28 U	4500 U
Acenaphthylene	UG/KG	33	4%	41000	0	1	28 U	4500 U
Anthracene	UG/KG	96	11%	50000	0	3	28 U	4500 U
Benzo(a)anthracene	UG/KG	180	14%	224	0	4	28 U	4500 U
Benzo(a)pyrene	UG/KG	200	14%	61	1	4	28 U	4500 U
Benzo(b)fluoranthene	UG/KG	190	14%	1100	0	4	28 U	4500 U
Benzo(ghi)perylene	UG/KG	120	7%	50000	0	2	28 U	4500 U
Benzo(k)fluoranthene	UG/KG	160	11%	1100	0	3	28 U	4500 U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	28 U	4500 U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	28 U	4500 U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	24	
Bis(2-Ethylhexyl)phthalate	UG/KG	930	25%	50000	0	7	28 U	4500 U
Butylbenzylphthalate	UG/KG	5.1	4%	50000	0	1	28 U	4500 U
Carbazole	UG/KG	0	0%		0	0	28 U	4500 U
Chrysene	UG/KG	240	14%	400	0	4	28 U	4500 U
Di-n-butylphthalate	UG/KG	1700	11%	8100	0	3	28 U	4500 U
Di-n-octylphthalate	UG/KG	54	43%	50000	0	12	28 U	4500 U
Dibenz(a,h)anthracene	UG/KG	57	7%	14	1	2	28 U	4500 U
Dibenzofuran	UG/KG	0	0%	6200	0	0	28 U	4500 U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	28 U	4500 U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	28 U	4500 U
Fluoranthene	UG/KG	420	21%	50000	0	6	28 U	4500 U
Fluorene	UG/KG	52	7%	50000	0	2	28 U	4500 U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	28 U	4500 U
Hexachlorobutadiene	UG/KG	0	0%		0	0	28 U	4500 U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	28 U	4500 U
Hexachloroethane	UG/KG	0	0%		0	0	28 U	4500 U
Indeno(1,2,3-cd)pyrene	UG/KG	120	7%	3200	0	2	28 U	4500 U
Isophorone	UG/KG	0	0%	4400	0	0	28 U	4500 U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	28 U	4500 U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY										SEAD-12	
LOCATION ID										TP12A-2	
MATRIX										SOIL	
SAMPLE ID										TP12A-2-1	
SAMPLE DEPTH TO TOP OF SAMPLE										6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE										6	
SAMPLE DATE										6/22/1994	
QC CODE										SA	
STUDY ID										ESI	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES			N	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	28	U		4500	U
Naphthalene	UG/KG	600	7%	13000	0	2	28	U		4500	U
Nitrobenzene	UG/KG	0	0%	200	0	0	28	U		4500	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	28	U		11000	U
Phenanthrene	UG/KG	340	18%	50000	0	5	28	U		4500	U
Phenol	UG/KG	300	7%	30	2	2	28	U		4500	U
Pyrene	UG/KG	380	18%	50000	0	5	28	U		4500	U
PESTICIDES/PCBS											
4,4'-DDD	UG/KG	0	0%	2900	0	0	28	U		9	U
4,4'-DDE	UG/KG	42	11%	2100	0	3	28	U		9	U
4,4'-DDT	UG/KG	2.1	4%	2100	0	1	28	J		9	U
Aldrin	UG/KG	0.79	4%	41	0	1	28	U		4.7	U
Alpha-BHC	UG/KG	24	7%	110	0	2	28	U		4.7	U
Alpha-Chlordane	UG/KG	4.6	7%		0	2	28	U		4.7	U
Aroclor-1016	UG/KG	0	0%		0	0	28	U		90	U
Aroclor-1221	UG/KG	0	0%		0	0	28	U		180	U
Aroclor-1232	UG/KG	0	0%		0	0	28	U		90	U
Aroclor-1242	UG/KG	0	0%		0	0	28	U		90	U
Aroclor-1248	UG/KG	0	0%		0	0	28	U		90	U
Aroclor-1254	UG/KG	3000	21%	10000	0	6	28			2300	
Aroclor-1260	UG/KG	150	7%	10000	0	2	28	J		150	
Beta-BHC	UG/KG	2.2	4%	200	0	1	28	U		4.7	U
Delta-BHC	UG/KG	0	0%	300	0	0	28	U		4.7	U
Dieldrin	UG/KG	40	7%	44	0	2	28	U		9	U
Endosulfan I	UG/KG	0	0%	900	0	0	28	U		4.7	U
Endosulfan II	UG/KG	19	7%	900	0	2	28	U		9	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	28	U		9	U
Endrin	UG/KG	20	14%	100	0	4	28	J		20	J
Endrin aldehyde	UG/KG	0	0%		0	0	28	U		9	U
Endrin ketone	UG/KG	0	0%		0	0	28	U		9	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	28	U		4.7	U

TABLE G-7
DISPOSAL PIT A/B METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY									SEAD-12	
LOCATION ID									TP12A-2	
MATRIX									SOIL	
SAMPLE ID									TP12A-2-1	
SAMPLE DEPTH TO TOP OF SAMPLE									6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									6	
SAMPLE DATE									6/22/1994	
QC CODE									SA	
STUDY ID									ESI	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES		N	
Gamma-Chlordane	UG/KG	58	11%	540	0	3	28	J	4.7	U
Heptachlor	UG/KG	13	7%	100	0	2	28	U	4.7	U
Heptachlor epoxide	UG/KG	22	7%	20	1	2	28	U	4.7	U
Methoxychlor	UG/KG	0	0%		0	0	28	U	47	U
Toxaphene	UG/KG	0	0%		0	0	28	U	470	U
METALS										
Aluminum	MG/KG	17100	100%	19520	0	28	28		10900	
Antimony	MG/KG	7.2	25%	6	1	7	28	J	7.2	J
Arsenic	MG/KG	5.9	100%	8.9	0	28	28		4.7	
Barium	MG/KG	125	100%	300	0	28	28		81	
Beryllium	MG/KG	0.74	100%	1.13	0	28	28	J	0.74	J
Cadmium	MG/KG	94.3	36%	2.46	7	10	28		27.3	
Calcium	MG/KG	142000	100%	125300	1	28	28		77700	
Chromium	MG/KG	83.3	100%	30	4	28	28		16.5	
Cobalt	MG/KG	26.5	100%	30	0	28	28		13.1	
Copper	MG/KG	215	100%	33	5	28	28		43.6	
Cyanide	MG/KG	1.5	7%	0.35	2	2	28	U	0.63	U
Iron	MG/KG	35700	100%	37410	0	28	28		19000	
Lead	MG/KG	366	100%	24.4	3	28	28		20	
Magnesium	MG/KG	34300	100%	21700	1	28	28		5360	
Manganese	MG/KG	631	100%	1100	0	28	28		502	
Mercury	MG/KG	0.06	18%	0.1	0	5	28	J	0.04	J
Nickel	MG/KG	201	93%	50	2	26	28		39	
Potassium	MG/KG	2090	100%	2623	0	28	28	J	1530	J
Selenium	MG/KG	1.2	18%	2	0	5	28		1.2	
Silver	MG/KG	11.9	14%	0.8	2	4	28	J	0.49	J
Sodium	MG/KG	134	57%	188	0	16	28	J	46.2	J
Thallium	MG/KG	1.7	25%	0.855	5	7	28	J	0.98	J
Vanadium	MG/KG	25.6	100%	150	0	28	28		17.9	
Zinc	MG/KG	424	100%	115	3	28	28		93.3	

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-15		MW12-33		MW12-34		MW12-7		SS12-150	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123099		123028		123195		123198		123180		123345	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								14-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		28-Oct-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Acetone	UG/KG	15	56%	200	0	5	9	14	U	11	U	15		8	J	7	J	7	J
Benzene	UG/KG	0	0%	60	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Bromodichloromethane	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Bromoform	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Chlorodibromomethane	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Chloroethane	UG/KG	0	0%	1900	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Chloroform	UG/KG	0	0%	300	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methyl bromide	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methyl butyl ketone	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methyl chloride	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Methylene chloride	UG/KG	0	0%	100	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Styrene	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Toluene	UG/KG	0	0%	1500	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Total Xylenes	UG/KG	0	0%	1200	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Trichloroethene	UG/KG	0	0%	700	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
Vinyl chloride	UG/KG	0	0%	200	0	0	9	14	U	11	U	12	U	13	U	13	U	13	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-15		MW12-33		MW12-34		MW12-7		SS12-150	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123099		123028		123195		123198		123180		123345	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								14-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		28-Oct-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	9	200	U	180	U	210	U	200	U	210	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	9	85	UJ	73	UJ	86	U	81	U	85	U	84	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	9	200	UJ	180	UR	210	UJ	200	U	210	U	200	UR
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	9	85	U	73	UJ	86	U	81	U	85	U	84	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	9	85	U	73	UJ	86	U	81	U	85	U	84	U
2-Methylphenol	UG/KG	0	0%	100	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	9	200	U	180	U	210	U	200	U	210	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	9	85	U	73	U	86	UJ	81	UJ	85	U	84	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	9	200	U	180	UJ	210	U	200	UJ	210	U	200	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	9	200	U	180	UJ	210	UJ	200	U	210	U	200	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	9	85	UJ	73	UJ	86	U	81	U	85	UJ	84	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
4-Methylphenol	UG/KG	0	0%	900	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
4-Nitroaniline	UG/KG	0	0%		0	0	9	200	UJ	180	U	210	U	200	UJ	210	U	200	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	9	200	UJ	180	UJ	210	U	200	U	210	U	200	U
Acenaphthene	UG/KG	0	0%	50000	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	9	85	U	73	UJ	86	U	81	U	85	U	84	U
Anthracene	UG/KG	4.6	11%	50000	0	1	9	85	U	73	U	4.6	J	81	U	85	U	84	U
Benzo(a)anthracene	UG/KG	20	56%	224	0	5	9	85	U	73	U	20	J	9.8	J	5.4	J	9.5	J
Benzo(a)pyrene	UG/KG	20	67%	61	0	6	9	85	U	73	U	20	J	10	J	6.7	J	9.7	J
Benzo(b)fluoranthene	UG/KG	28	67%	1100	0	6	9	85	U	73	U	28	J	12	J	7.4	J	12	J
Benzo(ghi)perylene	UG/KG	18	44%	50000	0	4	9	85	U	73	U	18	J	9	J	7.5	J	84	U
Benzo(k)fluoranthene	UG/KG	19	56%	1100	0	5	9	85	U	73	U	19	J	11	J	7.7	J	9.3	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Bis(2-Ethylhexyl)phthalate	UG/KG	5.8	11%	50000	0	1	9	85	UJ	5.8	J	86	U	100	U	85	U	84	UJ
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	9	85	UJ	73	U	86	U	81	U	85	U	84	UJ
Carbazole	UG/KG	6.4	11%		0	1	9	85	UJ	73	UJ	86	UJ	81	UJ	85	U	84	UJ
Chrysene	UG/KG	27	89%	400	0	8	9	5.9	J	4.5	J	27	J	13	J	7.7	J	13	J
Di-n-butylphthalate	UG/KG	4.5	22%	8100	0	2	9	85	U	4.5	J	86	U	81	U	85	U	4.2	J
Di-n-octylphthalate	UG/KG	7.3	11%	50000	0	1	9	85	UJ	73	U	86	U	7.3	J	85	U	84	UJ
Dibenz(a,h)anthracene	UG/KG	5.8	22%	14	0	2	9	85	U	73	U	5.8	J	81	U	85	U	84	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-15		MW12-33		MW12-34		MW12-7		SS12-150	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123099		123028		123195		123198		123180		123345	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								14-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		28-Oct-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Dibenzofuran	UG/KG	0	0%	6200	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	9	85	U	73	UJ	86	U	81	U	85	U	84	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Fluoranthene	UG/KG	40	67%	50000	0	6	9	85	U	73	U	40	J	19	J	11	J	22	J
Fluorene	UG/KG	0	0%	50000	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	9	85	UJ	73	U	86	U	81	U	85	U	84	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	9	85	U	73	U	86	UJ	81	U	85	U	84	UJ
Hexachloroethane	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Indeno(1,2,3-cd)pyrene	UG/KG	15	44%	3200	0	4	9	85	U	73	U	15	J	8.9	J	6	J	84	U
Isophorone	UG/KG	0	0%	4400	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Naphthalene	UG/KG	0	0%	13000	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Nitrobenzene	UG/KG	0	0%	200	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	9	200	UJ	180	U	210	UJ	200	U	210	U	200	UR
Phenanthrene	UG/KG	21	78%	50000	0	7	9	6	J	73	U	21	J	9.4	J	6.6	J	19	J
Phenol	UG/KG	0	0%	30	0	0	9	85	U	73	U	86	U	81	U	85	U	84	U
Pyrene	UG/KG	40	67%	50000	0	6	9	85	U	73	U	40	J	20	J	13	J	20	J
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	8.6	11%	2900	0	1	9	8.6		3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
4,4'-DDT	UG/KG	2.2	11%	2100	0	1	9	4.2	U	3.7	U	2.2	J	4.1	U	4.3	U	4.2	U
Aldrin	UG/KG	0	0%	41	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Aroclor-1016	UG/KG	0	0%		0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Aroclor-1221	UG/KG	0	0%		0	0	9	86	U	74	U	87	U	83	U	87	U	85	U
Aroclor-1232	UG/KG	0	0%		0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Aroclor-1242	UG/KG	0	0%		0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Aroclor-1248	UG/KG	0	0%		0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	9	42	U	37	U	43	U	41	U	43	U	42	U
Beta-BHC	UG/KG	0	0%	200	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Delta-BHC	UG/KG	0	0%	300	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Dieldrin	UG/KG	0	0%	44	0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Endosulfan I	UG/KG	0	0%	900	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Endosulfan II	UG/KG	0	0%	900	0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Endrin	UG/KG	0	0%	100	0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Endrin aldehyde	UG/KG	0	0%		0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Endrin ketone	UG/KG	0	0%		0	0	9	4.2	U	3.7	U	4.3	U	4.1	U	4.3	U	4.2	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-15		MW12-33		MW12-34		MW12-7		SS12-150	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123099		123028		123195		123198		123180		123345	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0		0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								14-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		28-Oct-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Heptachlor	UG/KG	0	0%	100	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	9	2.2	U	1.9	U	2.2	U	2.1	U	2.2	U	2.2	U
Methoxychlor	UG/KG	0	0%		0	0	9	22	U	19	U	22	U	21	U	22	U	22	U
Toxaphene	UG/KG	0	0%		0	0	9	220	U	190	U	220	U	210	U	220	U	220	U
METALS																			
Aluminum	MG/KG	14100	100%	19520	0	9	9	12000	J	6480		14100		10200		12400		12800	J
Antimony	MG/KG	0	0%	6	0	0	9	1.4	UR	1.2	UR	1.3	UR	1.4	UJ	1.6	UR	1	UR
Arsenic	MG/KG	4.3	100%	8.9	0	9	9	4.3	J	3.1		3.9		2.9		4.1		3.9	J
Barium	MG/KG	108	100%	300	0	9	9	90.7		58		94.6		93.8		81.6		102	
Beryllium	MG/KG	0.69	100%	1.13	0	9	9	0.51	J	0.26	J	0.69	J	0.47	J	0.63	J	0.52	J
Cadmium	MG/KG	0	0%	2.46	0	0	9	0.07	U	0.06	U	0.38	U	0.07	U	0.46	U	0.3	U
Calcium	MG/KG	75900	100%	125300	0	9	9	2620	J	75900	J	7570		11000		3720		16200	
Chromium	MG/KG	21.6	100%	30	0	9	9	16.5		11.2		21.6	J	15.1		16.5	J	16.4	
Cobalt	MG/KG	11	100%	30	0	9	9	11		7.7	J	10.7	J	9.5	J	9	J	7.7	J
Copper	MG/KG	22.1	100%	33	0	9	9	14.6		17.2		20.8		15.8		15.7		16.1	
Cyanide	MG/KG	0	0%	0.35	0	0	9	0.68	U	0.56	UJ	0.72	U	0.65	U	0.66	U	0.66	U
Iron	MG/KG	23200	100%	37410	0	9	9	23200		15400		22700	J	20800	J	20300		20300	J
Lead	MG/KG	24.9	100%	24.4	1	9	9	18.6	J	6.7	J	[redacted]	J	16.3	J	16	J	15	
Magnesium	MG/KG	18600	100%	21700	0	9	9	3070	J	18600		4570		4930		3200		5130	
Manganese	MG/KG	700	100%	1100	0	9	9	693		389		700		632	J	640		502	
Mercury	MG/KG	0.06	11%	0.1	0	1	9	0.06	U	0.05	U	0.06	U	0.06	J	0.06	U	0.05	U
Nickel	MG/KG	27.6	78%	50	0	7	9	19.5	J	21.9		22.1	UJ	21.4		17.2	UJ	18.7	
Potassium	MG/KG	1980	100%	2623	0	9	9	1110	J	891	J	1980		1010	J	1280		1500	
Selenium	MG/KG	0.95	56%	2	0	5	9	1	U	0.9	UJ	0.95	J	1.1	UJ	0.84	J	0.43	J
Silver	MG/KG	0	0%	0.8	0	0	9	0.27	U	0.23	U	0.26	U	0.28	U	0.31	U	0.2	U
Sodium	MG/KG	92.4	33%	188	0	3	9	57.5	U	92.4	J	53.8	U	58.5	U	64.2	U	72.3	J
Thallium	MG/KG	1.7	33%	0.855	3	3	9	[redacted]	J	1.3	U	[redacted]	J	[redacted]	J	1.3	U	0.88	U
Vanadium	MG/KG	24.6	100%	150	0	9	9	21.8		12.2		24.6		18.9		21.8		21.8	
Zinc	MG/KG	97.3	100%	115	0	9	9	57.6	J	43.5		97.3	J	55.6	J	54.2	J	52.5	J

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SS12-155		SS12-155		SS12-18	
MATRIX								SOIL		SOIL		SOIL	
SAMPLE ID								123350		123479		123103	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2	
SAMPLE DATE								17-Nov-98		17-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF						
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
VOLATILE ORGANICS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	9	13	U	14	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	9	13	UJ	14	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	9	13	U	14	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	9	13	U	14	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	9	13	U	14	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Acetone	UG/KG	15	56%	200	0	5	9	13	U	8	J	12	U
Benzene	UG/KG	0	0%	60	0	0	9	13	U	14	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Bromoform	UG/KG	0	0%		0	0	9	13	UJ	14	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	9	13	U	14	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	9	13	U	14	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	9	13	UJ	14	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	9	13	U	14	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	9	13	U	14	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	9	13	UJ	14	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	9	13	U	14	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	9	13	U	14	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	9	13	U	14	U	12	U
Styrene	UG/KG	0	0%		0	0	9	13	UJ	14	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	9	13	U	14	U	12	U
Toluene	UG/KG	0	0%	1500	0	0	9	13	U	14	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	9	13	UJ	14	U	12	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	9	13	U	14	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	9	13	U	14	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	9	13	U	14	U	12	U
SEMI VOLATILE ORGANICS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	9	82	U	81	U	75	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SS12-155		SS12-155		SS12-18	
MATRIX								SOIL		SOIL		SOIL	
SAMPLE ID								123350		123479		123103	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2	
SAMPLE DATE								17-Nov-98		17-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF						
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	9	82	U	81	U	75	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	9	82	U	81	U	75	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	9	82	U	81	U	75	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	9	200	U	200	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	9	82	U	81	U	75	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	9	82	UJ	81	UJ	75	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	9	200	UR	200	UJ	180	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	9	82	U	81	U	75	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	9	82	U	81	U	75	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	9	82	U	81	U	75	U
2-Methylphenol	UG/KG	0	0%	100	0	0	9	82	U	81	U	75	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	9	200	U	200	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	9	82	U	81	UJ	75	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	9	82	UJ	81	U	75	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	9	200	U	200	UJ	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	9	200	UJ	200	UJ	180	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	9	82	U	81	U	75	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	9	82	UJ	81	UJ	75	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
4-Methylphenol	UG/KG	0	0%	900	0	0	9	82	U	81	U	75	U
4-Nitroaniline	UG/KG	0	0%		0	0	9	200	U	200	UJ	180	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	9	200	U	200	U	180	UJ
Acenaphthene	UG/KG	0	0%	50000	0	0	9	82	U	81	U	75	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	9	82	U	81	U	75	U
Anthracene	UG/KG	4.6	11%	50000	0	1	9	82	U	81	U	75	U
Benzo(a)anthracene	UG/KG	20	56%	224	0	5	9	82	U	11	J	75	U
Benzo(a)pyrene	UG/KG	20	67%	61	0	6	9	4.2	J	13	J	75	UJ
Benzo(b)fluoranthene	UG/KG	28	67%	1100	0	6	9	9	J	12	J	75	U
Benzo(ghi)perylene	UG/KG	18	44%	50000	0	4	9	82	U	12	J	75	U
Benzo(k)fluoranthene	UG/KG	19	56%	1100	0	5	9	82	U	14	J	75	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	9	82	UJ	81	U	75	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
Bis(2-Ethylhexyl)phthalate	UG/KG	5.8	11%	50000	0	1	9	82	UJ	81	UJ	75	U
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	9	82	UJ	81	UJ	75	U
Carbazole	UG/KG	6.4	11%		0	1	9	82	UJ	6.4	J	75	U
Chrysene	UG/KG	27	89%	400	0	8	9	5.1	J	13	J	75	U
Di-n-butylphthalate	UG/KG	4.5	22%	8100	0	2	9	82	U	81	U	75	U
Di-n-octylphthalate	UG/KG	7.3	11%	50000	0	1	9	82	UJ	81	U	75	U
Dibenz(a,h)anthracene	UG/KG	5.8	22%	14	0	2	9	82	U	5.6	J	75	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SS12-155		SS12-155		SS12-18	
MATRIX								SOIL		SOIL		SOIL	
SAMPLE ID								123350		123479		123103	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2	
SAMPLE DATE								17-Nov-98		17-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF						
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Dibenzofuran	UG/KG	0	0%	6200	0	0	9	82	U	81	U	75	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	9	82	U	81	U	75	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	9	82	U	81	U	75	U
Fluoranthene	UG/KG	40	67%	50000	0	6	9	7.2	J	20	J	75	U
Fluorene	UG/KG	0	0%	50000	0	0	9	82	U	81	U	75	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	9	82	U	81	U	75	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	9	82	UJ	81	UJ	75	U
Hexachloroethane	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
Indeno(1,2,3-cd)pyrene	UG/KG	15	44%	3200	0	4	9	82	U	12	J	75	U
Isophorone	UG/KG	0	0%	4400	0	0	9	82	U	81	U	75	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	9	82	U	81	U	75	U
Naphthalene	UG/KG	0	0%	13000	0	0	9	82	U	81	U	75	U
Nitrobenzene	UG/KG	0	0%	200	0	0	9	82	U	81	U	75	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	9	200	UR	200	UR	180	UJ
Phenanthrene	UG/KG	21	78%	50000	0	7	9	4.6	J	11	J	75	U
Phenol	UG/KG	0	0%	30	0	0	9	82	U	81	U	75	U
Pyrene	UG/KG	40	67%	50000	0	6	9	7.5	J	15	J	75	U
PESTICIDES/PCBS													
4,4'-DDD	UG/KG	8.6	11%	2900	0	1	9	4.1	U	4.1	U	3.8	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	9	4.1	U	4.1	U	3.8	U
4,4'-DDT	UG/KG	2.2	11%	2100	0	1	9	4.1	U	4.1	U	3.8	U
Aldrin	UG/KG	0	0%	41	0	0	9	2.1	U	2.1	U	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	9	2.1	U	2.1	U	1.9	U
Alpha-Chlordane	UG/KG	0	0%		0	0	9	2.1	U	2.1	U	1.9	U
Aroclor-1016	UG/KG	0	0%		0	0	9	41	U	41	U	38	U
Aroclor-1221	UG/KG	0	0%		0	0	9	84	U	83	U	76	U
Aroclor-1232	UG/KG	0	0%		0	0	9	41	U	41	U	38	U
Aroclor-1242	UG/KG	0	0%		0	0	9	41	U	41	U	38	U
Aroclor-1248	UG/KG	0	0%		0	0	9	41	U	41	U	38	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	9	41	U	41	U	38	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	9	41	U	41	U	38	U
Beta-BHC	UG/KG	0	0%	200	0	0	9	2.1	U	2.1	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	9	2.1	U	2.1	U	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	9	4.1	U	4.1	U	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	9	2.1	U	2.1	U	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	9	4.1	U	4.1	U	3.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	9	4.1	U	4.1	U	3.8	U
Endrin	UG/KG	0	0%	100	0	0	9	4.1	U	4.1	U	3.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	9	4.1	U	4.1	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	9	4.1	U	4.1	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	9	2.1	U	2.1	U	1.9	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	9	2.1	U	2.1	U	1.9	U

TABLE G-8
DISPOSAL PIT C METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SS12-155		SS12-155		SS12-18	
MATRIX								SOIL		SOIL		SOIL	
SAMPLE ID								123350		123479		123103	
SAMPLE DEPTH TO TOP OF SAMPLE								0		0		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.2		0.2		0.2	
SAMPLE DATE								17-Nov-98		17-Nov-98		13-Oct-98	
QC CODE								SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF						
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Heptachlor	UG/KG	0	0%	100	0	0	9	2.1	U	2.1	U	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	9	2.1	U	2.1	U	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	9	21	U	21	U	19	U
Toxaphene	UG/KG	0	0%		0	0	9	210	U	210	U	190	U
METALS													
Aluminum	MG/KG	14100	100%	19520	0	9	9	13900	J	11600	J	9760	
Antimony	MG/KG	0	0%	6	0	0	9	1.2	UR	1.1	UR	1.2	UR
Arsenic	MG/KG	4.3	100%	8.9	0	9	9	3.8	J	3.5	J	3.8	
Barium	MG/KG	108	100%	300	0	9	9	108		96.8		90.2	
Beryllium	MG/KG	0.69	100%	1.13	0	9	9	0.47	J	0.45	J	0.46	J
Cadmium	MG/KG	0	0%	2.46	0	0	9	0.36	U	0.31	U	0.06	U
Calcium	MG/KG	75900	100%	125300	0	9	9	4400		3960		35700	J
Chromium	MG/KG	21.6	100%	30	0	9	9	17.7		15.4		15.6	
Cobalt	MG/KG	41	100%	30	0	9	9	8.6	J	8.2	J	8.9	J
Copper	MG/KG	22.1	100%	33	0	9	9	15.8		15.2		22.1	
Cyanide	MG/KG	0	0%	0.35	0	0	9	0.64	U	0.61	U	0.56	U
Iron	MG/KG	23200	100%	37410	0	9	9	21700	J	20400	J	20200	J
Lead	MG/KG	24.9	100%	24.4	1	9	9	14		14		9.8	
Magnesium	MG/KG	18600	100%	21700	0	9	9	3640		3190		8070	
Manganese	MG/KG	700	100%	1100	0	9	9	690		607		408	
Mercury	MG/KG	0.06	11%	0.1	0	1	9	0.06	U	0.06	U	0.05	U
Nickel	MG/KG	27.6	78%	50	0	7	9	19.6		18.3	J	27.6	
Potassium	MG/KG	1980	100%	2623	0	9	9	1510		1030		989	J
Selenium	MG/KG	0.95	56%	2	0	5	9	0.9	J	0.65	J	0.92	U
Silver	MG/KG	0	0%	0.8	0	0	9	0.24	U	0.21	U	0.24	U
Sodium	MG/KG	92.4	33%	188	0	3	9	50.6	U	43.8	U	91.6	J
Thallium	MG/KG	1.7	33%	0.855	3	3	9	1	U	0.9	U	1	U
Vanadium	MG/KG	24.6	100%	150	0	9	9	22.5		19.1		16.9	
Zinc	MG/KG	97.3	100%	115	0	9	9	58.2	J	51.4	J	54.1	J

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-14		MW12-15		MW12-15		MW12-33		MW12-33		MW12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123100		123101		123029		123030		123196		123197		123199	
SAMPLE DEPTH TO TOP OF SAMPLE								8		10		6		8		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								10		12		8		10		8		0		6	
SAMPLE DATE								14-Oct-98		14-Oct-98		01-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		31-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Acetone	UG/K	61	21%	200	0	9	42	14	UJ	14	UJ	9	J	11	UJ	15		10	J	13	
Benzene	UG/K	0	0%	60	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Bromodichloromethane	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Bromoform	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Chloroethane	UG/K	0	0%	1900	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Chloroform	UG/K	0	0%	300	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
Methyl bromide	UG/K	0	0%		0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Methyl chloride	UG/K	0	0%		0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Methylene chloride	UG/K	180	12%	100	1	5	42	11	U	11	UJ	11	U	11	U	11	U	11	UJ	12	U
Styrene	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Toluene	UG/K	62	14%	1500	0	6	42	11	UJ	7	J	10	J	62		11	U	11	UJ	12	U
Total Xylenes	UG/K	14	2%	1200	0	1	42	11	UJ	11	UJ	11	UR	11	UJ	11	U	11	UJ	12	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Trichloroethene	UG/K	2	2%	700	0	1	42	11	UJ	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	11	U	11	UJ	11	UJ	11	U	11	U	11	UJ	12	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9														
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	170	U	180	U	180	U	170	U	180	U	180	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	72	UJ	73	UJ	72	UJ	72	UJ	74	U	72	U	74	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-14		MW12-15		MW12-15		MW12-33		MW12-33		MW12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123100		123101		123029		123030		123196		123197		123199	
SAMPLE DEPTH TO TOP OF SAMPLE								6		10		6		6		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								10		12		8		10		8		0		6	
SAMPLE DATE								14-Oct-98		14-Oct-98		01-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		31-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42	170	U	180	U	180	UR	170	UR	180	UJ	180	U	180	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42	72	U	73	U	72	UJ	72	UJ	74	U	72	U	74	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42	72	U	73	U	72	UJ	72	UJ	74	U	72	U	74	U
2-Methylphenol	UG/K	0	0%	100	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42	170	U	180	U	180	U	170	U	180	U	180	U	180	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42	72	UJ	73	UJ	72	U	72	U	74	U	72	U	74	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	UJ	72	UJ	74	UJ
3-Nitroaniline	UG/K	0	0%	500	0	0	42	170	U	180	U	180	UJ	170	UJ	180	U	180	UJ	180	UJ
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42	170	U	180	U	180	UJ	170	UJ	180	UJ	180	U	180	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42	72	UJ	73	UJ	72	UJ	72	UJ	74	U	72	U	74	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
4-Methylphenol	UG/K	0	0%	900	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
4-Nitroaniline	UG/K	0	0%		0	0	42	170	U	180	U	180	U	170	U	180	U	180	UJ	180	UJ
4-Nitrophenol	UG/K	0	0%	100	0	0	42	170	U	180	U	180	UJ	170	UJ	180	U	180	U	180	U
Acenaphthene	UG/K	44	12%	50000	0	5	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Acenaphthylene	UG/K	0	0%	41000	0	0	42	72	U	73	U	72	UJ	72	UJ	74	U	72	U	74	U
Anthracene	UG/K	63	21%	50000	0	9	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42	72	U	73	U	72	U	72	U	74	U	6.3	J	4.4	J
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42	72	U	73	U	72	U	72	U	74	U	8.8	J	5.1	J
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42	72	U	73	U	72	U	72	U	74	U	12	J	7	J
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42	72	UJ	73	UJ	72	U	72	U	4.3	J	8.1	J	5.6	J
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42	72	U	73	U	72	U	72	U	74	U	10	J	4.2	J
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42	74	UJ	73	UJ	12	J	14	J	74	U	100	U	74	U
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42	72	UJ	73	UJ	72	U	72	U	74	U	72	U	74	U
Carbazole	UG/K	40	14%		0	6	42	72	UJ	73	UJ	72	UJ	72	U	74	UJ	72	UJ	74	UJ
Chrysene	UG/K	310	50%	400	0	21	42	72	U	73	U	72	U	72	UJ	74	U	13	J	8.4	J
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42	72	U	73	U	11	J	10	J	74	U	72	U	74	U
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42	11	J	9.1	J	3.8	J	8.4	J	74	U	15	J	6.1	J
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42	72	UJ	73	UJ	72	U	72	U	74	U	72	U	74	U
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42	72	U	73	U	72	UJ	72	UJ	74	U	72	U	74	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Fluoranthene	UG/K	320	45%	50000	0	19	42	72	U	73	U	72	U	72	U	74	U	11	J	6.1	J
Fluorene	UG/K	35	5%	50000	0	2	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42	72	UJ	73	UJ	72	U	72	U	74	U	72	U	74	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-14		MW12-15		MW12-15		MW12-33		MW12-33		MW12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123100		123101		123029		123030		123196		123197		123199	
SAMPLE DEPTH TO TOP OF SAMPLE								8		10		6		8		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								10		12		8		10		8		0		6	
SAMPLE DATE								14-Oct-98		14-Oct-98		01-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		31-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	UJ	72	U	74	U
Hexachloroethane	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	72	UJ	73	UJ	72	U	72	U	74	U	6.3	J	74	U
Isophorone	UG/K	0	0%	4400	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Naphthalene	UG/K	13	2%	13000	0	1	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	170	UJ	180	UJ	180	U	170	U	180	UJ	180	U	180	U
Phenanthrene	UG/K	280	43%	50000	0	18	42	72	U	73	U	72	U	72	U	74	U	6.8	J	74	U
Phenol	UG/K	0	0%	30	0	0	42	72	U	73	U	72	U	72	U	74	U	72	U	74	U
Pyrene	UG/K	310	48%	50000	0	20	42	72	U	73	U	72	U	72	U	74	U	17	J	6.2	J
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Alpha-Chlordane	UG/K	2.6	2%		0	1	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	42	36	U	37	U	36	U	36	U	37	U	36	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	42	73	U	74	U	73	U	73	U	75	U	74	U	75	U
Aroclor-1232	UG/K	0	0%		0	0	42	36	U	37	U	36	U	36	U	37	U	36	U	37	U
Aroclor-1242	UG/K	0	0%		0	0	42	36	U	37	U	36	U	36	U	37	U	36	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	42	36	U	37	U	36	U	36	U	37	U	36	U	37	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	36	U	37	U	36	U	36	U	37	U	36	U	37	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	36	U	37	U	25	J	36	U	37	U	36	U	37	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	42	3.6	U	3.7	U	3.6	U	3.6	U	3.7	U	3.6	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	1.8	U	1.9	U	1.8	U	1.8	U	1.9	U	1.9	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	42	18	U	19	U	18	U	18	U	19	U	19	U	19	U
Toxaphene	UG/K	0	0%		0	0	42	180	U	190	U	180	U	180	U	190	U	190	U	190	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	6380	J	5990	J	7220		5330		8690		6170		6380	
Antimony	MG/K	0.39	7%	6	0	3	42	1	UR	0.83	UR	1.2	UR	1.1	UR	1.1	UR	1.1	UJ	1	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-14		MW12-14		MW12-15		MW12-15		MW12-33		MW12-33		MW12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123100		123101		123029		123030		123196		123197		123199	
SAMPLE DEPTH TO TOP OF SAMPLE								8		10		6		8		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								10		12		8		10		8		0		6	
SAMPLE DATE								14-Oct-98		14-Oct-98		01-Oct-98		01-Oct-98		31-Oct-98		31-Oct-98		31-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	3.1	J	3.1	J	3.1		1.9		3.3		2.1		1.3	J
Barium	MG/K	135	100%	300	0	42	42	69.8		76.7		71.8		63		74.7		90.8		51.9	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.23	J	0.23	J	0.28	J	0.18	J	0.47	J	0.32	J	0.32	J
Cadmium	MG/K	6	24%	2.48	2	10	42	0.05	U	0.04	U	0.06	U	0.05	U	0.32	U	0.05	U	0.05	U
Calcium	MG/K	224000	100%	125300	3	42	42	96500	J	84000	J	66500	J	65000	J	94800		65100		16500	
Chromium	MG/K	29.7	100%	30	0	42	42	11.4		11		12.5		9.1		14.2	J	10.7		12.5	
Cobalt	MG/K	16.3	100%	30	0	42	42	7	J	8	J	7.6	J	6.1	J	10.5		6.8	J	5	J
Copper	MG/K	74.5	100%	33	3	42	42	16.7		15.2		17.7		13.4		22.1		19		11	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.57	U	0.57	U	0.56	UJ	0.55	UJ	0.61	U	0.55	U	0.6	U
Iron	MG/K	51000	100%	37410	1	42	42	15500		15300		16400		12400		17600	J	15400	J	14200	J
Lead	MG/K	431	100%	24.4	8	42	42	6.7	J	6	J	4.9	J	3.8	J	5.2	J	8	J	9.6	J
Magnesium	MG/K	36100	100%	21700	2	42	42	21000	J	21200	J	14500		19700		20200		16800		3590	
Manganese	MG/K	857	100%	1100	0	42	42	385		359		350		341		493		312	J	143	J
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.05	U	0.05	U	0.05	U	0.05	U	0.06	U	0.06	U	0.05	U
Nickel	MG/K	45.5	93%	50	0	39	42	19.3	J	21.4	J	23.2		15.6		23.3	UJ	20.9		21.4	
Potassium	MG/K	3670	100%	2623	2	42	42	1200		1110		1180		979		1830		1080		404	J
Selenium	MG/K	1.9	26%	2	0	11	42	0.77	U	0.63	U	0.93	UJ	0.82	UJ	0.41	U	0.8	UJ	0.77	UJ
Silver	MG/K	1.8	14%	0.8	1	6	42	0.23	J	0.16	U	0.24	U	0.21	U	0.21	U	0.21	U	0.2	U
Sodium	MG/K	1420	81%	188	4	34	42	113	J	113	J	73	J	93.4	J	79.7	J	43.8	U	42.5	U
Thallium	MG/K	1.7	40%	0.855	12	17	42	[redacted]	J	[redacted]	J	1.3	U	1.2	U	[redacted]	J	[redacted]	J	0.88	U
Vanadium	MG/K	36.4	100%	150	0	42	42	11.8		10.9		12.4		10.1		15.7		11.7		9.3	
Zinc	MG/K	6080	100%	115	7	42	42	33.5	J	38.9	J	53.2		29.6		51.1	J	41	J	37.7	J

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-34		MW12-7		MW12-7		TP12-23A		TP12-23B		TP12-23C		TP12-3A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123200		123181		123182		123139		123140		123141		123085	
SAMPLE DEPTH TO TOP OF SAMPLE								10		4		8		1		2		3		0 8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		6		10		1		2		3		0.8	
SAMPLE DATE								31-Oct-98		28-Oct-98		28-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		07-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Acetone	UG/K	61	21%	200	0	9	42	9	J	6	J	5	J	11	U	18		12	U	11	U
Benzene	UG/K	0	0%	60	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Bromoform	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Chloroform	UG/K	0	0%	300	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methyl bromide	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methyl chloride	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Methylene chloride	UG/K	180	12%	100	1	5	42	11	U	12	U	11	U	11	U	11	U	12	U	2	J
Styrene	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Toluene	UG/K	62	14%	1500	0	6	42	11	U	12	U	11	U	11	U	11	U	12	U	6	J
Total Xylenes	UG/K	14	2%	1200	0	1	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Trichloroethene	UG/K	2	2%	700	0	1	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	11	U	12	U	11	U	11	U	11	U	12	U	11	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	72	U	76	U	72	U	77	UJ	76	U	770	UR	72	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9														
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	180	U	180	U	170	U	190	U	180	U	1900	UR	170	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	UJ	76	UJ	770	UR	72	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-34		MW12-7		MW12-7		TP12-23A		TP12-23B		TP12-23C		TP12-3A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123200		123181		123182		123139		123140		123141		123085	
SAMPLE DEPTH TO TOP OF SAMPLE								10		4		8		1		2		3		0.8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		6		10		1		2		3		0.8	
SAMPLE DATE								31-Oct-98		28-Oct-98		28-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		07-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42	180	U	180	U	170	U	190	UJ	180	UJ	1900	UR	170	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42	72	U	76	U	72	U	77	U	4.4	J	770	UR	72	U
2-Methylphenol	UG/K	0	0%	100	0	0	42	72	UJ	76	U	72	U	77	U	76	U	770	UR	72	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42	180	U	180	U	170	U	190	U	180	UJ	1900	UR	170	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42	72	U	76	U	72	U	77	U	76	UJ	770	UR	72	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
3-Nitroaniline	UG/K	0	0%	500	0	0	42	180	UJ	180	U	170	U	190	U	180	U	1900	UR	170	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42	180	U	180	U	170	U	190	U	180	U	1900	UR	170	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42	72	U	76	UJ	72	UJ	77	U	76	U	770	UR	72	UJ
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
4-Methylphenol	UG/K	0	0%	900	0	0	42	72	UJ	76	U	72	U	77	U	76	U	770	UR	72	U
4-Nitroaniline	UG/K	0	0%		0	0	42	180	UJ	180	U	170	U	190	U	180	UJ	1900	UR	170	U
4-Nitrophenol	UG/K	0	0%	100	0	0	42	180	UJ	180	U	170	U	190	UJ	180	U	1900	UR	170	U
Acenaphthene	UG/K	44	12%	50000	0	5	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Acenaphthylene	UG/K	0	0%	41000	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Anthracene	UG/K	63	21%	50000	0	9	42	72	U	76	U	72	U	77	U	5.4	J	770	UR	72	U
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42	72	U	76	U	72	U	7.2	J	16	J	770	UR	72	U
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42	72	U	76	U	72	U	8.3	J	13	J	39	J	72	U
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42	72	U	76	U	72	U	13	J	14	J	770	UR	72	U
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42	5	J	76	U	72	U	77	U	11	J	39	J	72	U
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42	72	U	76	U	72	U	77	U	12	J	770	UR	72	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42	72	UJ	76	U	72	U	77	U	76	U	770	UR	72	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42	130	U	76	U	72	U	77	U	5	J	770	UJ	72	U
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42	72	U	76	U	72	U	77	U	76	U	770	UR	4.1	J
Carbazole	UG/K	40	14%		0	6	42	72	U	76	U	72	U	77	UJ	7.4	J	770	UR	72	UJ
Chrysene	UG/K	310	50%	400	0	21	42	9.2	J	76	U	72	U	12	J	17	J	770	UR	72	U
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42	72	U	76	U	72	U	280	UJ	440	UJ	770	UR	72	U
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42	20	J	14	J	6.9	J	77	U	76	U	770	UR	72	U
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42	72	U	76	U	72	U	77	U	4.1	J	770	UR	72	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Fluoranthene	UG/K	320	45%	50000	0	19	42	72	U	76	U	72	U	77	U	36	J	88	J	72	U
Fluorene	UG/K	35	5%	50000	0	2	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	UJ	76	U	770	UR	72	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-34		MW12-7		MW12-7		TP12-23A		TP12-23B		TP12-23C		TP12-3A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123200		123181		123182		123139		123140		123141		123085	
SAMPLE DEPTH TO TOP OF SAMPLE								10		4		8		1		2		3		0.8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		6		10		1		2		3		0.8	
SAMPLE DATE								31-Oct-98		28-Oct-98		28-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		07-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	UJ	76	U	770	UR	72	U
Hexachloroethane	UG/K	0	0%		0	0	42	72	UJ	76	U	72	U	77	U	76	U	770	UR	72	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	72	U	76	U	72	U	77	U	8.7	J	770	UR	72	U
Isophorone	UG/K	0	0%	4400	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Naphthalene	UG/K	13	2%	13000	0	1	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	72	U	76	U	72	U	77	UJ	76	U	770	UR	72	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	180	U	180	U	170	U	190	UJ	180	U	1900	UR	170	UJ
Phenanthrene	UG/K	280	43%	50000	0	18	42	4.6	J	76	U	72	U	77	U	30	J	770	UR	72	U
Phenol	UG/K	0	0%	30	0	0	42	72	U	76	U	72	U	77	U	76	U	770	UR	72	U
Pyrene	UG/K	310	48%	50000	0	20	42	7	J	76	U	72	U	77	U	32	J	52	J	72	U
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Aldrin	UG/K	0	0%	41	0	0	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Alpha-Chlordane	UG/K	2.6	2%		0	1	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Aroclor-1016	UG/K	0	0%		0	0	42	36	U	38	U	36	U	38	U	38	U	38	U	36	U
Aroclor-1221	UG/K	0	0%		0	0	42	74	U	77	U	72	U	78	U	77	U	78	U	73	U
Aroclor-1232	UG/K	0	0%		0	0	42	36	U	38	U	36	U	38	U	38	U	38	U	36	U
Aroclor-1242	UG/K	0	0%		0	0	42	36	U	38	U	36	U	38	U	38	U	38	U	36	U
Aroclor-1248	UG/K	0	0%		0	0	42	36	U	38	U	36	U	38	U	38	U	38	U	36	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	38	U	38	U	36	U	38	U	38	U	38	U	36	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	36	U	38	U	36	U	38	U	38	U	38	U	36	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Delta-BHC	UG/K	0	0%	300	0	0	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Endosulfan I	UG/K	0	0%	900	0	0	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Endrin	UG/K	0	0%	100	0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Endrin ketone	UG/K	0	0%		0	0	42	3.6	U	3.8	U	3.6	U	3.8	U	3.8	U	3.8	U	3.6	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.1	J
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	1.9	U	2	U	1.8	U	2	U	2	U	2	U	1.8	U
Methoxychlor	UG/K	0	0%		0	0	42	19	U	20	U	18	U	20	U	20	U	20	U	18	U
Toxaphene	UG/K	0	0%		0	0	42	190	U	200	U	180	U	200	U	200	U	200	U	180	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	6930		7400		7700		12500		11000		11000		9100	
Antimony	MG/K	0.39	7%	6	0	3	42	0.95	UJ	1.2	UR	0.89	UR	1.3	UR	1	UR	1.3	UR	1.3	UR

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-34		MW12-7		MW12-7		TP12-23A		TP12-23B		TP12-23C		TP12-3A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123200		123181		123182		123139		123140		123141		123085	
SAMPLE DEPTH TO TOP OF SAMPLE								10		4		8		1		2		3		0.8	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		6		10		1		2		3		0.8	
SAMPLE DATE								31-Oct-98		28-Oct-98		28-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		07-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	2.5		3		3.3		4.5		6.7		3.9		3.9	
Barium	MG/K	135	100%	300	0	42	42	76.8		62.7		68.2		88.2		77.3		73		73.6	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.29	J	0.39	J	0.38	J	0.43	J	0.33	J	0.43	J	0.33	J
Cadmium	MG/K	6	24%	2.46	2	10	42	0.05	U	0.35	U	0.26	U	0.06	U	0.05	U	0.06	U	0.06	U
Calcium	MG/K	224000	100%	125300	3	42	42	72700		72400		62500		34700		90700		32100		46900	J
Chromium	MG/K	29.7	100%	30	0	42	42	13.4		12.4	J	13.3	J	17.5		16.4		29.7		13.6	
Cobalt	MG/K	16.3	100%	30	0	42	42	9.8		8.2	J	8.4		10.6		7.9	J	11.5		7.7	J
Copper	MG/K	74.5	100%	33	3	42	42	24.3		19.4		18.5		20.9		16.2		[redacted]		17.5	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.57	U	0.58	U	0.54	U	0.61	U	0.59	U	[redacted]		0.57	U
Iron	MG/K	51000	100%	37410	1	42	42	18100	J	16500		17200		23800		18000		[redacted]		17400	J
Lead	MG/K	431	100%	24.4	8	42	42	12.1	J	5	J	4.7	J	14.8		9.3		[redacted]	J	10.4	
Magnesium	MG/K	36100	100%	21700	2	42	42	14200		15300		13800		8710		[redacted]		9450		6930	
Manganese	MG/K	857	100%	1100	0	42	42	377	J	378		387		629		497		331		431	
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.05	U	0.05	U	0.05	U	0.06	U	0.05	U	[redacted]	J	[redacted]	J
Nickel	MG/K	45.5	93%	50	0	39	42	29.3		21.7	UJ	21.3	UJ	25.2		20.7		36.9		22.5	
Potassium	MG/K	3670	100%	2623	2	42	42	893		1160		1290		1560		1330		1940		897	J
Selenium	MG/K	1.9	26%	2	0	11	42	1.5	J	0.45	U	0.34	U	0.95	UJ	0.78	UJ	0.99	UJ	0.94	U
Silver	MG/K	1.8	14%	0.8	1	6	42	0.19	U	0.23	U	0.18	U	0.25	U	0.2	U	0.27	J	0.34	J
Sodium	MG/K	1420	81%	188	4	34	42	64.9	J	75.1	J	103	J	52.1	U	42.5	U	[redacted]		67.5	J
Thallium	MG/K	1.7	40%	0.855	12	17	42	[redacted]	J	[redacted]	J	[redacted]	J	1.1	U	[redacted]	J	1.1	U	1.1	U
Vanadium	MG/K	36.4	100%	150	0	42	42	12.8		13.6		13.6		21.3		17.7		17.6		15.9	
Zinc	MG/K	6080	100%	115	7	42	42	85.4	J	49.6	J	50.5	J	63		69.6		[redacted]		46.3	J

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-3A		TP12-3B		TP12-3C		TP12-4A		TP12-4B		TP12-4C		TP12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123082		123083		123084		123086		123087		123088		123092	
SAMPLE DEPTH TO TOP OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.8		5.5		4		0.5		8		8		0.5	
SAMPLE DATE								07-Oct-98		07-Oct-98		07-Oct-98		12-Oct-98		12-Oct-98		12-Oct-98		13-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Acetone	UG/K	61	21%	200	0	9	42	61		35	U	17	U	12	U	11	U	11	U	11	U
Benzene	UG/K	0	0%	60	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Bromoform	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Chloroform	UG/K	0	0%	300	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methyl bromide	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methyl chloride	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Methylene chloride	UG/K	180	12%	100	1	5	42	[redacted]		2	J	12	U	12	U	11	U	11	U	11	U
Styrene	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	11	U	2	J	12	U	12	U	11	U	11	U	11	U
Toluene	UG/K	62	14%	1500	0	6	42	11	U	3	J	12	U	12	U	11	U	11	U	11	U
Total Xylenes	UG/K	14	2%	1200	0	1	42	11	U	14		12	U	12	U	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Trichloroethene	UG/K	2	2%	700	0	1	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	11	U	13	U	12	U	12	U	11	U	11	U	11	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	UJ
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9														
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	170	U	400	U	180	U	180	U	180	U	180	U	190	UJ
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-3A		TP12-3B		TP12-3C		TP12-4A		TP12-4B		TP12-4C		TP12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123082		123083		123084		123086		123087		123088		123092	
SAMPLE DEPTH TO TOP OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DATE								07-Oct-98		07-Oct-98		07-Oct-98		12-Oct-98		12-Oct-98		12-Oct-98		13-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42	170	U	400	U	180	U	180	UJ	180	UJ	180	UJ	190	UJ
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42	72	U	22	J	74	U	74	U	75	U	75	U	77	U
2-Methylphenol	UG/K	0	0%	100	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42	170	U	400	U	180	U	180	U	180	U	180	U	190	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42	72	U	170	UJ	74	U	74	UJ	75	UJ	75	UJ	77	U
3-Nitroaniline	UG/K	0	0%	500	0	0	42	170	U	400	UJ	180	U	180	U	180	U	180	U	190	UJ
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42	170	U	400	U	180	U	180	U	180	U	180	U	190	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42	72	UJ	170	U	74	UJ	74	U	75	U	75	U	77	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
4-Methylphenol	UG/K	0	0%	900	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
4-Nitroaniline	UG/K	0	0%		0	0	42	170	U	400	UJ	180	U	180	UJ	180	UJ	180	UJ	190	UJ
4-Nitrophenol	UG/K	0	0%	100	0	0	42	170	U	400	U	180	U	180	UJ	180	UJ	180	UJ	190	U
Acenaphthene	UG/K	44	12%	50000	0	5	42	72	U	170	U	74	U	74	U	75	U	75	U	7.6	J
Acenaphthylene	UG/K	0	0%	41000	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Anthracene	UG/K	63	21%	50000	0	9	42	72	U	170	U	74	U	74	U	75	U	75	U	9.8	J
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42	5.3	J	170	U	74	U	74	U	75	U	3.9	J	32	J
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42	4.8	J	170	U	74	U	10	J	75	UJ	75	UJ	34	J
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42	5	J	170	U	74	U	74	U	75	U	5.9	J	33	J
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42	72	U	170	U	74	U	74	U	75	U	75	U	26	J
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42	5.1	J	170	U	74	U	74	U	75	U	5.6	J	33	J
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Carbazole	UG/K	40	14%		0	6	42	72	UJ	170	UJ	74	UJ	74	U	75	U	75	U	14	J
Chrysene	UG/K	310	50%	400	0	21	42	6.6	J	170	U	74	U	74	U	75	U	6.8	J	45	J
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42	72	U	170	U	74	U	74	U	75	U	75	U	9	J
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Fluoranthene	UG/K	320	45%	50000	0	19	42	5.1	J	170	U	74	U	74	U	75	U	75	U	62	J
Fluorene	UG/K	35	5%	50000	0	2	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42	72	UJ	170	U	74	UJ	74	U	75	U	75	U	77	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-3A		TP12-3B		TP12-3C		TP12-4A		TP12-4B		TP12-4C		TP12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123082		123083		123084		123086		123087		123088		123092	
SAMPLE DEPTH TO TOP OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DATE								07-Oct-98		07-Oct-98		07-Oct-98		12-Oct-98		12-Oct-98		12-Oct-98		13-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	UJ
Hexachloroethane	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	72	U	170	U	74	U	74	U	75	U	75	U	25	J
Isophorone	UG/K	0	0%	4400	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	72	U	9500		74	U	74	U	75	U	75	U	77	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Naphthalene	UG/K	13	2%	13000	0	1	42	72	U	13	J	74	U	74	U	75	U	75	U	77	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	170	UJ	400	UJ	180	UJ	180	UJ	180	UJ	180	UJ	190	UJ
Phenanthrene	UG/K	280	43%	50000	0	18	42	6.6	J	170	U	74	U	74	U	75	U	75	U	51	J
Phenol	UG/K	0	0%	30	0	0	42	72	U	170	U	74	U	74	U	75	U	75	U	77	U
Pyrene	UG/K	310	48%	50000	0	20	42	10	J	170	U	74	U	74	U	75	U	75	U	66	J
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	2.9	J
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	3.6	U	4.2	U	3.7	U	3.7	U	2.7	J	3.8	U	3.8	UJ
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	3.6	U	4.2	U	3.7	U	3.7	U	4.9		3.8	U	3.3	J
Aldrin	UG/K	0	0%	41	0	0	42	1.8	U	2.2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	1.8	U	2.2	U	1.9	U	1.9	U	5.8		1.9	U	2	U
Alpha-Chlordane	UG/K	2.6	2%		0	1	42	1.8	U	2.2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Aroclor-1016	UG/K	0	0%		0	0	42	36	U	42	U	37	U	37	U	38	U	38	U	38	U
Aroclor-1221	UG/K	0	0%		0	0	42	73	U	85	U	75	U	75	U	76	U	76	U	78	U
Aroclor-1232	UG/K	0	0%		0	0	42	36	U	42	U	37	U	37	U	38	U	38	U	38	U
Aroclor-1242	UG/K	0	0%		0	0	42	36	U	42	U	37	U	37	U	38	U	38	U	38	U
Aroclor-1248	UG/K	0	0%		0	0	42	36	U	42	U	37	U	37	U	38	U	38	U	38	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	36	U	28	J	37	U	37	U	38	U	38	U	38	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	36	U	42	U	37	U	37	U	38	U	38	U	38	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	1.8	U	2.2	U	1.9	U	1.9	U	1.7	J	1.9	U	2	U
Delta-BHC	UG/K	0	0%	300	0	0	42	1.8	U	2.2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Endosulfan I	UG/K	0	0%	900	0	0	42	1.8	U	2.2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Endrin	UG/K	0	0%	100	0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Endrin ketone	UG/K	0	0%		0	0	42	3.6	U	4.2	U	3.7	U	3.7	U	3.8	U	3.8	U	3.8	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	1.8	U	2.2	U	1.9	U	1.9	U	1.9	U	1.9	U	2	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	1.8	U	2.2	U	1.9	U	1.9	U	1	J	1.9	U	2	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	1	J	2.2	U	1.9	U	1.9	U	8.4		1.9	U	2	U
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	1.8	U	2.2	U	1.9	U	1.9	U	2	J	1.9	U	2	U
Methoxychlor	UG/K	0	0%		0	0	42	18	U	22	U	19	U	19	U	19	U	19	U	20	U
Toxaphene	UG/K	0	0%		0	0	42	180	U	220	U	190	U	190	U	190	U	190	U	200	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	8520		9140		6550		9170		7650		7360		11100	
Antimony	MG/K	0.39	7%	6	0	3	42	1.1	UR	1.3	UR	1.3	UR	1	UR	1.2	UR	1.1	UR	1.4	UR

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-3A		TP12-3B		TP12-3C		TP12-4A		TP12-4B		TP12-4C		TP12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123082		123083		123084		123086		123087		123088		123092	
SAMPLE DEPTH TO TOP OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.8		5.5		4		0.5		6		8		0.5	
SAMPLE DATE								07-Oct-98		07-Oct-98		07-Oct-98		12-Oct-98		12-Oct-98		12-Oct-98		13-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	4		[redacted]		4.3		3.4		2.7		3.7		3	
Barium	MG/K	135	100%	300	0	42	42	71.9		71.7		53.3		69.3		56.4		66.7		77.2	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.35	J	0.4	J	0.23	J	0.41	J	0.34	J	0.28	J	0.49	J
Cadmium	MG/K	6	24%	2.46	2	10	42	0.06	U	[redacted]		0.07	U	0.05	U	0.06	U	0.05	U	0.07	U
Calcium	MG/K	224000	100%	125300	3	42	42	44300	J	51900	J	78500	J	67200	J	14200	J	78600	J	30800	J
Chromium	MG/K	29.7	100%	30	0	42	42	12		29.4		13.5		15.4		10.8		12.4		25.4	
Cobalt	MG/K	16.3	100%	30	0	42	42	7.4	J	8.3	J	8	J	9.5		6.4	J	8.5	J	9.2	J
Copper	MG/K	74.5	100%	33	3	42	42	18		26.4		18.8		21		11.3		18.3		23.5	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.56	U	0.7	U	0.57	U	0.58	U	0.6	U	0.56	U	0.59	U
Iron	MG/K	51000	100%	37410	1	42	42	15500	J	18800	J	18500	J	20200	J	15300	J	17200	J	20000	J
Lead	MG/K	431	100%	24.4	8	42	42	9.3		15.8		8.3		9		9.3		7		[redacted]	
Magnesium	MG/K	36100	100%	21700	2	42	42	8790		12200		8290		8840		3960		15300		7700	
Manganese	MG/K	857	100%	1100	0	42	42	422		379		354		398		158		382		289	
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.06	J	0.08	J	0.05	U	0.05	U	0.05	U	0.05	U	0.06	J
Nickel	MG/K	45.5	93%	50	0	39	42	20.7		27.5		24		29		15.6		24.8		28.3	
Potassium	MG/K	3670	100%	2623	2	42	42	770	J	875	J	898	J	787	J	755	J	1110		1090	J
Selenium	MG/K	1.9	26%	2	0	11	42	0.86	U	0.97	U	1	U	0.76	U	0.93	U	0.8	U	1.1	U
Silver	MG/K	1.8	14%	0.8	1	6	42	0.26	J	[redacted]	J	0.39	J	0.2	U	0.24	U	0.21	U	0.28	U
Sodium	MG/K	1420	81%	188	4	34	42	61.5	J	[redacted]	J	109	J	105	J	70.4	J	127	J	79.7	J
Thallium	MG/K	1.7	40%	0.855	12	17	42	0.97	U	1.4	U	1.1	U	0.86	U	1	U	0.91	U	1.2	U
Vanadium	MG/K	36.4	100%	150	0	42	42	15.2		17.3		12.1		15.8		14		12.7		18.4	
Zinc	MG/K	6080	100%	115	7	42	42	44.2	J	[redacted]	J	44.8	J	49.7	J	36.7	J	51.7	J	104	J

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-5A		TP12-5B		TP12-5C		TP12-6A		TP12-6B		TP12-6C		TP12-7AA	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123089		123090		123091		123158		123159		123160		123128	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DATE								13-Oct-98		13-Oct-98		13-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		15-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Acetone	UG/K	61	21%	200	0	9	42	12	U	12	U	11	U	13	U	16	UJ	13	UJ	11	UJ
Benzene	UG/K	0	0%	60	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Bromoform	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	42	12	U	12	U	11	U	13	U	16	UJ	13	UJ	11	UJ
Chloroform	UG/K	0	0%	300	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Methyl bromide	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	UJ	13	UJ	11	U
Methyl chloride	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	12	U	12	U	11	U	13	U	16	UJ	13	UJ	11	UJ
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Methylene chloride	UG/K	180	12%	100	1	5	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Styrene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Toluene	UG/K	62	14%	1500	0	6	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Total Xylenes	UG/K	14	2%	1200	0	1	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Trichloroethene	UG/K	2	2%	700	0	1	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	12	U	12	U	11	U	13	U	16	U	13	U	11	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	75	UJ	78	U	74	U	85	U	84	U	78	U	76	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9														
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	180	U	190	U	180	U	200	U	200	U	190	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	75	U	78	U	74	U	85	UJ	84	UJ	78	UJ	76	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY									SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID									TP12-5A		TP12-5B		TP12-5C		TP12-6A		TP12-6B		TP12-6C		TP12-7AA	
MATRIX									SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID									123089		123090		123091		123158		123159		123160		123128	
SAMPLE DEPTH TO TOP OF SAMPLE									0.5		2		8		2.5		3		3.5		1	
SAMPLE DEPTH TO BOTTOM OF SAMPLE									0.5		2		8		2.5		3		3.5		1	
SAMPLE DATE									13-Oct-98		13-Oct-98		13-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		15-Oct-98	
QC CODE									SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER		RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES		VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42		180	UJ	190	UJ	180	UJ	200	UJ	200	UJ	190	UJ	180	UJ
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42		75	U	78	U	74	U	85	U	84	U	78	U	7.8	J
2-Methylphenol	UG/K	0	0%	100	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42		180	U	190	U	180	U	200	U	200	U	190	U	180	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42		75	U	78	UJ	74	UJ	85	U	84	U	78	U	76	U
3-Nitroaniline	UG/K	0	0%	500	0	0	42		180	U	190	U	180	U	200	U	200	U	190	U	180	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42		180	U	190	U	180	U	200	U	200	U	190	U	180	UJ
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	UJ
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
4-Methylphenol	UG/K	0	0%	900	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
4-Nitroaniline	UG/K	0	0%		0	0	42		180	U	190	UJ	180	UJ	200	UJ	200	UJ	190	UJ	180	UJ
4-Nitrophenol	UG/K	0	0%	100	0	0	42		180	UJ	190	UJ	180	UJ	200	UJ	200	UJ	190	UJ	180	UJ
Acenaphthene	UG/K	44	12%	50000	0	5	42		75	U	78	U	74	U	85	U	84	U	78	U	7.6	J
Acenaphthylene	UG/K	0	0%	41000	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Anthracene	UG/K	63	21%	50000	0	9	42		75	U	78	UJ	74	U	85	U	84	U	78	U	8.3	J
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42		20	J	7.7	J	74	U	85	U	15	J	7.4	J	38	J
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42		26	J	8	J	74	UJ	85	U	15	J	7.8	J	43	J
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42		23	J	11	J	74	U	5.1	J	16	J	11	J	49	J
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42		16	J	13	J	74	U	4.9	J	13	J	9.7	J	28	J
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42		26	J	10	J	74	U	85	U	16	J	8.6	J	42	J
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42		75	U	78	U	74	U	12	J	13	J	16	J	76	UJ
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42		75	U	78	UJ	74	U	15	J	27	J	30	J	76	UJ
Carbazole	UG/K	40	14%		0	6	42		75	UJ	78	UJ	74	U	85	U	84	U	78	U	12	J
Chrysene	UG/K	310	50%	400	0	21	42		28	J	11	J	74	U	5.2	J	19	J	11	J	55	J
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42		75	U	5.8	J	74	U	640	UJ	850	UJ	680	UJ	76	UJ
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42		75	U	78	U	74	U	85	U	84	U	78	U	8	J
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42		6.8	J	78	U	74	U	85	U	84	U	78	U	11	J
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Fluoranthene	UG/K	320	45%	50000	0	19	42		40	J	17	J	74	U	7.7	J	31	J	17	J	85	
Fluorene	UG/K	35	5%	50000	0	2	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42		75	U	78	U	74	U	85	U	84	U	78	U	76	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42		75	UJ	78	U	74	U	85	U	84	U	78	U	76	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-5A		TP12-5B		TP12-5C		TP12-6A		TP12-6B		TP12-6C		TP12-7AA	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123089		123090		123091		123158		123159		123160		123128	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DATE								13-Oct-98		13-Oct-98		13-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		15-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	75	UJ	78	U	74	U	85	U	84	U	78	U	76	U
Hexachloroethane	UG/K	0	0%		0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	18	J	8.1	J	74	U	85	U	9.4	J	7.6	J	26	J
Isophorone	UG/K	0	0%	4400	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
Naphthalene	UG/K	13	2%	13000	0	1	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	75	UJ	78	U	74	U	85	U	84	U	78	U	76	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	180	UJ	190	UJ	180	UJ	200	U	200	U	190	U	180	UJ
Phenanthrene	UG/K	280	43%	50000	0	18	42	36	J	12	J	74	U	5	J	13	J	8.3	J	67	J
Phenol	UG/K	0	0%	30	0	0	42	75	U	78	U	74	U	85	U	84	U	78	U	76	U
Pyrene	UG/K	310	48%	50000	0	20	42	35	J	11	J	74	U	8.2	J	30	J	16	J	85	
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	25	J	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	2.2	J
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	5.7	J	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	2.5	J
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	2.4	J	3.9	U	3.7	UJ	4.2	U	3.4	J	3.9	U	2.6	J
Aldrin	UG/K	0	0%	41	0	0	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Alpha-Chlordane	UG/K	2.8	2%		0	1	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Aroclor-1016	UG/K	0	0%		0	0	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Aroclor-1221	UG/K	0	0%		0	0	42	76	U	79	U	75	UJ	86	U	85	U	80	U	77	U
Aroclor-1232	UG/K	0	0%		0	0	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Aroclor-1242	UG/K	0	0%		0	0	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Aroclor-1248	UG/K	0	0%		0	0	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	38	U	39	U	37	UJ	42	U	42	U	39	U	38	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Delta-BHC	UG/K	0	0%	300	0	0	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Endosulfan I	UG/K	0	0%	900	0	0	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Endrin	UG/K	0	0%	100	0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Endrin ketone	UG/K	0	0%		0	0	42	3.8	U	3.9	U	3.7	UJ	4.2	U	4.2	U	3.9	U	3.8	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	1.9	U	2	U	1.9	UJ	2.2	U	2.2	U	2	U	2	U
Methoxychlor	UG/K	0	0%		0	0	42	19	U	20	U	19	UJ	22	U	22	U	20	U	20	U
Toxaphene	UG/K	0	0%		0	0	42	190	U	200	U	190	UJ	220	U	220	U	200	U	200	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	11300		10300		7130		11300		7180		7690		9980	J
Antimony	MG/K	0.39	7%	6	0	3	42	0.9	UR	1.3	UR	1.2	UR	1.3	UR	1	UR	1.4	UR	1.1	UR

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-5A		TP12-5B		TP12-5C		TP12-6A		TP12-6B		TP12-6C		TP12-7AA	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123089		123090		123091		123158		123159		123160		123128	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		2		8		2.5		3		3.5		1	
SAMPLE DATE								13-Oct-98		13-Oct-98		13-Oct-98		17-Oct-98		17-Oct-98		17-Oct-98		15-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	3.2		4.4		3.3		4.3		4.1		3.8		5.8	J
Barium	MG/K	135	100%	300	0	42	42	79.7		74.3		77.5		82.2		63.2		62.2		69.9	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.45	J	0.47	J	0.26	J	0.47	J	0.31	J	0.35	J	0.32	J
Cadmium	MG/K	6	24%	2.46	2	10	42	0.04	U	0.06	U	0.06	U	0.07	U	0.05	U	0.07	U	0.06	U
Calcium	MG/K	224000	100%	125300	3	42	42	22300	J	49800	J	91300	J	24600		114000		[redacted]		51400	J
Chromium	MG/K	29.7	100%	30	0	42	42	23.6		15.4		12		16.5		11.2		13.1		24.6	
Cobalt	MG/K	16.3	100%	30	0	42	42	9.4		8.6	J	10.5		10.2	J	8.5	J	7.8	J	10.8	
Copper	MG/K	74.5	100%	33	3	42	42	23.2		21.2		20		20.3		18.5		19.3		26	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.57	U	0.59	U	0.56	U	0.67	U	0.64	U	0.62	U	0.63	U
Iron	MG/K	51000	100%	37410	1	42	42	20300	J	19600	J	16100	J	22700		14600		17400		25500	J
Lead	MG/K	431	100%	24.4	8	42	42	[redacted]		13.8		8.1		15.4	J	15.1	J	14.8	J	[redacted]	J
Magnesium	MG/K	36100	100%	21700	2	42	42	6830		9720		15500		6520		9930		13500		18400	J
Manganese	MG/K	857	100%	1100	0	42	42	363		403		423		545		314		359		656	
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.05	U	0.1	J	0.1	J	0.06	U	0.06	U	0.09	J	0.06	J
Nickel	MG/K	45.5	93%	50	0	39	42	26.8		24		25.5		24.1		21.2		22.6		28.1	J
Potassium	MG/K	3670	100%	2623	2	42	42	1090		1220		1290		978	J	920		977	J	961	
Selenium	MG/K	1.9	26%	2	0	11	42	0.68	U	0.96	U	0.89	U	1	UJ	0.78	UJ	1.1	UJ	0.85	U
Silver	MG/K	1.8	14%	0.8	1	6	42	0.18	U	0.25	U	0.23	U	0.27	U	0.2	U	0.28	U	0.22	U
Sodium	MG/K	1420	81%	188	4	34	42	88.7	J	80.4	J	148	J	55.7	U	42.9	U	82.5	J	48.4	J
Thallium	MG/K	1.7	40%	0.855	12	17	42	0.77	U	1.1	U	1	U	1.1	U	0.89	U	1.2	U	[redacted]	J
Vanadium	MG/K	36.4	100%	150	0	42	42	19.2		19		12.8		19.7		17.5		14.6		19.3	
Zinc	MG/K	6080	100%	115	7	42	42	88.4	J	62.3	J	53.1	J	59		61.5		94.5		[redacted]	J

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-7BA		TP12-7BB		TP12-8A		TP12-8B		TP12-8C		TP12A-3		TP12A-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123127		123129		123130		123132		123131		TP12A-3-1		TP12A-3-2	
SAMPLE DEPTH TO TOP OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DATE								15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		22-Jun-94		22-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Acetone	UG/K	61	21%	200	0	9	42	13	UJ	12	UJ	12	UJ	11	UJ	12	UJ	13	U	11	U
Benzene	UG/K	0	0%	60	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Bromoform	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	42	11	UJ	12	UJ	12	UJ	11	UJ	12	UJ	13	U	11	U
Chloroform	UG/K	0	0%	300	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Methyl bromide	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Methyl chloride	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	11	UJ	12	UJ	12	UJ	11	UJ	12	UJ	13	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Methylene chloride	UG/K	180	12%	100	1	5	42	11	U	12	U	12	U	11	U	12	U	1	J	1	J
Styrene	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Toluene	UG/K	62	14%	1500	0	6	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Total Xylenes	UG/K	14	2%	1200	0	1	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Trichloroethene	UG/K	2	2%	700	0	1	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	11	U	12	U	12	U	11	U	12	U	13	U	11	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9											430	U	370	U
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	180	U	180	U	190	U	300	U	180	U	1100	U	900	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	73	UJ	76	U	78	U	120	U	74	U	430	U	370	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-7BA		TP12-7BB		TP12-8A		TP12-8B		TP12-8C		TP12A-3		TP12A-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123127		123129		123130		123132		123131		TP12A-3-1		TP12A-3-2	
SAMPLE DEPTH TO TOP OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DATE								15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		22-Jun-94		22-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		RI PHASE 1 ST		ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42	180	UJ	180	UJ	190	UJ	300	UJ	180	UJ	1100	U	900	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42	73	U	6.8	J	78	U	120	U	74	U	430	U	370	U
2-Methylphenol	UG/K	0	0%	100	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42	180	U	180	U	190	U	300	U	180	U	1100	U	900	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
3-Nitroaniline	UG/K	0	0%	500	0	0	42	180	U	180	U	190	U	300	U	180	U	1100	U	900	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42	180	UJ	180	U	190	U	300	U	180	U	1100	U	900	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42	73	UJ	76	UJ	78	UJ	120	UJ	74	UJ	430	U	370	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
4-Methylphenol	UG/K	0	0%	900	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
4-Nitroaniline	UG/K	0	0%		0	0	42	180	UJ	180	UJ	190	UJ	300	UJ	180	UJ	1100	U	900	U
4-Nitrophenol	UG/K	0	0%	100	0	0	42	180	UJ	180	U	190	U	300	U	180	U	1100	U	900	U
Acenaphthene	UG/K	44	12%	50000	0	5	42	5	J	76	U	78	U	120	U	13	J	430	U	370	U
Acenaphthylene	UG/K	0	0%	41000	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Anthracene	UG/K	63	21%	50000	0	9	42	5.4	J	17	J	57	J	120	U	20	J	430	U	370	U
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42	19	J	7.7	J	200		26	J	68	J	430	U	370	U
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42	20	J	8.6	J	[redacted]		24	J	[redacted]	J	430	U	370	U
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42	18	J	13	J	200		33	J	82	J	430	U	370	U
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42	14	J	76	UJ	35	J	120	UJ	43	J	430	U	370	U
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42	24	J	76	U	170		29	J	84	J	430	U	370	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33	73	U	76	U	78	U	120	U	74	U				
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42	73	UJ	76	U	78	U	120	U	74	U	430	U	370	U
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42	73	UJ	76	U	78	U	120	U	11	J	430	U	370	U
Carbazole	UG/K	40	14%		0	6	42	6.7	J	76	UJ	78	UJ	120	UJ	18	J	430	U	370	U
Chrysene	UG/K	310	50%	400	0	21	42	26	J	16	J	310		36	J	88		430	U	370	U
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42	73	UJ	76	U	78	U	120	U	74	U	430	U	370	U
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42	73	UJ	76	UJ	78	UJ	120	UJ	74	UJ	430	U	370	U
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42	7	J	76	UJ	[redacted]	J	120	UJ	[redacted]	J	430	U	370	U
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Fluoranthene	UG/K	320	45%	50000	0	19	42	48	J	22	J	220		51	J	140		430	U	370	U
Fluorene	UG/K	35	5%	50000	0	2	42	73	U	76	U	78	U	120	U	12	J	430	U	370	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42	73	UJ	76	UJ	78	UJ	120	UJ	74	UJ	430	U	370	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-7BA		TP12-7BB		TP12-8A		TP12-8B		TP12-8C		TP12A-3		TP12A-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123127		123129		123130		123132		123131		TP12A-3-1		TP12A-3-2	
SAMPLE DEPTH TO TOP OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DATE								15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		22-Jun-94		22-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Hexachloroethane	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	13	J	76	UJ	44	J	120	UJ	42	J	430	U	370	U
Isophorone	UG/K	0	0%	4400	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Naphthalene	UG/K	13	2%	13000	0	1	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	180	UJ	180	U	190	U	300	U	180	U	1100	U	900	U
Phenanthrene	UG/K	280	43%	50000	0	18	42	39	J	16	J	20	J	16	J	100		430	U	370	U
Phenol	UG/K	0	0%	30	0	0	42	73	U	76	U	78	U	120	U	74	U	430	U	370	U
Pyrene	UG/K	310	48%	50000	0	20	42	40	J	15	J	310		53	J	140		430	U	370	U
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	3.7	U	3.3	J	3.9	U	6.1	U	2.1	J	4.3	U	3.7	U
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	3.7	U	2.9	J	3.9	U	6.1	U	4.4		4.3	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Alpha-Chlordane	UG/K	2.6	2%		0	1	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	42	74	U	77	U	80	U	120	U	75	U	88	U	75	U
Aroclor-1232	UG/K	0	0%		0	0	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Aroclor-1242	UG/K	0	0%		0	0	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	37	U	38	U	39	U	61	U	37	U	43	U	37	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	42	3.7	U	3.8	U	3.9	U	6.1	U	3.7	U	4.3	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	1.9	U	2	U	2	U	3.1	U	1.9	U	2.2	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	42	19	U	20	U	20	U	31	U	19	U	22	U	19	U
Toxaphene	UG/K	0	0%		0	0	42	190	U	200	U	200	U	310	U	190	U	220	U	190	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	8110	J	11000	J	10300	J	14000	J	4140	J	13200		9720	
Antimony	MG/K	0.39	7%	6	0	3	42	1.3	UR	1.2	UR	1.3	UR	2	UR	1.2	UR	0.25	UJ	0.27	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-7BA		TP12-7BB		TP12-8A		TP12-8B		TP12-8C		TP12A-3		TP12A-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123127		123129		123130		123132		123131		TP12A-3-1		TP12A-3-2	
SAMPLE DEPTH TO TOP OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								1		2		1		3		2		2.5		6	
SAMPLE DATE								15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		15-Oct-98		22-Jun-94		22-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	RI PHASE 1	ST	ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	3.6	J	4.3		3.2		5.8		2.6		5		3.7	
Barium	MG/K	135	100%	300	0	42	42	51.8		49.9	J	106	J	113	J	38.9	J	89		73.6	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.31	J	0.46	J	0.44	J	0.6	J	0.21	J	0.71	J	0.49	J
Cadmium	MG/K	6	24%	2.46	2	10	42	0.06	U	0.06	U	0.06	U	0.1	U	0.06	U	[redacted]		0.68	J
Calcium	MG/K	224000	100%	125300	3	42	42	39000	J	27400		6830		[redacted]		[redacted]		5600		85400	
Chromium	MG/K	29.7	100%	30	0	42	42	13.8		20.9		14		24.1		6.7		18.1		14.8	
Cobalt	MG/K	16.3	100%	30	0	42	42	11.6		11.7		9	J	16.3	J	4.9	J	10.2		8.3	J
Copper	MG/K	74.5	100%	33	3	42	42	20.9		[redacted]		14.7		32.5		14		18.6		18	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.56	U	0.65	U	0.87	U	1	U	0.57	U	0.58	U	0.45	U
Iron	MG/K	51000	100%	37410	1	42	42	23100	J	11300	J	20800	J	33500	J	13000	J	24100		19400	
Lead	MG/K	431	100%	24.4	8	42	42	17.2	J	[redacted]	J	12.8	J	21.8	J	18.1	J	[redacted]		10	
Magnesium	MG/K	36100	100%	21700	2	42	42	7820	J	9900	J	4390	J	14300	J	11900	J	4530		12700	
Manganese	MG/K	857	100%	1100	0	42	42	378		167		597		786		515		490		429	
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.05	U	0.05	U	0.06	J	0.09	U	0.06	U	0.06	J	0.02	J
Nickel	MG/K	45.5	93%	50	0	39	42	34.9	J	39	J	18.7	J	45.5	J	12.3	J	27.2		25	
Potassium	MG/K	3670	100%	2623	2	42	42	985	J	1210		881	J	1340	J	731	J	1290	J	1700	J
Selenium	MG/K	1.9	26%	2	0	11	42	0.95	U	0.93	J	0.98	J	1.5	J	0.9	J	1.9		0.65	J
Silver	MG/K	1.8	14%	0.8	1	6	42	0.25	U	0.24	U	0.26	U	0.39	U	0.24	U	0.1	U	0.1	U
Sodium	MG/K	1420	81%	188	4	34	42	[redacted]	J	140	J	53.6	U	[redacted]	J	114	J	30.3	J	129	J
Thallium	MG/K	1.7	40%	0.855	12	17	42	[redacted]	J	[redacted]	J	1.1	U	1.7	U	1	U	0.56	J	0.7	J
Vanadium	MG/K	36.4	100%	150	0	42	42	14.9		19.9		17.5		23.7		11.1		22.5		15.4	
Zinc	MG/K	6080	100%	115	7	42	42	[redacted]	J	[redacted]	J	49.2	J	108	J	90.2	J	112		53.8	

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12A-4		TP12A-4		TP12A-5		TP12A-6		TP12A-6		TP12A-7		TP12A-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								TP12A-4-1		TP12A-4-2		TP12A-5-1		TP12A-6-1		TP12A-6-2		TP12A-7-1		TP12A-8-1	
SAMPLE DEPTH TO TOP OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DATE								21-Jun-94		21-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		24-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID								ESI		ESI		ESI		ESI		ESI		ESI		ESI	
PARAMETER	UNIT	AXIMU	FREQUENC OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																					
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Acetone	UG/K	61	21%	200	0	9	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Benzene	UG/K	0	0%	60	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Bromodichloromethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Bromoform	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Carbon disulfide	UG/K	0	0%	2700	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Chlorobenzene	UG/K	5	5%	1700	0	2	42	5	J	1	J	11	U	11	U	11	U	15	UJ	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Chloroethane	UG/K	0	0%	1900	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Chloroform	UG/K	0	0%	300	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methyl bromide	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methyl chloride	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methyl ethyl ketone	UG/K	0	0%	300	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Methylene chloride	UG/K	180	12%	100	1	5	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Styrene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Tetrachloroethene	UG/K	2	2%	1400	0	1	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Toluene	UG/K	62	14%	1500	0	6	42	2	J	12	U	11	U	11	U	11	U	15	UJ	11	U
Total Xylenes	UG/K	14	2%	1200	0	1	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Trichloroethene	UG/K	2	2%	700	0	1	42	2	J	12	U	11	U	11	U	11	U	15	UJ	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	42	12	U	12	U	11	U	11	U	11	U	15	UJ	11	U
Semi-Volatile Organics																					
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	9	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12A-4		TP12A-4		TP12A-5		TP12A-6		TP12A-6		TP12A-7		TP12A-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								TP12A-4-1		TP12A-4-2		TP12A-5-1		TP12A-6-1		TP12A-6-2		TP12A-7-1		TP12A-8-1	
SAMPLE DEPTH TO TOP OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DATE								21-Jun-94		21-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		24-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	ESI		ESI		ESI		ESI		ESI		ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2-Chloronaphthalene	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2-Chlorophenol	UG/K	0	0%	800	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2-Methylnaphthalene	UG/K	22	10%	36400	0	4	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2-Methylphenol	UG/K	0	0%	100	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
2-Nitroaniline	UG/K	0	0%	430	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
2-Nitrophenol	UG/K	0	0%	330	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
3-Nitroaniline	UG/K	0	0%	500	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
4-Chloroaniline	UG/K	0	0%	220	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
4-Methylphenol	UG/K	0	0%	900	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
4-Nitroaniline	UG/K	0	0%		0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
4-Nitrophenol	UG/K	0	0%	100	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
Acenaphthene	UG/K	44	12%	50000	0	5	42	390	U	400	U	370	U	44	J	370	U	540	U	370	U
Acenaphthylene	UG/K	0	0%	41000	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Anthracene	UG/K	63	21%	50000	0	9	42	390	U	400	U	370	U	63	J	370	U	43	J	370	U
Benzo(a)anthracene	UG/K	200	45%	224	0	19	42	390	U	400	U	370	U	99	J	370	U	150	J	370	U
Benzo(a)pyrene	UG/K	180	48%	61	4	20	42	390	U	400	U	370	U	[redacted]	J	370	U	[redacted]	J	370	U
Benzo(b)fluoranthene	UG/K	320	48%	1100	0	20	42	390	U	400	U	370	U	95	J	370	U	320	J	370	U
Benzo(ghi)perylene	UG/K	98	43%	50000	0	18	42	390	U	400	U	370	U	29	J	370	U	98	J	370	U
Benzo(k)fluoranthene	UG/K	170	38%	1100	0	16	42	390	U	400	U	370	U	76	J	370	U	540	UJ	370	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	33														
Bis(2-Ethylhexyl)phthalate	UG/K	16	14%	50000	0	6	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Butylbenzylphthalate	UG/K	30	12%	50000	0	5	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Carbazole	UG/K	40	14%		0	6	42	390	U	400	U	370	U	40	J	370	U	540	U	370	U
Chrysene	UG/K	310	50%	400	0	21	42	390	U	400	U	370	U	130	J	370	U	210	J	370	U
Di-n-butylphthalate	UG/K	52	19%	8100	0	8	42	390	U	400	U	28	J	47	J	32	J	50	J	52	J
Di-n-octylphthalate	UG/K	20	24%	50000	0	10	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Dibenz(a,h)anthracene	UG/K	99	19%	14	4	8	42	390	U	400	U	370	U	[redacted]	J	370	U	[redacted]	J	370	U
Dibenzofuran	UG/K	4.1	2%	6200	0	1	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Diethyl phthalate	UG/K	0	0%	7100	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Fluoranthene	UG/K	320	45%	50000	0	19	42	390	U	400	U	370	U	300	J	370	U	320	J	370	U
Fluorene	UG/K	35	5%	50000	0	2	42	390	U	400	U	370	U	35	J	370	U	540	U	370	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Hexachlorobutadiene	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12A-4		TP12A-4		TP12A-5		TP12A-6		TP12A-6		TP12A-7		TP12A-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								TP12A-4-1		TP12A-4-2		TP12A-5-1		TP12A-6-1		TP12A-6-2		TP12A-7-1		TP12A-8-1	
SAMPLE DEPTH TO TOP OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DATE								21-Jun-94		21-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		24-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	ESI		ESI		ESI		ESI		ESI		ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Hexachloroethane	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Indeno(1,2,3-cd)pyrene	UG/K	140	31%	3200	0	13	42	390	U	400	U	370	U	69	J	370	U	140	J	370	U
Isophorone	UG/K	0	0%	4400	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
N-Nitrosodiphenylamine	UG/K	9500	2%		0	1	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Naphthalene	UG/K	13	2%	13000	0	1	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Nitrobenzene	UG/K	0	0%	200	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	42	940	U	960	U	900	U	920	U	900	U	1300	U	890	U
Phenanthrene	UG/K	280	43%	50000	0	18	42	390	U	400	U	370	U	280	J	370	U	120	J	370	U
Phenol	UG/K	0	0%	30	0	0	42	390	U	400	U	370	U	380	U	370	U	540	U	370	U
Pyrene	UG/K	310	48%	50000	0	20	42	390	U	400	U	370	U	230	J	370	U	230	J	370	U
Pesticides/ PCBs																					
4,4'-DDD	UG/K	25	10%	2900	0	4	42	3.9	U	4	U	3.7	U	5.1		3.7	U	5.4	U	3.7	U
4,4'-DDE	UG/K	6.4	17%	2100	0	7	42	3.9	U	4	U	3.7	U	6.4		3.7	U	2.3	J	3.7	U
4,4'-DDT	UG/K	4.9	19%	2100	0	8	42	3.9	U	4	U	3.7	U	3.8		3.7	U	5.4	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Alpha-BHC	UG/K	5.8	2%	110	0	1	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Alpha-Chlordane	UG/K	2.6	2%		0	1	42	2	U	2	U	1.9	U	2	U	1.9	U	2.6	J	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	42	79	U	81	U	75	U	77	U	75	U	110	U	74	U
Aroclor-1232	UG/K	0	0%		0	0	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Aroclor-1242	UG/K	0	0%		0	0	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Aroclor-1254	UG/K	28	2%	10000	0	1	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Aroclor-1260	UG/K	25	2%	10000	0	1	42	39	U	40	U	37	U	38	U	37	U	54	U	37	U
Beta-BHC	UG/K	1.7	2%	200	0	1	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	42	3.9	U	4	U	3.7	U	3.8	U	3.7	U	5.4	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Gamma-Chlordane	UG/K	2.3	5%	540	0	2	42	2	U	2	U	1.9	U	2	U	1.9	U	2.3	J	1.9	U
Heptachlor	UG/K	8.4	7%	100	0	3	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Heptachlor epoxide	UG/K	2	2%	20	0	1	42	2	U	2	U	1.9	U	2	U	1.9	U	2.8	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	42	20	U	20	U	19	U	20	U	19	U	28	U	19	U
Toxaphene	UG/K	0	0%		0	0	42	200	U	200	U	190	U	200	U	190	U	280	U	190	U
Metals																					
Aluminum	MG/K	18600	100%	19520	0	42	42	9600		13400		9750		14000		8460		18600		6610	
Antimony	MG/K	0.39	7%	6	0	3	42	0.25	UJ	0.18	UJ	0.26	UJ	0.25	J	0.28	J	0.39	J	0.26	UJ

TABLE G-9
DISPOSAL PIT C - CHEMICAL DATA -SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12A-4		TP12A-4		TP12A-5		TP12A-6		TP12A-6		TP12A-7		TP12A-8	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								TP12A-4-1		TP12A-4-2		TP12A-5-1		TP12A-6-1		TP12A-6-2		TP12A-7-1		TP12A-8-1	
SAMPLE DEPTH TO TOP OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								4		4		3		1		7		4		7	
SAMPLE DATE								21-Jun-94		21-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		23-Jun-94		24-Jun-94	
QC CODE								SA		SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	NUMBER	NUMBER	NUMBER	ESI		ESI		ESI		ESI		ESI		ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	11.1	100%	8.9	1	42	42	4.2		4.9		3.8		5.2		2.9		7.7		3.1	
Barium	MG/K	135	100%	300	0	42	42	72		102		94.5		78.7		76.2		135		67.4	
Beryllium	MG/K	0.83	100%	1.13	0	42	42	0.48	J	0.63	J	0.45	J	0.61	J	0.4	J	0.83	J	0.31	J
Cadmium	MG/K	6	24%	2.46	2	10	42	0.57	J	0.82		0.4	J	0.7	J	0.35	J	1	J	0.5	J
Calcium	MG/K	224000	100%	125300	3	42	42	82600		39100		78800	J	22000	J	62000	J	25400	J	86700	J
Chromium	MG/K	29.7	100%	30	0	42	42	14.1		18.5		15.1		20.7		14		25		10.6	
Cobalt	MG/K	16.3	100%	30	0	42	42	8.6	J	9.6		8.2	J	10.1		6.8	J	15.7		7.1	J
Copper	MG/K	74.5	100%	33	3	42	42	21.2		24.2		19.5		21.2		16.4		[redacted]		17.7	
Cyanide	MG/K	2.2	2%	0.35	1	1	42	0.46	U	0.5	U	0.52	U	0.48	U	0.48	U	0.8	U	0.49	U
Iron	MG/K	51000	100%	37410	1	42	42	18700		23300		18900		26100		17100		34500		14400	
Lead	MG/K	431	100%	24.4	8	42	42	8.9		16.8		15.5	J	22.7	J	[redacted]	J	[redacted]	J	12.3	J
Magnesium	MG/K	36100	100%	21700	2	42	42	15700		9930		19100		6840		11600		10600		[redacted]	
Manganese	MG/K	857	100%	1100	0	42	42	395		419		394		524		358		857		326	
Mercury	MG/K	0.15	45%	0.1	3	19	42	0.03	J	0.03	J	0.04	J	0.08	J	0.03	J	[redacted]		0.02	J
Nickel	MG/K	45.5	93%	50	0	39	42	24.8		30.9		24		28.4		22		39.4		18.9	
Potassium	MG/K	3870	100%	2623	2	42	42	1990	J	[redacted]	J	2350	J	1430	J	1700	J	[redacted]	J	1480	J
Selenium	MG/K	1.9	26%	2	0	11	42	0.95	J	1.6		0.54	U	1.2		0.48	U	1.2	J	0.54	U
Silver	MG/K	1.8	14%	0.8	1	6	42	0.1	U	0.07	U	0.1	U	0.08	U	0.09	U	0.13	U	0.1	U
Sodium	MG/K	1420	81%	188	4	34	42	124	J	107	J	115	J	51.5	J	95	J	26.5	U	112	J
Thallium	MG/K	1.7	40%	0.855	12	17	42	0.41	J	0.56	J	0.38	U	0.48	J	0.34	U	[redacted]	J	0.38	U
Vanadium	MG/K	36.4	100%	150	0	42	42	16.2		21.5		17.5		22.7		14.1		36.4		11	
Zinc	MG/K	6080	100%	115	7	42	42	79.3		[redacted]		51.1		78.8		53.8		[redacted]		42.6	

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12			
LOCATION ID								MW12-16		MW12-17		MW12-18		MW12-18		MW12-35			
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL			
SAMPLE ID								123149		123152		123043		123037		123186			
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0			
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2			
SAMPLE DATE								17-Oct-98		16-Oct-98		02-Oct-98		02-Oct-98		29-Oct-98			
QC CODE								SA		SA		DU		SA		SA			
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1			
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	11	12	U	12	U	11	U	11	U	12	U		
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	11	12	U	12	U	11	U	11	U	12	U		
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	11	12	U	12	U	11	U	11	U	12	U		
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	11	12	U	12	U	11	U	11	U	12	U		
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	11	12	U	12	U	11	U	11	U	12	U		
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
1,2-Dichloropropane	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Acetone	UG/KG	7	9%	200	0	1	11	12	U	12	UJ	11	UJ	11	U	12	U		
Benzene	UG/KG	0	0%	60	0	0	11	12	U	12	U	11	U	11	U	12	U		
Bromodichloromethane	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Bromoform	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Carbon disulfide	UG/KG	0	0%	2700	0	0	11	12	U	12	U	11	U	11	U	12	U		
Carbon tetrachloride	UG/KG	0	0%	600	0	0	11	12	U	12	U	11	U	11	U	12	U		
Chlorobenzene	UG/KG	0	0%	1700	0	0	11	12	U	12	U	11	U	11	U	12	U		
Chlorodibromomethane	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Chloroethane	UG/KG	0	0%	1900	0	0	11	12	U	12	U	11	U	11	U	12	U		
Chloroform	UG/KG	0	0%	300	0	0	11	12	U	12	U	11	U	11	U	12	U		
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Ethyl benzene	UG/KG	0	0%	5500	0	0	11	12	U	12	U	11	U	11	U	12	U		
Methyl bromide	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Methyl butyl ketone	UG/KG	0	0%		0	0	11	12	U	12	UJ	11	U	11	U	12	U		
Methyl chloride	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	11	12	U	12	UJ	11	U	11	U	12	U		
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	11	12	U	12	U	11	U	11	U	12	U		
Methylene chloride	UG/KG	0	0%	100	0	0	11	12	U	12	U	11	U	11	U	12	U		
Styrene	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		
Tetrachloroethene	UG/KG	0	0%	1400	0	0	11	12	U	12	U	11	U	11	U	12	U		
Toluene	UG/KG	26	18%	1500	0	2	11	12	U	12	U	26	J	3	J	12	U		
Total Xylenes	UG/KG	0	0%	1200	0	0	11	12	U	12	U	11	U	11	U	12	U		
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	12	U	12	U	11	U	11	U	12	U		

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12					
LOCATION ID								MW12-16		MW12-17		MW12-18		MW12-18		MW12-35					
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL					
SAMPLE ID								123149		123152		123043		123037		123186					
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0					
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2					
SAMPLE DATE								17-Oct-98		16-Oct-98		02-Oct-98		02-Oct-98		29-Oct-98					
QC CODE								SA		SA		DU		SA		SA					
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1					
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N					
Trichloroethene	UG/KG	0	0%	700	0	0	11	12	U	12	U	11	U	11	U	12	U				
Vinyl chloride	UG/KG	0	0%	200	0	0	11	12	U	12	U	11	U	11	U	12	U				
1,2,4-Trichlorobenzene	UG/KG	11	9%	3400	0	1	11	89	UJ	84	U	72	U	11	J	76	U				
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	11	89	U	84	U	72	U	72	U	76	U				
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	11	89	U	84	U	72	U	72	U	76	U				
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	11	89	U	84	U	72	U	72	U	76	U				
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	1														
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	11	220	U	200	U	170	U	170	U	180	U				
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	UJ	76	U				
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	11	89	U	84	U	72	U	72	U	76	U				
2,4-Dimethylphenol	UG/KG	0	0%		0	0	11	89	UJ	84	UJ	72	UJ	72	UJ	76	UJ				
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	11	220	UJ	200	UJ	170	UR	170	UR	180	UJ				
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U				
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	11	89	U	84	U	72	U	72	U	76	U				
2-Chloronaphthalene	UG/KG	0	0%		0	0	11	89	U	84	UJ	72	U	72	UJ	76	U				
2-Chlorophenol	UG/KG	0	0%	800	0	0	11	89	U	84	U	72	U	72	U	76	U				
2-Methylnaphthalene	UG/KG	5.5	9%	36400	0	1	11	89	U	84	UJ	72	U	72	UJ	76	U				
2-Methylphenol	UG/KG	0	0%	100	0	0	11	89	U	84	U	72	U	72	U	76	U				
2-Nitroaniline	UG/KG	0	0%	430	0	0	11	220	U	200	U	170	U	170	U	180	U				
2-Nitrophenol	UG/KG	0	0%	330	0	0	11	89	U	84	U	72	UJ	72	U	76	U				
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	11	89	U	84	UJ	72	U	72	U	76	U				
3-Nitroaniline	UG/KG	0	0%	500	0	0	11	220	U	200	UJ	170	UJ	170	UJ	180	UJ				
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	11	220	U	200	U	170	UJ	170	UJ	180	UJ				
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U				
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	11	89	U	84	U	72	U	72	U	76	U				
4-Chloroaniline	UG/KG	0	0%	220	0	0	11	89	U	84	UJ	72	UJ	72	UJ	76	UJ				
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	UJ				
4-Methylphenol	UG/KG	0	0%	900	0	0	11	89	U	84	U	72	U	72	UJ	76	U				
4-Nitroaniline	UG/KG	0	0%		0	0	11	220	U	200	UJ	170	U	170	UJ	180	UJ				
4-Nitrophenol	UG/KG	0	0%	100	0	0	11	220	UJ	200	U	170	UJ	170	UJ	180	UJ				
Acenaphthene	UG/KG	0	0%	50000	0	0	11	89	U	84	U	72	U	72	U	76	U				

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA army DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-17		MW12-18		MW12-18		MW12-35	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123149		123152		123043		123037		123188	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		16-Oct-98		02-Oct-98		02-Oct-98		29-Oct-98	
QC CODE								SA		SA		DU		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Acenaphthylene	UG/KG	0	0%	41000	0	0	11	89	U	84	U	72	U	72	UJ	76	U
Anthracene	UG/KG	0	0%	50000	0	0	11	89	U	84	UJ	72	U	72	U	76	U
Benzo(a)anthracene	UG/KG	26	45%	224	0	5	11	89	U	84	U	8	J	5.7	J	9.3	J
Benzo(a)pyrene	UG/KG	20	55%	61	0	6	11	89	U	84	UJ	9.4	J	6.2	J	8.8	J
Benzo(b)fluoranthene	UG/KG	34	55%	1100	0	6	11	89	U	84	U	10	J	9	J	11	J
Benzo(ghi)perylene	UG/KG	11	18%	50000	0	2	11	89	U	84	U	11	J	72	U	6.6	J
Benzo(k)fluoranthene	UG/KG	20	55%	1100	0	6	11	89	U	84	U	11	J	7.5	J	9.2	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	10	89	U	84	U	72	U	72	U	76	U
Bis(2-Ethylhexyl)phthalate	UG/KG	36	27%	50000	0	3	11	36	J	84	U	72	U	9.9	J	76	UJ
Butylbenzylphthalate	UG/KG	5.9	9%	50000	0	1	11	89	U	84	U	72	UJ	72	UJ	76	UJ
Carbazole	UG/KG	0	0%		0	0	11	89	UJ	84	UJ	72	UJ	72	UJ	76	U
Chrysene	UG/KG	32	64%	400	0	7	11	9.2	J	84	U	11	J	7.5	J	13	J
Di-n-butylphthalate	UG/KG	4.5	27%	8100	0	3	11	610	UJ	84	U	72	UJ	4.1	J	76	U
Di-n-octylphthalate	UG/KG	15	36%	50000	0	4	11	89	U	15	J	7.4	J	15	J	76	U
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	11	89	U	84	U	72	U	72	U	78	UJ
Dibenzofuran	UG/KG	0	0%	6200	0	0	11	89	U	84	UJ	72	U	72	U	78	U
Diethyl phthalate	UG/KG	11	9%	7100	0	1	11	89	U	84	U	72	U	72	UJ	76	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	11	89	U	84	U	72	U	72	U	76	U
Fluoranthene	UG/KG	64	82%	50000	0	9	11	89	U	11	J	16	J	11	J	17	J
Fluorene	UG/KG	0	0%	50000	0	0	11	89	U	84	U	72	U	72	U	76	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	11	89	U	84	U	72	U	72	U	76	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	11	89	UJ	84	UJ	72	U	72	U	76	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	11	89	UJ	84	U	72	U	72	UJ	76	UJ
Hexachloroethane	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U
Indeno(1,2,3-cd)pyrene	UG/KG	7.5	36%	3200	0	4	11	89	U	84	U	7.5	J	4.8	J	5.8	J
Isophorone	UG/KG	0	0%	4400	0	0	11	89	U	84	UJ	72	UJ	72	U	76	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	11	89	U	84	U	72	U	72	U	76	U
Naphthalene	UG/KG	5.4	9%	13000	0	1	11	89	U	84	UJ	72	U	72	U	76	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-17		MW12-18		MW12-18		MW12-35	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123149		123152		123043		123037		123186	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		16-Oct-98		02-Oct-98		02-Oct-98		29-Oct-98	
QC CODE								SA		SA		DU		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N		N		N		N		N	
Nitrobenzene	UG/KG	0	0%	200	0	0	11	89	UJ	84	U	72	U	72	U	76	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	11	220	UJ	200	UR	170	U	170	UJ	180	U
Phenanthrene	UG/KG	34	64%	50000	0	7	11	12	J	84	U	8.2	J	8.2	J	8.8	J
Phenol	UG/KG	0	0%	30	0	0	11	89	U	84	U	72	U	72	U	76	U
Pyrene	UG/KG	51	82%	50000	0	9	11	89	U	8.9	J	14	J	13	J	17	J
4,4'-DDD	UG/KG	0	0%	2900	0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
4,4'-DDE	UG/KG	2	9%	2100	0	1	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
4,4'-DDT	UG/KG	4.2	9%	2100	0	1	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Aldrin	UG/KG	0	0%	41	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Aroclor-1016	UG/KG	0	0%		0	0	11	44	U	42	U	36	U	36	U	38	U
Aroclor-1221	UG/KG	0	0%		0	0	11	90	U	85	U	73	U	73	U	77	U
Aroclor-1232	UG/KG	0	0%		0	0	11	44	U	42	U	36	U	36	U	38	U
Aroclor-1242	UG/KG	17	9%		0	1	11	44	U	42	U	36	U	36	U	38	U
Aroclor-1248	UG/KG	0	0%		0	0	11	44	U	42	U	36	U	36	U	38	U
Aroclor-1254	UG/KG	23	9%	10000	0	1	11	44	U	42	U	36	U	36	U	38	U
Aroclor-1260	UG/KG	25	9%	10000	0	1	11	44	U	42	U	36	U	36	U	38	U
Beta-BHC	UG/KG	0	0%	200	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Endrin	UG/KG	0	0%	100	0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Endrin aldehyde	UG/KG	2.2	9%		0	1	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	11	4.4	U	4.2	U	3.6	U	3.6	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Heptachlor	UG/KG	0	0%	100	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	11	2.3	U	2.2	U	1.8	U	1.8	U	2	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-17		MW12-18		MW12-18		MW12-35	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123149		123152		123043		123037		123186	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		16-Oct-98		02-Oct-98		02-Oct-98		29-Oct-98	
QC CODE								SA		SA		DU		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Methoxychlor	UG/KG	0	0%		0	0	11	23	U	22	U	18	U	18	U	20	U
Toxaphene	UG/KG	0	0%		0	0	11	230	U	220	U	180	U	180	U	200	U
Aluminum	MG/KG	13600	100%	19520	0	11	11	13600		11600	J	7580		8220		10300	
Antimony	MG/KG	1.2	9%	6	0	1	11	1.2	UR	1.4	UR	1.1	UR	1.2	J	1.2	UR
Arsenic	MG/KG	6.6	100%	8.9	0	11	11	3.9		4.3		3.7		4.5		4.2	
Barium	MG/KG	102	100%	300	0	11	11	95.4		86.5	J	58.1		63.5		76.4	
Beryllium	MG/KG	0.56	100%	1.13	0	11	11	0.5	J	0.56	J	0.23	J	0.32	J	0.54	J
Cadmium	MG/KG	0.63	9%	2.46	0	1	11	0.06	U	0.07	U	0.05	U	0.06	U	0.36	U
Calcium	MG/KG	116000	100%	125300	0	11	11	8330		4870		88500	J	68900	J	45600	
Chromium	MG/KG	17.3	100%	30	0	11	11	17.3		15.4		9.4	J	13.5		15.7	J
Cobalt	MG/KG	10.4	100%	30	0	11	11	9.1	J	8.6	J	8.6	J	8.6	J	9.7	J
Copper	MG/KG	30.4	100%	33	0	11	11	22.8		16.9		19.3		21.2		23.8	
Cyanide	MG/KG	0	0%	0.35	0	0	11	0.7	U	0.65	U	0.54	U	0.55	UJ	0.65	U
Iron	MG/KG	23400	100%	37410	0	11	11	20500		21500	J	15900		17400		20600	
Lead	MG/KG	20.5	100%	24.4	0	11	11	20.5		15.7	J	8.5	J	7.7		8.9	J
Magnesium	MG/KG	23800	100%	21700	1	11	11	4290		3640	J	13000		12900		9060	
Manganese	MG/KG	551	100%	1100	0	11	11	551		445		517	J	409		431	
Mercury	MG/KG	0.04	9%	0.1	0	1	11	0.07	U	0.06	U	0.05	UJ	0.05	U	0.05	U
Nickel	MG/KG	30.3	91%	50	0	10	11	23.3		20.8	J	21.4	J	24.4		25.4	UJ
Potassium	MG/KG	1870	100%	2623	0	11	11	1770		1010	J	1600		1530		1510	
Selenium	MG/KG	1.3	27%	2	0	3	11	0.91	UJ	1.1	UJ	0.41	U	0.86	U	0.68	J
Silver	MG/KG	0.39	18%	0.8	0	2	11	0.24	U	0.28	U	0.27	J	0.22	U	0.39	J
Sodium	MG/KG	276	64%	188	3	7	11	49.6	U	59.7	U	[redacted]	J	[redacted]	J	49.8	U
Thallium	MG/KG	2	36%	0.855	3	4	11	[redacted]	J	1.2	U	0.92	UJ	1.3	U	[redacted]	J
Vanadium	MG/KG	22.8	100%	150	0	11	11	22.8		19.9		14.5		15.6		18.7	
Zinc	MG/KG	72.5	100%	115	0	11	11	72.5		47	J	40.6	J	52.2		60.3	J

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-8		MW12B-1		SB12-5A		SS12-144		SS12-145	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123155		MW12B-1-00		123096		123339		123340	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		13-Jun-94		14-Oct-98		17-Nov-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	11	12	U	11	U	11	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	11	12	U	11	U	11	U	12	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	11	12	U	11	U	11	U	12	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	11	12	U	11	U	11	U	12	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	11	12	U	11	U	11	U	12	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Acetone	UG/KG	7	9%	200	0	1	11	12	U	11	U	11	U	7	J	11	U
Benzene	UG/KG	0	0%	60	0	0	11	12	U	11	U	11	U	12	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Bromoform	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	11	12	U	11	U	11	U	12	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	11	12	U	11	U	11	U	12	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	11	12	U	11	U	11	U	12	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	11	12	U	11	U	11	U	12	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	11	12	U	11	U	11	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	11	12	U	11	U	11	U	12	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	11	12	U	11	U	11	U	12	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	11	12	U	11	U	11	U	12	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	11	12	U	11	U	11	U	12	U	11	U
Styrene	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	11	12	U	11	U	11	U	12	U	11	U
Toluene	UG/KG	26	18%	1500	0	2	11	12	U	11	U	11	U	12	U	11	U
Total Xylenes	UG/KG	0	0%	1200	0	0	11	12	U	11	U	11	U	12	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	12	U	11	U	11	U	12	U	11	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-9		MW12B-1		SB12-5A		SS12-144		SS12-145	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123155		MW12B-1-00		123096		123339		123340	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		13-Jun-94		14-Oct-98		17-Nov-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Trichloroethene	UG/KG	0	0%	700	0	0	11	12	U	11	U	11	U	12	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	11	12	U	11	U	11	U	12	U	11	U
1,2,4-Trichlorobenzene	UG/KG	11	9%	3400	0	1	11	82	U	360	U	75	U	77	U	73	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	11	82	U	360	U	75	U	77	U	73	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	11	82	U	360	U	75	U	77	U	73	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	11	82	U	360	U	75	U	77	U	73	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	1			360	U						
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	11	200	U	880	U	180	U	190	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	11	82	U	360	U	75	U	77	U	73	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	11	82	UJ	360	U	75	UJ	77	UJ	73	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	11	200	UJ	880	U	180	U	190	UR	180	UR
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	11	82	U	360	U	75	U	77	U	73	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	11	82	U	360	U	75	U	77	U	73	U
2-Methylnaphthalene	UG/KG	5.5	9%	36400	0	1	11	82	U	360	U	5.5	J	77	U	73	U
2-Methylphenol	UG/KG	0	0%	100	0	0	11	82	U	360	U	75	U	77	U	73	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	11	200	U	880	U	180	U	190	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	11	82	U	360	U	75	UJ	77	U	73	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	UJ	73	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	11	200	U	880	U	180	U	190	U	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	11	200	U	880	U	180	U	190	UJ	180	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	11	82	U	360	U	75	U	77	U	73	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	11	82	U	360	U	75	UJ	77	UJ	73	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U
4-Methylphenol	UG/KG	0	0%	900	0	0	11	82	U	360	U	75	U	77	U	73	U
4-Nitroaniline	UG/KG	0	0%		0	0	11	200	UJ	880	U	180	U	190	U	180	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	11	200	UJ	880	U	180	U	190	U	180	U
Acenaphthene	UG/KG	0	0%	50000	0	0	11	82	U	360	U	75	U	77	U	73	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12			
LOCATION ID								MW12-9		MW12B-1		SB12-5A		SS12-144		SS12-145			
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL			
SAMPLE ID								123155		MW12B-1-00		123096		123339		123340			
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0			
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2			
SAMPLE DATE								17-Oct-98		13-Jun-94		14-Oct-98		17-Nov-98		17-Nov-98			
QC CODE								SA		SA		SA		SA		SA			
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1			
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N			
Acenaphthylene	UG/KG	0	0%	41000	0	0	11	82	U	360	U	75	U	77	U	73	U		
Anthracene	UG/KG	0	0%	50000	0	0	11	82	U	360	U	75	U	77	U	73	U		
Benzo(a)anthracene	UG/KG	26	45%	224	0	5	11	82	U	26	J	8.3	J	77	U	73	U		
Benzo(a)pyrene	UG/KG	20	55%	61	0	6	11	82	U	20	J	7.7	J	3.9	J	73	U		
Benzo(b)fluoranthene	UG/KG	34	55%	1100	0	6	11	82	U	34	J	9.9	J	5.6	J	73	U		
Benzo(ghi)perylene	UG/KG	11	18%	50000	0	2	11	82	U	360	U	75	UJ	77	U	73	U		
Benzo(k)fluoranthene	UG/KG	20	55%	1100	0	6	11	82	U	20	J	9.8	J	3.9	J	73	U		
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U		
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	UJ	73	UJ		
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	10	82	U			75	U	77	U	73	U		
Bis(2-Ethylhexyl)phthalate	UG/KG	38	27%	50000	0	3	11	11	J	360	U	75	UJ	77	UJ	73	UJ		
Butylbenzylphthalate	UG/KG	5.9	9%	50000	0	1	11	5.9	J	360	U	75	UJ	77	UJ	73	UJ		
Carbazole	UG/KG	0	0%		0	0	11	82	U	360	U	75	UJ	77	UJ	73	UJ		
Chrysene	UG/KG	32	64%	400	0	7	11	82	U	32	J	14	J	6.1	J	73	UJ		
Di-n-butylphthalate	UG/KG	4.5	27%	8100	0	3	11	570	UJ	360	U	75	UJ	4.1	J	4.5	J		
Di-n-octylphthalate	UG/KG	15	36%	50000	0	4	11	82	U	360	U	9.8	J	77	UJ	73	UJ		
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	11	82	U	360	U	75	UJ	77	U	73	U		
Dibenzofuran	UG/KG	0	0%	6200	0	0	11	82	U	360	U	75	U	77	U	73	U		
Diethyl phthalate	UG/KG	11	9%	7100	0	1	11	82	U	360	U	11	J	77	U	73	U		
Dimethylphthalate	UG/KG	0	0%	2000	0	0	11	82	U	360	U	75	U	77	U	73	U		
Fluoranthene	UG/KG	64	82%	50000	0	9	11	5.6	J	64	J	16	J	8.5	J	3.9	J		
Fluorene	UG/KG	0	0%	50000	0	0	11	82	U	360	U	75	U	77	U	73	U		
Hexachlorobenzene	UG/KG	0	0%	410	0	0	11	82	U	360	U	75	U	77	U	73	U		
Hexachlorobutadiene	UG/KG	0	0%		0	0	11	82	U	360	U	75	UJ	77	U	73	U		
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	UJ	73	UJ		
Hexachloroethane	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U		
Indeno(1,2,3-cd)pyrene	UG/KG	7.5	36%	3200	0	4	11	82	U	360	U	5.2	J	77	U	73	U		
Isophorone	UG/KG	0	0%	4400	0	0	11	82	U	360	U	75	U	77	U	73	U		
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U		
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	11	82	U	360	U	75	U	77	U	73	U		
Naphthalene	UG/KG	5.4	9%	13000	0	1	11	82	U	360	U	5.4	J	77	U	73	U		

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-9		MW12B-1		SB12-5A		SS12-144		SS12-145	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123155		MW12B-1-00		123096		123339		123340	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		13-Jun-94		14-Oct-98		17-Nov-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Nitrobenzene	UG/KG	0	0%	200	0	0	11	82	U	360	U	75	U	77	U	73	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	11	200	U	880	U	180	UJ	190	UR	180	UR
Phenanthrene	UG/KG	34	64%	50000	0	7	11	82	U	34	J	14	J	6.7	J	73	U
Phenol	UG/KG	0	0%	30	0	0	11	82	U	360	U	75	U	77	U	73	U
Pyrene	UG/KG	51	82%	50000	0	9	11	5.2	J	51	J	20	J	9.2	J	4.6	J
4,4'-DDD	UG/KG	0	0%	2900	0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
4,4'-DDE	UG/KG	2	9%	2100	0	1	11	4.1	U	2	J	3.8	U	3.8	U	3.7	U
4,4'-DDT	UG/KG	4.2	9%	2100	0	1	11	4.1	U	3.6	U	3.8	U	4.2		3.7	U
Aldrin	UG/KG	0	0%	41	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Alpha-Chlordane	UG/KG	0	0%		0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Aroclor-1016	UG/KG	0	0%		0	0	11	41	U	36	U	38	U	38	U	37	U
Aroclor-1221	UG/KG	0	0%		0	0	11	84	U	74	U	76	U	78	U	74	U
Aroclor-1232	UG/KG	0	0%		0	0	11	41	U	36	U	38	U	38	U	37	U
Aroclor-1242	UG/KG	17	9%		0	1	11	41	U	17	J	38	U	38	U	37	U
Aroclor-1248	UG/KG	0	0%		0	0	11	41	U	36	U	38	U	38	U	37	U
Aroclor-1254	UG/KG	23	9%	10000	0	1	11	41	U	36	U	38	U	23	J	37	U
Aroclor-1260	UG/KG	25	9%	10000	0	1	11	41	U	36	U	38	U	25	J	37	U
Beta-BHC	UG/KG	0	0%	200	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
Endosulfan I	UG/KG	0	0%	900	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
Endrin	UG/KG	0	0%	100	0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
Endrin aldehyde	UG/KG	2.2	9%		0	1	11	4.1	U	3.6	U	3.8	U	2.2	J	3.7	U
Endrin ketone	UG/KG	0	0%		0	0	11	4.1	U	3.6	U	3.8	U	3.8	U	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Heptachlor	UG/KG	0	0%	100	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	11	2.1	U	1.9	U	1.9	U	2	U	1.9	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-9		MW12B-1		SB12-5A		SS12-144		SS12-145	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123155		MW12B-1-00		123096		123339		123340	
SAMPLE DEPTH TOP OF SAMPLE								0		0		0		0		0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2		0.2		0.2		0.2		0.2	
SAMPLE DATE								17-Oct-98		13-Jun-94		14-Oct-98		17-Nov-98		17-Nov-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N		N		N		N		N	
Methoxychlor	UG/KG	0	0%		0	0	11	21	U	19	U	19	U	20	U	19	U
Toxaphene	UG/KG	0	0%		0	0	11	210	U	190	U	190	U	200	U	190	U
Aluminum	MG/KG	13600	100%	19520	0	11	11	11800		10800		6760	J	7700	J	7840	J
Antimony	MG/KG	1.2	9%	6	0	1	11	1.2	UR	0.23	UJ	1	UR	0.96	UR	1.2	UR
Arsenic	MG/KG	6.6	100%	8.9	0	11	11	4.4		6.6		5.2	J	3.1		3.3	
Barium	MG/KG	102	100%	300	0	11	11	63.1		102		77.9		56.2		74.9	
Beryllium	MG/KG	0.56	100%	1.13	0	11	11	0.43	J	0.53	J	0.28	J	0.3	J	0.36	J
Cadmium	MG/KG	0.63	9%	2.46	0	1	11	0.06	U	0.63	J	0.05	U	0.28	U	0.36	U
Calcium	MG/KG	116000	100%	125300	0	11	11	2820		45900		72100	J	95600		116000	
Chromium	MG/KG	17.3	100%	30	0	11	11	15.4		16		12.3		12.8		14.2	
Cobalt	MG/KG	10.4	100%	30	0	11	11	9.6	J	9.2		10.4	J	6.7	J	5.2	J
Copper	MG/KG	30.4	100%	33	0	11	11	15.9		30.4		20.7		18.3		20.6	
Cyanide	MG/KG	0	0%	0.35	0	0	11	0.66	U	0.5	U	0.61	U	0.6	U	0.58	U
Iron	MG/KG	23400	100%	37410	0	11	11	20100		23400		20600		16700	J	17700	J
Lead	MG/KG	20.5	100%	24.4	0	11	11	14	J	17.1		14.7	J	10.5	J	9.2	J
Magnesium	MG/KG	23800	100%	21700	1	11	11	3280		11400		10900	J	[redacted]		11400	
Manganese	MG/KG	551	100%	1100	0	11	11	469		418		392		393		374	
Mercury	MG/KG	0.04	9%	0.1	0	1	11	0.06	U	0.04	J	0.06	U	0.05	U	0.05	U
Nickel	MG/KG	30.3	91%	50	0	10	11	19.3		28		30.3	J	20.7		21.2	
Potassium	MG/KG	1870	100%	2623	0	11	11	1030		1870	J	932		1560		1500	
Selenium	MG/KG	1.3	27%	2	0	3	11	0.91	UJ	1.3		0.77	U	0.45	J	0.45	UJ
Silver	MG/KG	0.39	18%	0.8	0	2	11	0.24	U	0.09	U	0.2	U	0.19	U	0.24	U
Sodium	MG/KG	276	64%	188	3	7	11	49.9	U	76.2	J	97.5	J	96	J	[redacted]	J
Thallium	MG/KG	2	36%	0.855	3	4	11	1	U	0.41	J	[redacted]	J	0.82	U	1	U
Vanadium	MG/KG	22.8	100%	150	0	11	11	19.5		20.9		12.8		14.6		13.9	
Zinc	MG/KG	72.5	100%	115	0	11	11	48		62.7		59.2	J	42.7	J	44.2	J

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12	
LOCATION ID								SS12-146	
MATRIX								SOIL	
SAMPLE ID								123341	
SAMPLE DEPTH TOP OF SAMPLE								0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2	
SAMPLE DATE								17-Nov-98	
QC CODE								SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	11	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	11	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	11	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	11	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	11	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	11	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	11	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	11	11	U
Acetone	UG/KG	7	9%	200	0	1	11	11	U
Benzene	UG/KG	0	0%	60	0	0	11	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	11	11	U
Bromoform	UG/KG	0	0%		0	0	11	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	11	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	11	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	11	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	11	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	11	11	U
Chloroform	UG/KG	0	0%	300	0	0	11	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	11	11	U
Methyl bromide	UG/KG	0	0%		0	0	11	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	11	11	U
Methyl chloride	UG/KG	0	0%		0	0	11	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	11	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	11	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	11	11	U
Styrene	UG/KG	0	0%		0	0	11	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	11	11	U
Toluene	UG/KG	26	18%	1500	0	2	11	11	U
Total Xylenes	UG/KG	0	0%	1200	0	0	11	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	11	11	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12	
LOCATION ID								SS12-146	
MATRIX								SOIL	
SAMPLE ID								123341	
SAMPLE DEPTH TOP OF SAMPLE								0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2	
SAMPLE DATE								17-Nov-98	
QC CODE								SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N	
Trichloroethene	UG/KG	0	0%	700	0	0	11	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	11	11	U
1,2,4-Trichlorobenzene	UG/KG	11	9%	3400	0	1	11	73	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	11	73	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	11	73	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	11	73	U
2,2'-oxybis(1-Chloropropane)	UG/KG	0	0%		0	0	1		
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	11	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	11	73	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	11	73	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	11	73	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	11	180	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	11	73	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	11	73	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	11	73	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	11	73	U
2-Methylnaphthalene	UG/KG	5.5	9%	36400	0	1	11	73	U
2-Methylphenol	UG/KG	0	0%	100	0	0	11	73	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	11	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	11	73	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	11	73	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	11	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	11	180	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	11	73	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	11	73	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	11	73	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	11	73	U
4-Methylphenol	UG/KG	0	0%	900	0	0	11	73	U
4-Nitroaniline	UG/KG	0	0%		0	0	11	180	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	11	180	U
Acenaphthene	UG/KG	0	0%	50000	0	0	11	73	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12	
LOCATION ID								SS12-146	
MATRIX								SOIL	
SAMPLE ID								123341	
SAMPLE DEPTH TOP OF SAMPLE								0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2	
SAMPLE DATE								17-Nov-98	
QC CODE								SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES	N	
Acenaphthylene	UG/KG	0	0%	41000	0	0	11	73	U
Anthracene	UG/KG	0	0%	50000	0	0	11	73	U
Benzo(a)anthracene	UG/KG	26	45%	224	0	5	11	73	U
Benzo(a)pyrene	UG/KG	20	55%	61	0	6	11	73	U
Benzo(b)fluoranthene	UG/KG	34	55%	1100	0	6	11	73	U
Benzo(ghi)perylene	UG/KG	11	18%	50000	0	2	11	73	U
Benzo(k)fluoranthene	UG/KG	20	55%	1100	0	6	11	73	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	11	73	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	11	73	UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	10	73	U
Bis(2-Ethylhexyl)phthalate	UG/KG	36	27%	50000	0	3	11	73	UJ
Butylbenzylphthalate	UG/KG	5.9	9%	50000	0	1	11	73	UJ
Carbazole	UG/KG	0	0%		0	0	11	73	UJ
Chrysene	UG/KG	32	64%	400	0	7	11	73	UJ
Di-n-butylphthalate	UG/KG	4.5	27%	8100	0	3	11	73	U
Di-n-octylphthalate	UG/KG	15	36%	50000	0	4	11	73	UJ
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	11	73	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	11	73	U
Diethyl phthalate	UG/KG	11	9%	7100	0	1	11	73	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	11	73	U
Fluoranthene	UG/KG	64	82%	50000	0	9	11	73	U
Fluorene	UG/KG	0	0%	50000	0	0	11	73	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	11	73	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	11	73	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	11	73	UJ
Hexachloroethane	UG/KG	0	0%		0	0	11	73	U
Indeno(1,2,3-cd)pyrene	UG/KG	7.5	36%	3200	0	4	11	73	U
Isophorone	UG/KG	0	0%	4400	0	0	11	73	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	11	73	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	11	73	U
Naphthalene	UG/KG	5.4	9%	13000	0	1	11	73	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12	
LOCATION ID								SS12-146	
MATRIX								SOIL	
SAMPLE ID								123341	
SAMPLE DEPTH TOP OF SAMPLE								0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2	
SAMPLE DATE								17-Nov-98	
QC CODE								SA	
STUDY ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF		
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N	
Nitrobenzene	UG/KG	0	0%	200	0	0	11	73	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	11	180	UR
Phenanthrene	UG/KG	34	64%	50000	0	7	11	73	U
Phenol	UG/KG	0	0%	30	0	0	11	73	U
Pyrene	UG/KG	51	82%	50000	0	9	11	73	U
4,4'-DDD	UG/KG	0	0%	2900	0	0	11	3.7	U
4,4'-DDE	UG/KG	2	9%	2100	0	1	11	3.7	U
4,4'-DDT	UG/KG	4.2	9%	2100	0	1	11	3.7	U
Aldrin	UG/KG	0	0%	41	0	0	11	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	11	1.9	U
Alpha-Chlordane	UG/KG	0	0%		0	0	11	1.9	U
Aroclor-1016	UG/KG	0	0%		0	0	11	37	U
Aroclor-1221	UG/KG	0	0%		0	0	11	74	U
Aroclor-1232	UG/KG	0	0%		0	0	11	37	U
Aroclor-1242	UG/KG	17	9%		0	1	11	37	U
Aroclor-1248	UG/KG	0	0%		0	0	11	37	U
Aroclor-1254	UG/KG	23	9%	10000	0	1	11	37	U
Aroclor-1260	UG/KG	25	9%	10000	0	1	11	37	U
Beta-BHC	UG/KG	0	0%	200	0	0	11	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	11	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	11	3.7	U
Endosulfan I	UG/KG	0	0%	900	0	0	11	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	11	3.7	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	11	3.7	U
Endrin	UG/KG	0	0%	100	0	0	11	3.7	U
Endrin aldehyde	UG/KG	2.2	9%		0	1	11	3.7	U
Endrin ketone	UG/KG	0	0%		0	0	11	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	11	1.9	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	11	1.9	U
Heptachlor	UG/KG	0	0%	100	0	0	11	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	11	1.9	U

TABLE G-10
FORMER DRY WASTE DISPOSAL PIT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12	
LOCATION ID								SS12-146	
MATRIX								SOIL	
SAMPLE ID								123341	
SAMPLE DEPTH TOP OF SAMPLE								0	
SAMPLE DEPTH BOTTOM OF SAMPLE								0.2	
SAMPLE DATE								17-Nov-98	
QC CODE								SA	
STUDY ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI PHASE 1 STEP 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES	N	
Methoxychlor	UG/KG	0	0%		0	0	11	19	U
Toxaphene	UG/KG	0	0%		0	0	11	190	U
Aluminum	MG/KG	13600	100%	19520	0	11	11	8140	J
Antimony	MG/KG	1.2	9%	6	0	1	11	1.1	UR
Arsenic	MG/KG	6.6	100%	8.9	0	11	11	3.7	J
Barium	MG/KG	102	100%	300	0	11	11	53.8	
Beryllium	MG/KG	0.56	100%	1.13	0	11	11	0.32	J
Cadmium	MG/KG	0.63	9%	2.46	0	1	11	0.32	U
Calcium	MG/KG	116000	100%	125300	0	11	11	96600	
Chromium	MG/KG	17.3	100%	30	0	11	11	13.3	
Cobalt	MG/KG	10.4	100%	30	0	11	11	7.5	J
Copper	MG/KG	30.4	100%	33	0	11	11	19.9	
Cyanide	MG/KG	0	0%	0.35	0	0	11	0.58	U
Iron	MG/KG	23400	100%	37410	0	11	11	17300	J
Lead	MG/KG	20.5	100%	24.4	0	11	11	8.8	
Magnesium	MG/KG	23800	100%	21700	1	11	11	11800	
Manganese	MG/KG	551	100%	1100	0	11	11	395	
Mercury	MG/KG	0.04	9%	0.1	0	1	11	0.05	U
Nickel	MG/KG	30.3	91%	50	0	10	11	23.2	
Potassium	MG/KG	1870	100%	2623	0	11	11	1650	
Selenium	MG/KG	1.3	27%	2	0	3	11	0.41	UJ
Silver	MG/KG	0.39	18%	0.8	0	2	11	0.21	U
Sodium	MG/KG	276	64%	188	3	7	11	126	J
Thallium	MG/KG	2	36%	0.855	3	4	11	0.93	U
Vanadium	MG/KG	22.8	100%	150	0	11	11	14.9	
Zinc	MG/KG	72.5	100%	115	0	11	11	48.9	J

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-16		MW12-17		MW12-17		MW12-18	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123150		123151		123153		123154		123038	
SAMPLE DEPTH TO TOP OF SAMPLE								4		6		6		10		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		8		8		12		8	
SAMPLE DATE								17-Oct-98		17-Oct-98		16-Oct-98		16-Oct-98		02-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																	
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	11	U	11	UJ	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	UJ	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Acetone	UG/K	98	39%	200	0	15	38	11	U	11	U	11	UJ	19	J	11	UJ
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	11	U	11	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	U	11	U	11	U	11	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	11	UJ	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	11	UJ	11	UJ	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	11	U	11	U	11	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Toluene	UG/K	15	24%	1500	0	9	38	11	U	11	U	15		11	UJ	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	UJ	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	11	U	11	UJ	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U
Semi-Volatile Organics																	
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	72	U	69	U	72	U	72	U	71	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	72	U	69	U	72	U	72	U	71	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	72	U	69	U	72	U	72	U	71	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	72	U	69	U	72	U	72	U	71	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8										
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	170	U	170	U	180	U	170	U	170	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	UJ
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	72	U	69	U	72	U	72	U	71	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	72	UJ	69	UJ	72	UJ	72	UJ	71	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-16		MW12-17		MW12-17		MW12-18	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123150		123151		123153		123154		123038	
SAMPLE DEPTH TO TOP OF SAMPLE								4		6		6		10		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		8		8		12		8	
SAMPLE DATE								17-Oct-98		17-Oct-98		16-Oct-98		16-Oct-98		02-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	170	UJ	170	UJ	180	UJ	170	UJ	170	UR
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	72	U	69	U	72	U	72	U	71	U
2-Chloronaphthalene	UG/K	0	0%		0	0	38	72	U	69	U	72	UJ	72	UJ	71	UJ
2-Chlorophenol	UG/K	0	0%	800	0	0	38	72	U	69	U	72	U	72	U	71	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	72	U	69	U	72	UJ	72	UJ	71	UJ
2-Methylphenol	UG/K	0	0%	100	0	0	38	72	U	69	U	72	U	72	U	71	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	170	U	170	UJ	180	UJ	170	U	170	U
2-Nitrophenol	UG/K	0	0%	330	0	0	38	72	U	69	UJ	72	U	72	U	71	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
3-Nitroaniline	UG/K	0	0%	500	0	0	38	170	U	170	U	180	UJ	170	UJ	170	UJ
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	170	U	170	U	180	U	170	U	170	UJ
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	72	U	69	U	72	U	72	U	71	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	72	U	69	U	72	U	72	U	71	UJ
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	72	U	69	U	72	U	72	U	71	UJ
4-Nitroaniline	UG/K	0	0%		0	0	38	170	UJ	170	UJ	180	UJ	170	UJ	170	UJ
4-Nitrophenol	UG/K	0	0%	100	0	0	38	170	UJ	170	UJ	180	U	170	U	170	UJ
Acenaphthene	UG/K	0	0%	50000	0	0	38	72	U	69	U	72	U	72	U	71	U
Acenaphthylene	UG/K	0	0%	41000	0	0	38	72	U	69	U	72	U	72	U	71	UJ
Anthracene	UG/K	0	0%	50000	0	0	38	72	U	69	U	72	UJ	72	UJ	71	U
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	5.8	J	69	U	72	U	72	U	71	U
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	5.4	J	69	U	72	UJ	72	UJ	71	U
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	6	J	69	U	72	U	72	U	5	J
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	5.2	J	69	U	72	U	72	U	71	U
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	6	J	69	U	72	U	72	U	71	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	72	U	69	U	72	U	72	U	71	U
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	29	J	31	J	130	U	110	U	14	J
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	72	U	7.2	J	72	U	72	U	71	UJ
Carbazole	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	UJ
Chrysene	UG/K	15	18%	400	0	7	38	8.3	J	69	U	72	U	72	U	4.9	J
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	500	UJ	610	UJ	72	U	72	U	9.2	J
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	4	J	69	U	11	J	34	J	14	J
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	72	U	69	U	72	U	72	U	71	U
Dibenzofuran	UG/K	0	0%	6200	0	0	38	72	U	69	U	72	UJ	72	UJ	71	U
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	72	U	69	U	72	U	72	U	71	UJ
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	72	U	69	U	72	U	72	U	71	U
Fluoranthene	UG/K	18	11%	50000	0	4	38	13	J	69	U	72	U	72	U	71	U
Fluorene	UG/K	0	0%	50000	0	0	38	72	U	69	U	72	U	72	U	71	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	72	U	69	U	72	U	72	U	71	U
Hexachlorobutadiene	UG/K	0	0%		0	0	38	72	U	69	U	72	UJ	72	UJ	71	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-16		MW12-17		MW12-17		MW12-18	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123150		123151		123153		123154		123038	
SAMPLE DEPTH TO TOP OF SAMPLE								4		6		6		10		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		8		8		12		8	
SAMPLE DATE								17-Oct-98		17-Oct-98		16-Oct-98		16 Oct-98		02-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	UJ
Hexachloroethane	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	4.2	J	69	U	72	U	72	U	71	U
Isophorone	UG/K	0	0%	4400	0	0	38	72	U	69	U	72	UJ	72	UJ	71	U
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	72	U	69	U	72	U	72	U	71	U
Naphthalene	UG/K	0	0%	13000	0	0	38	72	U	69	U	72	UJ	72	UJ	71	U
Nitrobenzene	UG/K	0	0%	200	0	0	38	72	U	69	U	72	U	72	U	71	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	170	U	170	U	180	UR	170	UR	170	UJ
Phenanthrene	UG/K	13	16%	50000	0	6	38	9.2	J	69	U	72	U	72	U	4.5	J
Phenol	UG/K	0	0%	30	0	0	38	72	U	69	U	72	U	72	U	71	U
Pyrene	UG/K	20	13%	50000	0	5	38	12	J	69	U	72	U	72	U	71	U
Pesticides/ PCBs																	
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Aldrin	UG/K	0	0%	41	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Aroclor-1016	UG/K	0	0%		0	0	38	35	U	35	U	36	U	36	U	35	U
Aroclor-1221	UG/K	0	0%		0	0	38	72	U	70	U	73	U	73	U	72	U
Aroclor-1232	UG/K	0	0%		0	0	38	35	U	35	U	36	U	36	U	35	U
Aroclor-1242	UG/K	16	3%		0	1	38	35	U	35	U	36	U	36	U	35	U
Aroclor-1248	UG/K	0	0%		0	0	38	35	U	35	U	36	U	36	U	35	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	35	U	35	U	36	U	36	U	35	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	35	U	35	U	36	U	36	U	35	U
Beta-BHC	UG/K	0	0%	200	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Delta-BHC	UG/K	0	0%	300	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Endosulfan I	UG/K	0	0%	900	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Endrin	UG/K	0	0%	100	0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Endrin ketone	UG/K	0	0%		0	0	38	3.5	U	3.5	U	3.6	U	3.6	U	3.5	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Heptachlor	UG/K	0	0%	100	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U
Methoxychlor	UG/K	0	0%		0	0	38	18	U	18	U	19	U	18	U	18	U
Toxaphene	UG/K	0	0%		0	0	38	180	U	180	U	190	U	180	U	180	U
Metals																	
Aluminum	MG/K	14500	100%	19520	0	38	38	9510		7620		7390	J	6630	J	7240	
Antimony	MG/K	0.67	3%	6	0	1	38	1.1	UR	1	UR	1.2	UR	1.1	UR	0.98	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-16		MW12-16		MW12-17		MW12-17		MW12-18	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123150		123151		123153		123154		123038	
SAMPLE DEPTH TO TOP OF SAMPLE								4		6		6		10		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		8		8		12		8	
SAMPLE DATE								17-Oct-98		17-Oct-98		16-Oct-98		16-Oct-98		02-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	3.8		3.3		4.6		3.3		3.5	
Barium	MG/K	138	100%	300	0	38	38	65.2		66.9		87.3	J	89.6	J	82	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.34	J	0.31	J	0.3	J	0.26	J	0.31	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.05	U	0.06	U	0.05	U	0.05	U
Calcium	MG/K	132000	100%	125300	1	38	38	83800		80000		69200		95600		75900	J
Chromium	MG/K	20.8	100%	30	0	38	38	14.7		13.1		10.8		11.2		13.3	
Cobalt	MG/K	14.5	100%	30	0	38	38	11.5		7.3	J	10.3		8	J	9.7	
Copper	MG/K	41.1	100%	33	4	38	38	21.2		18.3		18.3		17.5		23.6	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.56	U	0.53	U	0.56	U	0.53	U	0.56	UJ
Iron	MG/K	41100	100%	37410	1	38	38	18800		17200		15000	J	16000	J	18300	
Lead	MG/K	16.4	100%	24.4	0	38	38	8.4		7.8	J	7.7	J	8	J	6.9	J
Magnesium	MG/K	34200	100%	21700	2	38	38	12000		10700		14600	J	16800	J	14600	
Manganese	MG/K	596	100%	1100	0	38	38	473		363		410		407		392	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.05	U	0.07	J	0.05	U	0.05	U	0.05	U
Nickel	MG/K	50.9	92%	50	1	35	38	28.8		23.8		20.6	J	22.4	J	30	
Potassium	MG/K	2330	100%	2623	0	38	38	1520		1170		1280		1240		1170	
Selenium	MG/K	2.5	18%	2	2	7	38	0.85	UJ	0.77	UJ	0.92	UJ	0.9	J	0.72	UJ
Silver	MG/K	0.27	8%	0.8	0	3	38	0.22	U	0.2	U	0.24	U	0.22	U	0.19	J
Sodium	MG/K	252	71%	188	2	27	38	111	J	97.2	J	50.6	U	54.9	J	129	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	[redacted]	J	0.87	U	1	U	0.94	U	1.2	U
Vanadium	MG/K	23.8	100%	150	0	38	38	16.5		12.7		13.5		11.8		12.9	
Zinc	MG/K	142	100%	115	1	38	38	52.4		41		44	J	35.7	J	42.6	

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-18		MW12-35		MW12-35		MW12-9		MW12-9		MW12B-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123039		123187		123188		123156		123157		MW12B-1-20	
SAMPLE DEPTH TO TOP OF SAMPLE								10		10		14		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		12		15.5		8		12		6	
SAMPLE DATE								02-Oct-98		29-Oct-98		29-Oct-98		17-Oct-98		17-Oct-98		13-Jun-94	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																			
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	8	J	30	U	12	U	11	U	12		11	U
Benzene	UG/K	2	3%	60	0	1	38	11	U	12	U	12	U	11	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	12	U	12	U	11	U	11	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	12	U	12	U	11	U	11	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	4	J	12	U	12	U	11	U	11	U	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	UJ	12	U	12	U	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Semi-Volatile Organics																			
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	78	U	78	U	75	U	72	U	74	UJ	360	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8											360	U
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	190	U	190	U	180	U	170	U	180	U	870	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	78	UJ	78	U	75	U	72	U	74	U	360	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	78	UJ	78	UJ	75	UJ	72	UJ	74	UJ	360	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-18		MW12-35		MW12-35		MW12-9		MW12-9		MW12B-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123039		123187		123188		123156		123157		MW12B-1-20	
SAMPLE DEPTH TO TOP OF SAMPLE								10		10		14		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		12		15.5		8		12		6	
SAMPLE DATE								02-Oct-98		29-Oct-98		29-Oct-98		17-Oct-98		17-Oct-98		13-Jun-94	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	190	UR	190	UJ	180	UJ	170	UJ	180	UJ	870	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2-Chloronaphthalene	UG/K	0	0%		0	0	38	78	UJ	78	U	75	U	72	U	74	U	360	U
2-Chlorophenol	UG/K	0	0%	800	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	78	UJ	78	U	75	U	72	U	74	U	360	U
2-Methylphenol	UG/K	0	0%	100	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	190	U	190	U	180	U	170	U	180	U	870	U
2-Nitrophenol	UG/K	0	0%	330	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
3-Nitroaniline	UG/K	0	0%	500	0	0	38	190	UJ	190	UJ	180	UJ	170	U	180	U	870	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	190	UJ	190	UJ	180	UJ	170	U	180	U	870	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	78	UJ	78	UJ	75	UJ	72	U	74	U	360	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	78	U	78	UJ	75	UJ	72	U	74	U	360	U
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	78	UJ	78	U	75	U	72	U	74	U	360	U
4-Nitroaniline	UG/K	0	0%		0	0	38	190	UJ	190	UJ	180	UJ	170	UJ	180	U	870	U
4-Nitrophenol	UG/K	0	0%	100	0	0	38	190	UJ	190	UJ	180	UJ	170	UJ	180	UJ	870	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Acenaphthylene	UG/K	0	0%	41000	0	0	38	78	UJ	78	U	75	U	72	U	74	U	360	U
Anthracene	UG/K	0	0%	50000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	78	U	78	U	75	U	72	U	74	U	360	U
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	78	U	78	U	75	U	72	U	74	U	360	U
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	78	UJ	78	U	75	U	72	U	74	U	360	U
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	78	U	78	U	75	U	72	U	74	U	360	U
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	78	U	78	U	75	U	72	U	74	U	360	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	78	U	78	U	75	U	72	U	74	U		
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	16	J	78	UJ	75	U	10	J	22	J	45	J
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	78	UJ	78	UJ	75	UJ	5.4	J	74	U	360	U
Carbazole	UG/K	0	0%		0	0	38	78	UJ	78	U	75	U	72	U	74	UJ	360	U
Chrysene	UG/K	15	18%	400	0	7	38	5.7	J	4	J	75	U	72	U	74	U	360	U
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	9	J	78	U	75	U	400	UJ	1100	UJ	360	U
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	8.7	J	78	U	75	U	72	U	74	U	360	U
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	78	U	78	UJ	75	UJ	72	U	74	U	360	U
Dibenzofuran	UG/K	0	0%	6200	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	78	UJ	78	U	75	U	72	U	74	U	360	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Fluoranthene	UG/K	18	11%	50000	0	4	38	78	U	6	J	75	U	72	U	74	U	360	U
Fluorene	UG/K	0	0%	50000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Hexachlorobutadiene	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	UJ	360	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-18		MW12-35		MW12-35		MW12-9		MW12-9		MW12B-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123039		123187		123188		123156		123157		MW12B-1-20	
SAMPLE DEPTH TO TOP OF SAMPLE								10		10		14		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		12		15.5		8		12		6	
SAMPLE DATE								02-Oct-98		29-Oct-98		29-Oct-98		17-Oct-98		17-Oct-98		13-Jun-94	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	78	UJ	78	UJ	75	UJ	72	U	74	UJ	360	U
Hexachloroethane	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	78	U	78	UJ	75	UJ	72	U	74	U	360	U
Isophorone	UG/K	0	0%	4400	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Naphthalene	UG/K	0	0%	13000	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Nitrobenzene	UG/K	0	0%	200	0	0	38	78	U	78	U	75	U	72	U	74	UJ	360	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	190	UJ	190	U	180	U	170	U	180	UJ	870	U
Phenanthrene	UG/K	13	16%	50000	0	6	38	5.9	J	4.1	J	75	U	72	U	74	U	360	U
Phenol	UG/K	0	0%	30	0	0	38	78	U	78	U	75	U	72	U	74	U	360	U
Pyrene	UG/K	20	13%	50000	0	5	38	7.9	J	5.9	J	75	U	72	U	74	U	360	U
Pesticides/ PCBs																			
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Aldrin	UG/K	0	0%	41	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Aroclor-1016	UG/K	0	0%		0	0	38	39	U	39	U	38	U	36	U	37	U	36	U
Aroclor-1221	UG/K	0	0%		0	0	38	80	U	80	U	76	U	73	U	75	U	73	U
Aroclor-1232	UG/K	0	0%		0	0	38	39	U	39	U	38	U	36	U	37	U	36	U
Aroclor-1242	UG/K	16	3%		0	1	38	39	U	39	U	38	U	36	U	37	U	36	U
Aroclor-1248	UG/K	0	0%		0	0	38	39	U	39	U	38	U	36	U	37	U	36	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	39	U	39	U	38	U	36	U	37	U	36	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	39	U	39	U	38	U	36	U	37	U	36	U
Beta-BHC	UG/K	0	0%	200	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Delta-BHC	UG/K	0	0%	300	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Endosulfan I	UG/K	0	0%	900	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Endrin	UG/K	0	0%	100	0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Endrin ketone	UG/K	0	0%		0	0	38	3.9	U	3.9	U	3.8	U	3.6	U	3.7	U	3.6	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Heptachlor	UG/K	0	0%	100	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	2	U	2	U	1.9	U	1.8	U	1.9	U	1.8	U
Methoxychlor	UG/K	0	0%		0	0	38	20	U	20	U	19	U	18	U	19	U	18	U
Toxaphene	UG/K	0	0%		0	0	38	200	U	200	U	190	U	180	U	190	U	180	U
Metals																			
Aluminum	MG/K	14500	100%	19520	0	38	38	6730		10100		8970		7010		6810		7510	
Antimony	MG/K	0.67	3%	6	0	1	38	1.3	UR	1.2	UR	1.1	UR	1.1	UR	1.2	UR	0.25	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12-18		MW12-35		MW12-35		MW12-9		MW12-9		MW12B-1	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123039		123187		123188		123156		123157		MW12B-1-20	
SAMPLE DEPTH TO TOP OF SAMPLE								10		10		14		6		10		4	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								12		12		15.5		8		12		6	
SAMPLE DATE								02-Oct-98		29-Oct-98		29-Oct-98		17-Oct-98		17-Oct-98		13-Jun-94	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	3.2		4.1		8.1		3.8		2.7		4.6	
Barium	MG/K	138	100%	300	0	38	38	82.7		84.2		85.4		80.1		72.7		88.3	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.23	J	0.59	J	0.48	J	0.27	J	0.22	J	0.38	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.35	U	0.32	U	0.06	U	0.06	U	0.46	J
Calcium	MG/K	132000	100%	125300	1	38	38	99200	J	51600		96500		93000		91000		79400	
Chromium	MG/K	20.8	100%	30	0	38	38	12.1		15.4	J	15.9	J	11.9		11		12.6	
Cobalt	MG/K	14.5	100%	30	0	38	38	8.1	J	9.6	J	9.6		9.3	J	7.5	J	8.6	J
Copper	MG/K	41.1	100%	33	4	38	38	18		23		28.2		20.5		23.1		20.3	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.6	UJ	0.61	U	0.62	U	0.56	U	0.55	U	0.46	U
Iron	MG/K	41100	100%	37410	1	38	38	16400		19100		21900		17000		14100		17000	
Lead	MG/K	16.4	100%	24.4	0	38	38	5.5	J	9.8	J	13.3	J	7.5	J	6.3		8.4	
Magnesium	MG/K	34200	100%	21700	2	38	38	11500		12600		19100		16900		16100		16000	
Manganese	MG/K	596	100%	1100	0	38	38	499		463		470		413		432		388	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.06	U	0.06	U	0.06	U	0.05	U	0.05	U	[redacted]	
Nickel	MG/K	50.9	92%	50	1	35	38	23.5		24.7	UJ	28.4	UJ	25.8		[redacted]		23.6	
Potassium	MG/K	2330	100%	2623	0	38	38	1200		1410		1490		1010		1430		1390	J
Selenium	MG/K	2.5	18%	2	2	7	38	0.98	UJ	0.44	U	0.93		0.87	UJ	0.87	UJ	0.54	J
Silver	MG/K	0.27	8%	0.8	0	3	38	0.26	U	0.23	U	0.21	U	0.23	U	0.23	U	0.1	U
Sodium	MG/K	252	71%	188	2	27	38	147	J	58.1	J	74	J	73.2	UJ	59.3	J	120	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	[redacted]		[redacted]		[redacted]	J	0.98	U	[redacted]	J	0.64	J
Vanadium	MG/K	23.8	100%	150	0	38	38	11.2		18.9		16.5		12		13.2		13.2	
Zinc	MG/K	142	100%	115	1	38	38	68.8		57.5	J	60.5	J	49.1		46.8		46.9	

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12B-1		MW12B-1		SB12-10		SB12-5A		SB12-5A		SB12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								MW12B-1-03		MW12B-1-07		123179		12519		12520		123097	
SAMPLE DEPTH TO TOP OF SAMPLE								4		12		0		0		3		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		13.5		0		3		6		8	
SAMPLE DATE								13-Jun-94		13-Jun-94		27-Oct-98		08-Nov-97		08-Nov-97		14-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	ESI		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																			
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	11	U	11	U	26		8	J	98		16	U
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	12	U	11	U	12	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	12	U	11	U	12	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	12	U	11	U	12	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	11	U	12	U	11	U	12	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	11	U	11	U	12	U	3	J	12	U	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	U	11	U	12	U	11	U	12	U	11	U
Semi-Volatile Organics																			
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8	360	U	360	U								
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12B-1		MW12B-1		SB12-10		SB12-5A		SB12-5A		SB12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								MW12B-1-03		MW12B-1-07		123179		12519		12520		123097	
SAMPLE DEPTH TO TOP OF SAMPLE								4		12		0		0		3		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		13.5		0		3		6		8	
SAMPLE DATE								13-Jun-94		13-Jun-94		27-Oct-98		08-Nov-97		08-Nov-97		14-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	ESI		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	TAGM ABOVE	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2-Chloronaphthalene	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2-Chlorophenol	UG/K	0	0%	800	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2-Methylphenol	UG/K	0	0%	100	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
2-Nitrophenol	UG/K	0	0%	330	0	0	38	360	U	360	U	85	U	74	U	77	U	72	UJ
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
3-Nitroaniline	UG/K	0	0%	500	0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	360	U	360	U	85	UJ	74	U	77	U	72	UJ
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	360	U	360	U	4.7	J	74	U	77	U	72	U
4-Nitroaniline	UG/K	0	0%		0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
4-Nitrophenol	UG/K	0	0%	100	0	0	38	880	U	880	U	200	U	180	U	190	U	180	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Acenaphthylene	UG/K	0	0%	41000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Anthracene	UG/K	0	0%	50000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	360	U	360	U	11	J	74	U	77	U	72	U
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	360	U	360	U	12	J	74	U	77	U	72	U
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	360	U	360	U	13	J	74	U	77	U	72	U
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	360	U	360	U	9.6	J	74	U	77	U	72	UJ
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	360	U	360	U	10	J	74	U	77	U	72	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30					85	U	74	U	77	U	72	U
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	360	U	83	J	85	U	74	U	77	U	72	UJ
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	360	U	360	U	85	U	74	U	77	U	72	UJ
Carbazole	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	UJ
Chrysene	UG/K	15	18%	400	0	7	38	360	U	360	U	15	J	74	U	77	U	72	U
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	360	U	360	U	85	U	74	U	77	U	72	U
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	360	U	360	U	15	J	74	U	77	U	13	J
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	360	U	360	U	4.8	J	74	U	77	U	72	UJ
Dibenzofuran	UG/K	0	0%	6200	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	360	U	360	U	85	U	74	U	77	U	72	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Fluoranthene	UG/K	18	11%	50000	0	4	38	360	U	360	U	18	J	74	U	77	U	72	U
Fluorene	UG/K	0	0%	50000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Hexachlorobutadiene	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12B-1		MW12B-1		SB12-10		SB12-5A		SB12-5A		SB12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								MW12B-1-03		MW12B-1-07		123179		12519		12520		123097	
SAMPLE DEPTH TO TOP OF SAMPLE								4		12		0		0		3		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		13.5		0		3		6		8	
SAMPLE DATE								13-Jun-94		13-Jun-94		27-Oct-98		08-Nov-97		08-Nov-97		14-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	ESI		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Hexachloroethane	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	360	U	360	U	7.3	J	74	U	77	U	72	UJ
Isophorone	UG/K	0	0%	4400	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Naphthalene	UG/K	0	0%	13000	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Nitrobenzene	UG/K	0	0%	200	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	880	U	880	U	200	U	180	U	190	U	180	UJ
Phenanthrene	UG/K	13	16%	50000	0	6	38	360	U	360	U	13	J	74	U	77	U	72	U
Phenol	UG/K	0	0%	30	0	0	38	360	U	360	U	85	U	74	U	77	U	72	U
Pyrene	UG/K	20	13%	50000	0	5	38	360	U	360	U	20	J	74	U	77	U	72	U
Pesticides/ PCBs																			
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Aldrin	UG/K	0	0%	41	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	38	36	U	36	U	42	U	37	U	38	U	36	U
Aroclor-1221	UG/K	0	0%		0	0	38	74	U	74	U	86	U	75	U	78	U	74	U
Aroclor-1232	UG/K	0	0%		0	0	38	36	U	36	U	42	U	37	U	38	U	36	U
Aroclor-1242	UG/K	16	3%		0	1	38	16	J	36	U	42	U	37	U	38	U	36	U
Aroclor-1248	UG/K	0	0%		0	0	38	36	U	36	U	42	U	37	U	38	U	36	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	36	U	36	U	42	U	37	U	38	U	36	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	36	U	36	U	42	U	37	U	38	U	36	U
Beta-BHC	UG/K	0	0%	200	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Endosulfan I	UG/K	0	0%	900	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Endrin	UG/K	0	0%	100	0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Endrin ketone	UG/K	0	0%		0	0	38	3.6	U	3.6	U	4.2	U	3.7	U	3.8	U	3.6	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Heptachlor	UG/K	0	0%	100	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	1.9	U	1.9	U	2.2	U	1.9	U	2	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	38	19	U	19	U	22	U	19	U	20	U	19	U
Toxaphene	UG/K	0	0%		0	0	38	190	U	190	U	220	U	190	U	200	U	190	U
Metals																			
Aluminum	MG/K	14500	100%	19520	0	38	38	8060		5940		8590		9170		9790		7920	J
Antimony	MG/K	0.67	3%	6	0	1	38	0.2	UJ	0.26	UJ	1.5	UR	0.76	UJ	0.71	UJ	1.3	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								MW12B-1		MW12B-1		SB12-10		SB12-5A		SB12-5A		SB12-5A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								MW12B-1-03		MW12B-1-07		123179		12519		12520		123097	
SAMPLE DEPTH TO TOP OF SAMPLE								4		12		0		0		3		6	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		13.5		0		3		6		8	
SAMPLE DATE								13-Jun-94		13-Jun-94		27-Oct-98		08-Nov-97		08-Nov-97		14-Oct-98	
QC CODE								SA		SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	ESI		ESI		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	4.6		2.9		5.8		4.5		3.7		3.6	J
Barium	MG/K	138	100%	300	0	38	38	89.1		43.8		90.4		97.9		71		108	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.4	J	0.27	J	0.46	J	0.33		0.36		0.33	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.52	J	0.32	J	0.45	U	0.07	U	0.06	U	0.07	U
Calcium	MG/K	132000	100%	125300	1	38	38	74200		51100		73600		74500		71600		85500	J
Chromium	MG/K	20.8	100%	30	0	38	38	12.7		12		18.9	J	14.3		14.9		14.1	
Cobalt	MG/K	14.5	100%	30	0	38	38	8.3		5.2	J	9.9	J	10.9		9.2		8	J
Copper	MG/K	41.1	100%	33	4	38	38	22.5		17.3		[redacted]		24.6		23.3		21.9	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.47	U	0.47	U	0.63	U	0.59	U	0.66	U	0.56	U
Iron	MG/K	41100	100%	37410	1	38	38	17200		13500		[redacted]		19900		19000		14500	
Lead	MG/K	16.4	100%	24.4	0	38	38	10.3		7.3		5.1	J	12.9		11.2		8	J
Magnesium	MG/K	34200	100%	21700	2	38	38	16300		8320		19400		12300		12500		15400	J
Manganese	MG/K	596	100%	1100	0	38	38	369		244		596		526		454		349	
Mercury	MG/K	0.5	34%	0.1	4	13	38	[redacted]		0.03	J	[redacted]		0.06		0.06	U	0 05	U
Nickel	MG/K	50.9	92%	50	1	35	38	23.5		19		31.4	UJ	28.7		26.8		24 5	J
Potassium	MG/K	2330	100%	2623	0	38	38	1660	J	1040	J	1300		1470	J	1830	J	1470	
Selenium	MG/K	2.5	18%	2	2	7	38	0.72	J	[redacted]		0.66	J	1	UJ	0.95	UJ	1	U
Silver	MG/K	0.27	8%	0.8	0	3	38	0.08	U	0.1	U	0.3	U	0.46	U	0.43	U	0.26	U
Sodium	MG/K	252	71%	188	2	27	38	135	J	77.3	J	112	J	133	U	123	U	116	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	0.37	J	0.39	J	[redacted]	J	1.4	U	1.3	U	1 1	U
Vanadium	MG/K	23.8	100%	150	0	38	38	13.8		11.5		18.3		16.3		18		14 2	
Zinc	MG/K	142	100%	115	1	38	38	50.5		36.2		80	J	56.5		52.6		[redacted]	J

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-5A		SB12-5A		SB12-5A		SB12-5A		SB12-6	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12521		12522		12523		123098		12514	
SAMPLE DEPTH TO TOP OF SAMPLE								6		9		12		12		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								9		12		14		14		3	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		14-Oct-98		08-Nov-97	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																	
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	35		8	J	20		12	U	11	J
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	2	J	12	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	3	J	12	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	11	U	12	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	11	UJ	12	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	11	U	12	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	11	U	2	J	12	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	11	U	11	U	13	UJ	12	U	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	UJ	12	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	U	11	U	11	UJ	12	U	11	U
Semi-Volatile Organics																	
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	74	U	73	U	72	U	73	U	75	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	74	U	73	U	72	U	73	U	75	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	74	U	73	U	72	U	73	U	75	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	74	U	73	U	72	U	73	U	75	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8										
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	180	U	180	U	180	U	180	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	74	U	73	U	72	U	73	U	75	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	UJ	75	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-5A		SB12-5A		SB12-5A		SB12-5A		SB12-6	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12521		12522		12523		123098		12514	
SAMPLE DEPTH TO TOP OF SAMPLE								6		9		12		12		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								9		12		14		14		3	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		14-Oct-98		08-Nov-97	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	180	U	180	UJ	180	UJ	180	U	180	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	74	U	73	U	72	U	73	U	75	U
2-Chloronaphthalene	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
2-Chlorophenol	UG/K	0	0%	800	0	0	38	74	U	73	U	72	U	73	U	75	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	74	U	73	U	72	U	73	U	75	U
2-Methylphenol	UG/K	0	0%	100	0	0	38	74	U	73	U	72	U	73	U	75	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	180	U	180	U	180	U	180	U	180	U
2-Nitrophenol	UG/K	0	0%	330	0	0	38	74	U	73	U	72	U	73	UJ	75	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	74	U	73	UJ	72	UJ	73	U	75	U
3-Nitroaniline	UG/K	0	0%	500	0	0	38	180	U	180	UJ	180	UJ	180	U	180	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	180	U	180	U	180	U	180	U	180	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	74	U	73	U	72	U	73	U	75	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	74	U	73	UJ	72	UJ	73	UJ	75	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	74	U	73	U	72	U	73	U	75	U
4-Nitroaniline	UG/K	0	0%		0	0	38	180	U	180	UJ	180	UJ	180	U	180	U
4-Nitrophenol	UG/K	0	0%	100	0	0	38	180	U	180	U	180	U	180	U	180	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	74	U	73	U	72	U	73	U	75	U
Acenaphthylene	UG/K	0	0%	41000	0	0	38	74	U	73	U	72	U	73	U	75	U
Anthracene	UG/K	0	0%	50000	0	0	38	74	U	73	U	72	U	73	U	75	U
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	74	U	73	U	72	U	73	U	75	U
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	74	U	73	U	72	U	73	U	75	U
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	74	U	73	U	72	U	73	U	75	U
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	74	U	73	U	72	U	73	UJ	75	U
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	74	U	73	U	72	U	73	U	75	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	74	U	73	U	72	U	73	U	75	U
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	74	U	73	U	72	U	73	UJ	33	J
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	74	U	73	U	72	U	73	UJ	75	U
Carbazole	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	UJ	75	U
Chrysene	UG/K	15	18%	400	0	7	38	74	U	73	U	72	U	73	U	4.5	J
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	74	U	73	U	72	U	73	U	75	U
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	74	U	73	U	72	U	6.4	J	75	U
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	74	U	73	U	72	U	73	UJ	75	U
Dibenzofuran	UG/K	0	0%	6200	0	0	38	74	U	73	U	72	U	73	U	75	U
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	74	U	73	U	72	U	73	U	75	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	74	U	73	U	72	U	73	U	75	U
Fluoranthene	UG/K	18	11%	50000	0	4	38	74	U	73	U	72	U	73	U	6.3	J
Fluorene	UG/K	0	0%	50000	0	0	38	74	U	73	U	72	U	73	U	75	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	74	U	73	U	72	U	73	UJ	75	U
Hexachlorobutadiene	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	UJ	75	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-5A		SB12-5A		SB12-5A		SB12-5A		SB12-6	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12521		12522		12523		123098		12514	
SAMPLE DEPTH TO TOP OF SAMPLE								6		9		12		12		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								9		12		14		14		3	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		14-Oct-98		08-Nov-97	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
Hexachloroethane	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	74	U	73	U	72	U	73	UJ	75	U
Isophorone	UG/K	0	0%	4400	0	0	38	74	U	73	U	72	U	73	U	75	U
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	74	U	73	U	72	U	73	U	75	U
Naphthalene	UG/K	0	0%	13000	0	0	38	74	U	73	U	72	U	73	U	75	U
Nitrobenzene	UG/K	0	0%	200	0	0	38	74	U	73	U	72	U	73	U	75	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	180	U	180	U	180	U	180	UJ	180	U
Phenanthrene	UG/K	13	16%	50000	0	6	38	74	U	73	U	72	U	73	U	4.5	J
Phenol	UG/K	0	0%	30	0	0	38	74	U	73	U	72	U	73	U	75	U
Pyrene	UG/K	20	13%	50000	0	5	38	74	U	73	U	72	U	73	U	5.9	J
Pesticides/ PCBs																	
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Aldrin	UG/K	0	0%	41	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	38	37	U	37	U	36	U	37	U	38	U
Aroclor-1221	UG/K	0	0%		0	0	38	75	U	74	U	74	U	74	U	76	U
Aroclor-1232	UG/K	0	0%		0	0	38	37	U	37	U	36	U	37	U	38	U
Aroclor-1242	UG/K	16	3%		0	1	38	37	U	37	U	36	U	37	U	38	U
Aroclor-1248	UG/K	0	0%		0	0	38	37	U	37	U	36	U	37	U	38	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	37	U	37	U	36	U	37	U	38	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	37	U	37	U	36	U	37	U	38	U
Beta-BHC	UG/K	0	0%	200	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Endosulfan I	UG/K	0	0%	900	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Endrin	UG/K	0	0%	100	0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Endrin ketone	UG/K	0	0%		0	0	38	3.7	U	3.7	U	3.6	U	3.7	U	3.8	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Heptachlor	UG/K	0	0%	100	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	38	19	U	19	U	19	U	19	U	19	U
Toxaphene	UG/K	0	0%		0	0	38	190	U	190	U	190	U	190	U	190	U
Metals																	
Aluminum	MG/K	14500	100%	19520	0	38	38	10400		9080		8460		6080	J	14500	
Antimony	MG/K	0.67	3%	6	0	1	38	0.76	UJ	0.84	UJ	0.67	J	1.2	UR	0.76	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-5A		SB12-5A		SB12-5A		SB12-5A		SB12-6	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12521		12522		12523		123098		12514	
SAMPLE DEPTH TO TOP OF SAMPLE								6		9		12		12		0	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								9		12		14		14		3	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		14-Oct-98		08-Nov-97	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	3.9		4.8		3.3		5	J	4.6	
Barium	MG/K	138	100%	300	0	38	38	71.1		60		42.4		52.7		110	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.34		0.36	J	0.31	J	0.17	J	0.62	
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.06	U	0.05	U	0.06	U	0.07	U
Calcium	MG/K	132000	100%	125300	1	38	38	82300		79400		95800		105000	J	23300	
Chromium	MG/K	20.8	100%	30	0	38	38	16.3		16.9		14.9		11.3		20.8	
Cobalt	MG/K	14.5	100%	30	0	38	38	10.2		14.5		9		8.9		10.2	
Copper	MG/K	41.1	100%	33	4	38	38	22.9		[redacted]		22.2		16.7		26.9	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.62	U	0.62	U	0.64	U	0.59	U	0.68	U
Iron	MG/K	41100	100%	37410	1	38	38	21300		25000		19600		16600		24500	
Lead	MG/K	16.4	100%	24.4	0	38	38	11.1		16.4		9.5		6.7	J	11.1	
Magnesium	MG/K	34200	100%	21700	2	38	38	13900		9080		12500		12700	J	6860	
Manganese	MG/K	596	100%	1100	0	38	38	573		478		415		541		513	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.05	U	0.04	U	0.05	U	0.06	U	0.06	
Nickel	MG/K	50.9	92%	50	1	35	38	31.1		44.8		27.1		23	J	31.9	
Potassium	MG/K	2330	100%	2623	0	38	38	1980	J	1230	J	1460	J	1000		1950	J
Selenium	MG/K	2.5	18%	2	2	7	38	1	UJ	0.87	U	0.83	U	0.88	U	1	UJ
Silver	MG/K	0.27	8%	0.8	0	3	38	0.45	U	0.39	U	0.37	U	0.23	U	0.46	U
Sodium	MG/K	252	71%	188	2	27	38	131	U	132	J	140	J	169	J	132	U
Thallium	MG/K	2.2	34%	0.855	7	13	38	1.4	U	1.2	U	1.1	U	0.99	U	1.4	U
Vanadium	MG/K	23.8	100%	150	0	38	38	17.5		14.9		14.2		10.5		23.8	
Zinc	MG/K	142	100%	115	1	38	38	56.1		73.5	J	64.7	J	40.6	J	70	

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-6		SB12-6		SB12-6		SB12-6		SB12B-1		TP12-25A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12515		12516		12517		12518		SB12B-1-1		123077	
SAMPLE DEPTH TO TOP OF SAMPLE								3		6		9		12		18		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		9		12		14.3		21		0.5	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		08-Nov-97		29-Jun-94		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																			
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	7	J	17		7	J	17		11	U	6	J
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	11	U	11	U	1	J	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	11	U	11	U	3	J	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	2	J	11	U	2	J	11	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	11	U	3	J	11	U	3	J	11	U	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Semi-Volatile Organics																			
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8									380	U		
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	180	U	180	U	180	U	180	U	910	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-6		SB12-6		SB12-6		SB12-6		SB12B-1		TP12-25A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12515		12516		12517		12518		SB12B-1-1		123077	
SAMPLE DEPTH TO TOP OF SAMPLE								3		6		9		12		18		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		9		12		14.3		21		0.5	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		08-Nov-97		29-Jun-94		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	180	U	180	U	180	U	180	U	910	U	180	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
2-Chloronaphthalene	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
2-Chlorophenol	UG/K	0	0%	800	0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
2-Methylphenol	UG/K	0	0%	100	0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	180	U	180	U	180	U	180	U	910	U	180	UR
2-Nitrophenol	UG/K	0	0%	330	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UJ
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
3-Nitroaniline	UG/K	0	0%	500	0	0	38	180	U	180	U	180	U	180	U	910	U	180	UR
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	180	U	180	U	180	U	180	U	910	U	180	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	76	U	76	U	75	U	75	U	380	U	73	U
4-Nitroaniline	UG/K	0	0%		0	0	38	180	U	180	U	180	U	180	U	910	U	180	UR
4-Nitrophenol	UG/K	0	0%	100	0	0	38	180	U	180	U	180	U	180	U	910	U	180	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Acenaphthylene	UG/K	0	0%	41000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Anthracene	UG/K	0	0%	50000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	76	U	76	U	75	U	75	U	380	U	73	UR
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	76	U	76	U	75	U	75	U			73	UR
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	76	U	76	U	75	U	75	U	380	U	7.8	J
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Carbazole	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Chrysene	UG/K	15	18%	400	0	7	38	76	U	76	U	75	U	75	U	380	U	73	UR
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	4.1	J	76	U	75	U	75	U	380	U	73	UJ
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	76	U	76	U	75	U	75	U	380	U	73	UR
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	76	U	76	U	75	U	75	U	380	U	73	UR
Dibenzofuran	UG/K	0	0%	6200	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	5.8	J	76	U	75	U	75	U	380	U	73	UJ
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Fluoranthene	UG/K	18	11%	50000	0	4	38	76	U	76	U	75	U	75	U	380	U	73	UR
Fluorene	UG/K	0	0%	50000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Hexachlorobutadiene	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-6		SB12-6		SB12-6		SB12-6		SB12B-1		TP12-25A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12515		12516		12517		12518		SB12B-1-1		123077	
SAMPLE DEPTH TO TOP OF SAMPLE								3		6		9		12		18		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		9		12		14.3		21		0.5	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		08-Nov-97		29-Jun-94		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Hexachloroethane	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	76	U	76	U	75	U	75	U	380	U	73	UR
Isophorone	UG/K	0	0%	4400	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Naphthalene	UG/K	0	0%	13000	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Nitrobenzene	UG/K	0	0%	200	0	0	38	76	U	76	U	75	U	75	U	380	U	73	UR
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	180	U	180	U	180	U	180	U	910	U	180	U
Phenanthrene	UG/K	13	16%	50000	0	6	38	76	U	76	U	75	U	75	U	380	U	73	UR
Phenol	UG/K	0	0%	30	0	0	38	76	U	76	U	75	U	75	U	380	U	73	U
Pyrene	UG/K	20	13%	50000	0	5	38	76	U	76	U	75	U	75	U	380	U	73	UR
Pesticides/ PCBs																			
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	38	38	U	38	U	38	U	38	U	38	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	38	77	U	77	U	76	U	76	U	77	U	74	U
Aroclor-1232	UG/K	0	0%		0	0	38	38	U	38	U	38	U	38	U	38	U	37	U
Aroclor-1242	UG/K	16	3%		0	1	38	38	U	38	U	38	U	38	U	38	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	38	38	U	38	U	38	U	38	U	38	U	37	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	38	U	38	U	38	U	38	U	38	U	37	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	38	U	38	U	38	U	38	U	38	U	37	U
Beta-BHC	UG/K	0	0%	200	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	38	3.8	U	3.8	U	3.8	U	3.8	U	3.8	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Heptachlor	UG/K	0	0%	100	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	2	U	2	U	1.9	U	1.9	U	2	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	38	20	U	20	U	19	U	19	U	20	U	19	U
Toxaphene	UG/K	0	0%		0	0	38	200	U	200	U	190	U	190	U	200	U	190	U
Metals																			
Aluminum	MG/K	14500	100%	19520	0	38	38	10900		9160		8890		8230		9050	J	7270	
Antimony	MG/K	0.67	3%	6	0	1	38	0.74	UJ	0.69	UJ	0.73	UJ	0.77	UJ	0.26	UJ	1.1	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								SB12-6		SB12-6		SB12-6		SB12-6		SB12B-1		TP12-25A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								12515		12516		12517		12518		SB12B-1-1		123077	
SAMPLE DEPTH TO TOP OF SAMPLE								3		6		9		12		18		0.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								6		9		12		14.3		21		0.5	
SAMPLE DATE								08-Nov-97		08-Nov-97		08-Nov-97		08-Nov-97		29-Jun-94		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA		DU	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		ESI		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF												
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	4.7		3.8		3.7		2.8		1.9	J	3.9	
Barium	MG/K	138	100%	300	0	38	38	76.8		65.9		61.2		39.1		138	J	51.4	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.46		0.34		0.3		0.3		0.44	J	0.21	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.06	U	0.06	U	0.07	U	0.29	J	0.06	U
Calcium	MG/K	132000	100%	125300	1	38	38	56800		70500		92400		98600		83400	J	60100	
Chromium	MG/K	20.8	100%	30	0	38	38	17.2		13.2		14.8		14.2		13.8	J	11.3	
Cobalt	MG/K	14.5	100%	30	0	38	38	10.7		9.3		11		9.1		4.6	J	7	J
Copper	MG/K	41.1	100%	33	4	38	38	26.6		20.9		[redacted]		22		15.6	J	20.5	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.71	U	0.64	U	0.67	U	0.62	U	0.41	U	0.56	UJ
Iron	MG/K	41100	100%	37410	1	38	38	23500		17600		20800		18900		14100	J	14600	
Lead	MG/K	16.4	100%	24.4	0	38	38	12.8		8.1		12.3		8.2		7.5		6.9	
Magnesium	MG/K	34200	100%	21700	2	38	38	8890		12000		15100		11700		12200	J	11600	J
Manganese	MG/K	596	100%	1100	0	38	38	432		418		526		418		366	J	398	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.04	U	[redacted]		0.05	U	0.05	U	0.03	J	0.05	U
Nickel	MG/K	50.9	92%	50	1	35	38	32.1		25.5		37.1		26.7		18.2	J	18.9	
Potassium	MG/K	2330	100%	2623	0	38	38	1870	J	1500	J	1520	J	1550	J	1650	J	970	
Selenium	MG/K	2.5	18%	2	2	7	38	1	UJ	0.92	UJ	0.98	UJ	[redacted]	J	0.53	U	0.85	U
Silver	MG/K	0.27	8%	0.8	0	3	38	0.45	U	0.41	U	0.44	U	0.46	U	0.1	U	0.22	U
Sodium	MG/K	252	71%	188	2	27	38	129	U	119	U	127	U	133	U	116	J	69	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	1.3	U	1.2	U	1.3	U	[redacted]		0.37	U	0.98	U
Vanadium	MG/K	23.8	100%	150	0	38	38	19.2		15.6		15		13.9		13.5	J	12.9	
Zinc	MG/K	142	100%	115	1	38	38	62.4		52.6		54.8		61.8		46.7	J	39.2	

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-25A		TP12-25B		TP12-25C		TP12-26A		TP12-26B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123071		123072		123073		123074		123075	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DATE								05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																	
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	11	U	11	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	11	U	11	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	11	U	11	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	11	U	11	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	11	U	11	U	11	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	11	U	11	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	4	J	3	J	5	J	11	U	3	J
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	11	U	11	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	UJ	11	UJ	11	UJ	11	UJ	11	UJ
Semi-Volatile Organics																	
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8										
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	180	U	180	UR	180	U	180	U	180	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	74	U	72	UR	72	U	72	U	73	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	74	U	72	UR	72	U	72	U	73	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	74	U	72	UR	72	U	72	U	73	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-25A		TP12-25B		TP12-25C		TP12-26A		TP12-26B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123071		123072		123073		123074		123075	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DATE								05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	180	U	180	UR	180	U	180	U	180	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
2-Chloronaphthalene	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
2-Chlorophenol	UG/K	0	0%	800	0	0	38	74	U	72	UR	72	U	72	U	73	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	74	U	72	U	72	U	72	UR	73	UR
2-Methylphenol	UG/K	0	0%	100	0	0	38	74	U	72	UR	72	U	72	U	73	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	180	U	180	U	180	U	180	UR	180	UR
2-Nitrophenol	UG/K	0	0%	330	0	0	38	74	UJ	72	UR	72	UJ	72	UJ	73	UJ
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
3-Nitroaniline	UG/K	0	0%	500	0	0	38	180	U	180	U	180	U	180	UR	180	UR
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	180	U	180	UR	180	U	180	U	180	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	74	U	72	UR	72	U	72	U	73	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	74	U	72	UR	72	U	72	U	73	U
4-Nitroaniline	UG/K	0	0%		0	0	38	180	UJ	180	U	180	U	180	UR	180	UR
4-Nitrophenol	UG/K	0	0%	100	0	0	38	180	U	180	UR	180	U	180	U	180	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Acenaphthylene	UG/K	0	0%	41000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Anthracene	UG/K	0	0%	50000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	74	U	72	U	72	U	72	UR	73	UR
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	74	U	72	U	72	U	72	UR	73	UR
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	74	U	3.7	J	72	U	72	UR	73	UR
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	74	U	72	U	72	U	72	UR	73	UR
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	74	U	72	U	72	U	72	UR	73	UR
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	74	U	72	U	72	U	72	UR	73	UR
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	3.8	J	72	UJ	72	UJ	10	R	13	R
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
Carbazole	UG/K	0	0%		0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
Chrysene	UG/K	15	18%	400	0	7	38	4.6	J	72	U	72	U	72	UR	73	UR
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	74	UJ	72	U	72	U	72	UR	73	UR
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	74	U	72	U	72	U	72	UR	73	UR
Dibenzofuran	UG/K	0	0%	6200	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	74	U	72	U	72	U	72	UJ	73	UJ
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Fluoranthene	UG/K	18	11%	50000	0	4	38	74	U	72	U	72	U	72	UR	73	UR
Fluorene	UG/K	0	0%	50000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Hexachlorobutadiene	UG/K	0	0%		0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-25A		TP12-25B		TP12-25C		TP12-26A		TP12-26B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123071		123072		123073		123074		123075	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DATE								05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
Hexachloroethane	UG/K	0	0%		0	0	38	74	UJ	72	UJ	72	UJ	72	UR	73	UR
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	74	U	72	U	72	U	72	UR	73	UR
Isophorone	UG/K	0	0%	4400	0	0	38	74	U	72	U	72	U	72	UR	73	UR
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	74	U	72	U	72	U	72	UR	73	UR
Naphthalene	UG/K	0	0%	13000	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Nitrobenzene	UG/K	0	0%	200	0	0	38	74	U	72	U	72	U	72	UR	73	UR
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	180	U	180	UR	180	U	180	U	180	U
Phenanthrene	UG/K	13	16%	50000	0	6	38	74	U	72	U	72	U	72	UR	73	UR
Phenol	UG/K	0	0%	30	0	0	38	74	U	72	UR	72	U	72	U	73	U
Pyrene	UG/K	20	13%	50000	0	5	38	74	U	72	U	72	U	72	UR	73	UR
Pesticides/ PCBs																	
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	38	37	U	36	U	36	U	36	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	38	75	U	74	U	74	U	74	U	74	U
Aroclor-1232	UG/K	0	0%		0	0	38	37	U	36	U	36	U	36	U	37	U
Aroclor-1242	UG/K	16	3%		0	1	38	37	U	36	U	36	U	36	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	38	37	U	36	U	36	U	36	U	37	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	37	U	36	U	36	U	36	U	37	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	37	U	36	U	36	U	36	U	37	U
Beta-BHC	UG/K	0	0%	200	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	38	3.7	U	3.6	U	3.6	U	3.6	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Heptachlor	UG/K	0	0%	100	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	1.9	U	1.9	U	1.9	U	1.9	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	38	19	U	19	U	19	U	19	U	19	U
Toxaphene	UG/K	0	0%		0	0	38	190	U	190	U	190	U	190	U	190	U
Metals																	
Aluminum	MG/K	14500	100%	19520	0	38	38	9330		7910		6790		7030		6970	
Antimony	MG/K	0.67	3%	6	0	1	38	1.2	UR	1.3	UR	1	UR	1.3	UR	1.2	UR

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-25A		TP12-25B		TP12-25C		TP12-26A		TP12-26B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123071		123072		123073		123074		123075	
SAMPLE DEPTH TO TOP OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								0.5		1		2		0.5		1.3	
SAMPLE DATE								05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98		05-Oct-98	
QC CODE								SA		SA		SA		SA		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1		RI PHASE 1 STEP 1	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	4.1		4.6		4		4		3.8	
Barium	MG/K	138	100%	300	0	38	38	64.7		63.7		63		65.4		58.8	
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.34	J	0.3	J	0.36	J	0.21	J	0.29	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.06	U	0.05	U	0.06	U	0.06	U
Calcium	MG/K	132000	100%	125300	1	38	38	46100		84900		117000		81600		[redacted]	
Chromium	MG/K	20.8	100%	30	0	38	38	13.5		12.9		10.9		10.7		12	
Cobalt	MG/K	14.5	100%	30	0	38	38	7.3	J	8.3	J	5.3	J	6.2	J	6.9	J
Copper	MG/K	41.1	100%	33	4	38	38	20.4		21.1		[redacted]		16.6		17.7	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.57	U	0.56	U	0.56	U	0.54	UJ	0.56	UJ
Iron	MG/K	41100	100%	37410	1	38	38	16600		17200		13300	J	13000		14900	J
Lead	MG/K	16.4	100%	24.4	0	38	38	7		8.3		8.1		6.3		7.7	
Magnesium	MG/K	34200	100%	21700	2	38	38	7660	J	15900	J	6550	J	17300	J	[redacted]	J
Manganese	MG/K	596	100%	1100	0	38	38	372		373		319		352		327	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.05	U	0.05	U	0.06	U	0.05	U	0.05	U
Nickel	MG/K	50.9	92%	50	1	35	38	20.7		25.7		17.3		16.4		20.7	
Potassium	MG/K	2330	100%	2623	0	38	38	1060		1010	J	983		1120		1310	
Selenium	MG/K	2.5	18%	2	2	7	38	0.92	U	0.99	U	0.79	U	0.98	U	0.93	U
Silver	MG/K	0.27	8%	0.8	0	3	38	0.24	U	0.26	U	0.21	U	0.27	J	0.24	U
Sodium	MG/K	252	71%	188	2	27	38	65.4	J	54.3	U	106	J	61.3	J	112	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	1	U	1.1	U	0.89	U	1.1	U	1.1	U
Vanadium	MG/K	23.8	100%	150	0	38	38	15.1		13.8		13.4		12.5		13.2	
Zinc	MG/K	142	100%	115	1	38	38	42.5		44.1		41.1		36.1		37.6	

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-26C		TP12B-1		TP12B-2		TP12B-3		TP12B-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123076		TP12B-1-1		TP12B-2-1		TP12B-53-1		TP12B-3-1	
SAMPLE DEPTH TO TOP OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DATE								05-Oct-98		25-Jun-94		24-Jun-94		25-Jun-94		25-Jun-94	
QC CODE								SA		SA		SA		DU		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		ESI		ESI		ESI	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Volatile Organics																	
1,1,1-Trichloroethane	UG/K	0	0%	800	0	0	38	11	U	11	U	12	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/K	0	0%	600	0	0	38	11	U	11	U	12	U	11	U	11	U
1,1,2-Trichloroethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
1,1-Dichloroethane	UG/K	0	0%	200	0	0	38	11	U	11	U	12	U	11	U	11	U
1,1-Dichloroethene	UG/K	0	0%	400	0	0	38	11	U	11	U	12	U	11	U	11	U
1,2-Dichloroethane	UG/K	0	0%	100	0	0	38	11	UJ	11	U	12	U	11	U	11	U
1,2-Dichloroethene (total)	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
1,2-Dichloropropane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Acetone	UG/K	98	39%	200	0	15	38	11	UJ	11	U	12	U	11	U	11	U
Benzene	UG/K	2	3%	60	0	1	38	11	U	11	U	12	U	11	U	11	U
Bromodichloromethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Bromoform	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Carbon disulfide	UG/K	3	5%	2700	0	2	38	11	U	11	U	12	U	11	U	11	U
Carbon tetrachloride	UG/K	0	0%	600	0	0	38	11	U	11	U	12	U	11	U	11	U
Chlorobenzene	UG/K	0	0%	1700	0	0	38	11	U	11	U	12	U	11	U	11	U
Chlorodibromomethane	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Chloroethane	UG/K	0	0%	1900	0	0	38	11	UJ	11	U	12	U	11	U	11	U
Chloroform	UG/K	0	0%	300	0	0	38	11	U	11	U	12	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Ethyl benzene	UG/K	0	0%	5500	0	0	38	11	U	11	U	12	U	11	U	11	U
Methyl bromide	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Methyl butyl ketone	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Methyl chloride	UG/K	0	0%		0	0	38	11	UJ	11	U	12	U	11	U	11	U
Methyl ethyl ketone	UG/K	3	3%	300	0	1	38	11	U	11	U	12	U	11	U	11	U
Methyl isobutyl ketone	UG/K	0	0%	1000	0	0	38	11	U	11	U	12	U	11	U	11	U
Methylene chloride	UG/K	2	11%	100	0	4	38	11	U	1	J	12	U	11	U	11	U
Styrene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Tetrachloroethene	UG/K	0	0%	1400	0	0	38	11	U	11	U	12	U	11	U	11	U
Toluene	UG/K	15	24%	1500	0	9	38	11	U	11	U	12	U	11	U	11	U
Total Xylenes	UG/K	0	0%	1200	0	0	38	11	U	11	U	12	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/K	0	0%		0	0	38	11	U	11	U	12	U	11	U	11	U
Trichloroethene	UG/K	0	0%	700	0	0	38	11	U	11	U	12	U	11	U	11	U
Vinyl chloride	UG/K	0	0%	200	0	0	38	11	UJ	11	U	12	U	11	U	11	U
Semi-Volatile Organics																	
1,2,4-Trichlorobenzene	UG/K	0	0%	3400	0	0	38	72	U	360	U	380	U	370	U	370	U
1,2-Dichlorobenzene	UG/K	0	0%	7900	0	0	38	72	UJ	360	U	380	U	370	U	370	U
1,3-Dichlorobenzene	UG/K	0	0%	1600	0	0	38	72	UJ	360	U	380	U	370	U	370	U
1,4-Dichlorobenzene	UG/K	0	0%	8500	0	0	38	72	UJ	360	U	380	U	370	U	370	U
2,2'-oxybis(1-Chloropropane)	UG/K	0	0%		0	0	8			360	U	380	U	370	U	370	U
2,4,5-Trichlorophenol	UG/K	0	0%	100	0	0	38	170	U	880	U	930	U	900	U	900	U
2,4,6-Trichlorophenol	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
2,4-Dichlorophenol	UG/K	0	0%	400	0	0	38	72	U	360	U	380	U	370	U	370	U
2,4-Dimethylphenol	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-26C		TP12B-1		TP12B-2		TP12B-3		TP12B-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123076		TP12B-1-1		TP12B-2-1		TP12B-53-1		TP12B-3-1	
SAMPLE DEPTH TO TOP OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DATE								05-Oct-98		25-Jun-94		24-Jun-94		25-Jun-94		25-Jun-94	
QC CODE								SA		SA		SA		DU		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		ESI		ESI		ESI	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
2,4-Dinitrophenol	UG/K	0	0%	200	0	0	38	170	U	880	U	930	U	900	U	900	U
2,4-Dinitrotoluene	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
2,6-Dinitrotoluene	UG/K	0	0%	1000	0	0	38	72	U	360	U	380	U	370	U	370	U
2-Chloronaphthalene	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
2-Chlorophenol	UG/K	0	0%	800	0	0	38	72	U	360	U	380	U	370	U	370	U
2-Methylnaphthalene	UG/K	0	0%	36400	0	0	38	72	U	360	U	380	U	370	U	370	U
2-Methylphenol	UG/K	0	0%	100	0	0	38	72	U	360	U	380	U	370	U	370	U
2-Nitroaniline	UG/K	0	0%	430	0	0	38	170	U	880	U	930	U	900	U	900	U
2-Nitrophenol	UG/K	0	0%	330	0	0	38	72	UJ	360	U	380	U	370	U	370	U
3,3'-Dichlorobenzidine	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
3-Nitroaniline	UG/K	0	0%	500	0	0	38	170	UJ	880	U	930	U	900	U	900	U
4,6-Dinitro-2-methylphenol	UG/K	0	0%		0	0	38	170	U	880	U	930	U	900	U	900	U
4-Bromophenyl phenyl ether	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
4-Chloro-3-methylphenol	UG/K	0	0%	240	0	0	38	72	U	360	U	380	U	370	U	370	U
4-Chloroaniline	UG/K	0	0%	220	0	0	38	72	UJ	360	U	380	U	370	U	370	U
4-Chlorophenyl phenyl ether	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
4-Methylphenol	UG/K	4.7	3%	900	0	1	38	72	U	360	U	380	U	370	U	370	U
4-Nitroaniline	UG/K	0	0%		0	0	38	170	U	880	U	930	U	900	U	900	U
4-Nitrophenol	UG/K	0	0%	100	0	0	38	170	U	880	U	930	U	900	U	900	U
Acenaphthene	UG/K	0	0%	50000	0	0	38	72	U	360	U	380	U	370	U	370	U
Acenaphthylene	UG/K	0	0%	41000	0	0	38	72	U	360	U	380	U	370	U	370	U
Anthracene	UG/K	0	0%	50000	0	0	38	72	U	360	U	380	U	370	U	370	U
Benzo(a)anthracene	UG/K	11	5%	224	0	2	38	72	U	360	U	380	U	370	U	370	U
Benzo(a)pyrene	UG/K	12	5%	61	0	2	38	72	U	360	U	380	U	370	U	370	U
Benzo(b)fluoranthene	UG/K	13	11%	1100	0	4	38	72	U	360	U	380	U	370	U	370	U
Benzo(ghi)perylene	UG/K	9.6	5%	50000	0	2	38	72	U	360	U	380	U	370	U	370	U
Benzo(k)fluoranthene	UG/K	10	5%	1100	0	2	38	72	U	360	U	380	U	370	U	370	U
Bis(2-Chloroethoxy)methane	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
Bis(2-Chloroethyl)ether	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
Bis(2-Chloroisopropyl)ether	UG/K	0	0%		0	0	30	72	U								
Bis(2-Ethylhexyl)phthalate	UG/K	83	29%	50000	0	11	38	72	UJ	360	U	380	U	370	U	370	U
Butylbenzylphthalate	UG/K	7.2	5%	50000	0	2	38	72	UJ	360	U	380	U	370	U	370	U
Carbazole	UG/K	0	0%		0	0	38	72	UJ	360	U	380	U	370	U	370	U
Chrysene	UG/K	15	18%	400	0	7	38	72	U	360	U	380	U	370	U	370	U
Di-n-butylphthalate	UG/K	53	13%	8100	0	5	38	72	UJ	44	J	380	U	53	J	370	U
Di-n-octylphthalate	UG/K	34	21%	50000	0	8	38	72	UJ	360	U	380	U	370	U	370	U
Dibenz(a,h)anthracene	UG/K	4.8	3%	14	0	1	38	72	U	360	U	380	U	370	U	370	U
Dibenzofuran	UG/K	0	0%	6200	0	0	38	72	U	360	U	380	U	370	U	370	U
Diethyl phthalate	UG/K	5.8	3%	7100	0	1	38	72	U	360	U	380	U	370	U	370	U
Dimethylphthalate	UG/K	0	0%	2000	0	0	38	72	U	360	U	380	U	370	U	370	U
Fluoranthene	UG/K	18	11%	50000	0	4	38	72	U	360	U	380	U	370	U	370	U
Fluorene	UG/K	0	0%	50000	0	0	38	72	U	360	U	380	U	370	U	370	U
Hexachlorobenzene	UG/K	0	0%	410	0	0	38	72	U	360	U	380	U	370	U	370	U
Hexachlorobutadiene	UG/K	0	0%		0	0	38	72	UJ	360	U	380	U	370	U	370	U

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-26C		TP12B-1		TP12B-2		TP12B-3		TP12B-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123076		TP12B-1-1		TP12B-2-1		TP12B-53-1		TP12B-3-1	
SAMPLE DEPTH TO TOP OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DATE								05-Oct-98		25-Jun-94		24-Jun-94		25-Jun-94		25-Jun-94	
QC CODE								SA		SA		SA		DU		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		ESI		ESI		ESI	
PARAMETER	UNIT	AXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECT	OF ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Hexachlorocyclopentadiene	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
Hexachloroethane	UG/K	0	0%		0	0	38	72	UJ	360	U	380	U	370	U	370	U
Indeno(1,2,3-cd)pyrene	UG/K	7.3	5%	3200	0	2	38	72	U	360	U	380	U	370	U	370	U
Isophorone	UG/K	0	0%	4400	0	0	38	72	U	360	U	380	U	370	U	370	U
N-Nitrosodiphenylamine	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
N-Nitrosodipropylamine	UG/K	0	0%		0	0	38	72	U	360	U	380	U	370	U	370	U
Naphthalene	UG/K	0	0%	13000	0	0	38	72	U	360	U	380	U	370	U	370	U
Nitrobenzene	UG/K	0	0%	200	0	0	38	72	U	360	U	380	U	370	U	370	U
Pentachlorophenol	UG/K	0	0%	1000	0	0	38	170	U	880	U	930	U	900	U	900	U
Phenanthrene	UG/K	13	16%	50000	0	6	38	72	U	360	U	380	U	370	U	370	U
Phenol	UG/K	0	0%	30	0	0	38	72	U	360	U	380	U	370	U	370	U
Pyrene	UG/K	20	13%	50000	0	5	38	72	U	360	U	380	U	370	U	370	U
Pesticides/ PCBs																	
4,4'-DDD	UG/K	0	0%	2900	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
4,4'-DDE	UG/K	0	0%	2100	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
4,4'-DDT	UG/K	0	0%	2100	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Aldrin	UG/K	0	0%	41	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Alpha-BHC	UG/K	0	0%	110	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Alpha-Chlordane	UG/K	0	0%		0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Aroclor-1016	UG/K	0	0%		0	0	38	36	U	36	UJ	38	U	37	U	37	U
Aroclor-1221	UG/K	0	0%		0	0	38	73	U	74	UJ	78	U	75	U	75	U
Aroclor-1232	UG/K	0	0%		0	0	38	36	U	36	UJ	38	U	37	U	37	U
Aroclor-1242	UG/K	16	3%		0	1	38	36	U	36	UJ	38	U	37	U	37	U
Aroclor-1248	UG/K	0	0%		0	0	38	36	U	36	UJ	38	U	37	U	37	U
Aroclor-1254	UG/K	0	0%	10000	0	0	38	36	U	36	UJ	38	U	37	U	37	U
Aroclor-1260	UG/K	0	0%	10000	0	0	38	36	U	36	UJ	38	U	37	U	37	U
Beta-BHC	UG/K	0	0%	200	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Delta-BHC	UG/K	0	0%	300	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Dieldrin	UG/K	0	0%	44	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Endosulfan I	UG/K	0	0%	900	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Endosulfan II	UG/K	0	0%	900	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Endosulfan sulfate	UG/K	0	0%	1000	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Endrin	UG/K	0	0%	100	0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Endrin aldehyde	UG/K	0	0%		0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Endrin ketone	UG/K	0	0%		0	0	38	3.6	U	3.6	UJ	3.8	U	3.7	U	3.7	U
Gamma-BHC/Lindane	UG/K	0	0%	60	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Gamma-Chlordane	UG/K	0	0%	540	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Heptachlor	UG/K	0	0%	100	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Heptachlor epoxide	UG/K	0	0%	20	0	0	38	1.8	U	1.9	UJ	2	U	1.9	U	1.9	U
Methoxychlor	UG/K	0	0%		0	0	38	18	U	19	UJ	20	U	19	U	19	U
Toxaphene	UG/K	0	0%		0	0	38	180	U	190	UJ	200	U	190	U	190	U
Metals																	
Aluminum	MG/K	14500	100%	19520	0	38	38	8350		7400		10300		6120		6850	
Antimony	MG/K	0.67	3%	6	0	1	38	1.2	UR	0.23	UJ	0.24	UJ	0.22	UJ	0.26	UJ

TABLE G-11
FORMER DRY WASTE DISPOSAL PIT - CHEMICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID								TP12-26C		TP12B-1		TP12B-2		TP12B-3		TP12B-3	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID								123076		TP12B-1-1		TP12B-2-1		TP12B-53-1		TP12B-3-1	
SAMPLE DEPTH TO TOP OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DEPTH TO BOTTOM OF SAMPLE								3		4		2.5		2.5		2.5	
SAMPLE DATE								05-Oct-98		25-Jun-94		24-Jun-94		25-Jun-94		25-Jun-94	
QC CODE								SA		SA		SA		DU		SA	
STUDY ID			FREQUENC	NYSDEC	UMBE	NUMBER	NUMBER	RI PHASE 1 STEP 1		ESI		ESI		ESI		ESI	
			OF	TAGM	ABOVE	OF	OF										
PARAMETER	UNIT	AXIMU	DETECTION	4046	TAGM	DETECT	ANALYSE	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)	VALUE	(Q)
Arsenic	MG/K	8.1	100%	8.9	0	38	38	4.1		4.4	J	4.6	J	2.8	J	3.3	J
Barium	MG/K	138	100%	300	0	38	38	64.4		78.3		90.5		32.5	J	36.5	J
Beryllium	MG/K	0.62	100%	1.13	0	38	38	0.32	J	0.37	J	0.52	J	0.24	J	0.26	J
Cadmium	MG/K	0.52	21%	2.46	0	8	38	0.06	U	0.36	J	0.43	J	0.17	J	0.18	J
Calcium	MG/K	132000	100%	125300	1	38	38	89400		85300		76400		45500		44100	
Chromium	MG/K	20.8	100%	30	0	38	38	14.1		11.4		15.9		8		9.1	
Cobalt	MG/K	14.5	100%	30	0	38	38	8.2	J	7.6	J	9.7		4.3	J	4.2	J
Copper	MG/K	41.1	100%	33	4	38	38	20.3		22.1		21.9		12.9		13.8	
Cyanide	MG/K	0	0%	0.35	0	0	38	0.56	UJ	0.53	UJ	0.53	UJ	0.54	UJ	0.54	UJ
Iron	MG/K	41100	100%	37410	1	38	38	18500		15600		20100		11000		11700	
Lead	MG/K	16.4	100%	24.4	0	38	38	8.3		7.9		10.6		4.3		4.8	
Magnesium	MG/K	34200	100%	21700	2	38	38	13200	J	[redacted]		16900		18300		15800	
Manganese	MG/K	596	100%	1100	0	38	38	384		340		383		337		316	
Mercury	MG/K	0.5	34%	0.1	4	13	38	0.05	U	0.03	J	0.02	J	0.03	J	0.03	J
Nickel	MG/K	50.9	92%	50	1	35	38	26		19.9		29		8.7		9.2	
Potassium	MG/K	2330	100%	2623	0	38	38	1250		1940	J	2330	J	1840	J	2150	J
Selenium	MG/K	2.5	18%	2	2	7	38	0.89	U	0.48	U	0.5	U	0.45	U	0.54	U
Silver	MG/K	0.27	8%	0.8	0	3	38	0.24	J	0.09	U	0.09	U	0.08	U	0.1	U
Sodium	MG/K	252	71%	188	2	27	38	121	J	[redacted]	J	[redacted]	J	144	J	157	J
Thallium	MG/K	2.2	34%	0.855	7	13	38	1	U	0.39	J	0.79	J	0.32	U	0.46	J
Vanadium	MG/K	23.8	100%	150	0	38	38	14.5		14.8		18.5		13.5		15.4	
Zinc	MG/K	142	100%	115	1	38	38	47.5		40.7	J	51.7	J	26	J	28.9	J

TABLE G-12
EM-5 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		SS12-109		SS12-114		SS12-115	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123068		123079		123303		123308		123309	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		2		0.2		0.2		0.2	
SAMP_DATE								10/4/1998		10/5/1998		17-Nov-98		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	5	11	U	12	U	15	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	5	11	U	12	U	15	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	5	11	U	12	U	15	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	5	11	U	12	U	15	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	5	11	UJ	12	U	15	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Acetone	UG/KG	5	20%	200	0	1	5	11	UJ	5	J	15	U	12	U	12	U
Benzene	UG/KG	0	0%	60	0	0	5	11	U	12	U	15	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	5	11	U	12	U	15	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	5	11	U	12	U	15	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	5	11	U	12	U	15	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	5	11	UJ	12	U	15	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	5	11	U	12	U	15	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	5	11	U	12	U	15	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	5	11	UJ	12	U	15	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	5	11	U	12	U	15	U	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	5	11	U	12	U	15	U	12	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	5	11	U	12	U	15	U	12	U	12	U
Styrene	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	5	11	U	12	U	15	U	12	U	12	U
Toluene	UG/KG	3	20%	1500	0	1	5	3	J	12	U	15	U	12	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	5	11	U	12	U	15	U	12	U	12	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	5	11	U	12	U	15	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	5	11	U	12	U	15	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	5	11	UJ	12	U	15	U	12	U	12	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	5	80	UJ	77	U	97	U	80	U	160	U

TABLE G-12
EM-5 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		SS12-109		SS12-114		SS12-115	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123068		123079		123303		123308		123309	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		2		0.2		0.2		0.2	
SAMP_DATE								10/4/1998		10/5/1998		17-Nov-98		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	5	80	UJ	77	UJ	97	U	80	U	160	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	5	80	UJ	77	UJ	97	U	80	U	160	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	5	80	UJ	77	UJ	97	U	80	U	160	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	5	200	U	190	U	240	U	190	U	390	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	5	80	U	77	U	97	U	80	U	160	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	5	80	U	77	U	97	UJ	80	UJ	160	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	5	200	U	190	U	240	U	190	U	390	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	5	80	U	77	U	97	U	80	U	160	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	5	80	U	77	U	97	U	80	U	160	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	5	80	U	77	U	97	U	80	U	160	U
2-Methylphenol	UG/KG	0	0%	100	0	0	5	80	U	77	U	97	UJ	80	U	160	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	5	200	U	190	U	240	UJ	190	UJ	390	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	5	80	UJ	77	UJ	97	UJ	80	UJ	160	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	UJ	160	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	5	200	U	190	U	240	U	190	U	390	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	5	200	U	190	U	240	U	190	U	390	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	5	80	U	77	U	97	U	80	U	160	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	5	80	UJ	77	UJ	97	UJ	80	UJ	160	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
4-Methylphenol	UG/KG	0	0%	900	0	0	5	80	U	77	U	97	U	80	U	160	U
4-Nitroaniline	UG/KG	0	0%		0	0	5	200	U	190	UJ	240	UJ	190	UJ	390	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	5	200	U	190	U	240	U	190	U	390	U
Acenaphthene	UG/KG	0	0%	50000	0	0	5	80	U	77	U	97	U	80	U	160	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	5	80	U	77	U	97	U	80	U	160	U
Anthracene	UG/KG	0	0%	50000	0	0	5	80	U	77	U	97	U	80	U	160	U
Benzo(a)anthracene	UG/KG	16	60%	224	0	3	5	10	J	5.2	J	16	J	80	U	160	U
Benzo(a)pyrene	UG/KG	19	60%	61	0	3	5	11	J	6.1	J	19	J	80	U	160	U
Benzo(b)fluoranthene	UG/KG	20	60%	1100	0	3	5	17	J	9	J	20	J	80	U	160	U
Benzo(ghi)perylene	UG/KG	20	40%	50000	0	2	5	9.8	J	77	U	20	J	80	U	160	U
Benzo(k)fluoranthene	UG/KG	20	60%	1100	0	3	5	13	J	8.4	J	20	J	80	U	160	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	5	80	U	77	U	97	U	80	U	160	UJ

TABLE G-12
EM-5 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID							MW12-22		MW12-23		SS12-109		SS12-114		SS12-115	
MATRIX							SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID							123068		123079		123303		123308		123309	
DEPTH_TOP							0		0		0		0		0	
DEPTH_BOT							0.2		2		0.2		0.2		0.2	
SAMP_DATE							10/4/1998		10/5/1998		17-Nov-98		17-Nov-98		17-Nov-98	
QC_CODE							SA		SA		SA		SA		SA	
STUDY_ID							RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES									
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	5	80 U	77 U		97 U		80 U		160 U	
Bis(2-Ethylhexyl)phthalate	UG/KG	900	60%	50000	0	3	5	8.3 J	10 J		97 UJ		80 UJ		900 J	
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	5	80 UJ	77 UJ		97 UJ		80 UJ		160 UJ	
Carbazole	UG/KG	7.6	20%		0	1	5	80 UJ	77 UJ		7.6 J		80 U		160 UJ	
Chrysene	UG/KG	23	60%	400	0	3	5	17 J	9.8 J		23 J		80 UJ		160 UJ.	
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	5	80 U	77 UJ		97 U		80 U		160 U	
Di-n-octylphthalate	UG/KG	5.3	20%	50000	0	1	5	80 UJ	5.3 J		97 U		80 U		160 UJ	
Dibenz(a,h)anthracene	UG/KG	6.8	20%	14	0	1	5	80 U	77 U		6.8 J		80 U		160 U	
Dibenzofuran	UG/KG	0	0%	6200	0	0	5	80 U	77 U		97 U		80 U		160 U	
Diethyl phthalate	UG/KG	0	0%	7100	0	0	5	80 U	77 U		97 U		80 U		160 U	
Dimethylphthalate	UG/KG	0	0%	2000	0	0	5	80 U	77 U		97 U		80 U		160 U	
Fluoranthene	UG/KG	36	60%	50000	0	3	5	20 J	13 J		36 J		80 U		160 U	
Fluorene	UG/KG	0	0%	50000	0	0	5	80 U	77 U		97 U		80 U		160 U	
Hexachlorobenzene	UG/KG	0	0%	410	0	0	5	80 U	77 U		97 U		80 U		160 U	
Hexachlorobutadiene	UG/KG	0	0%		0	0	5	80 UJ	77 UJ		97 U		80 U		160 U	
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	5	80 U	77 U		97 UJ		80 UJ		160 UJ	
Hexachloroethane	UG/KG	0	0%		0	0	5	80 UJ	77 UJ		97 U		80 U		160 U	
Indeno(1,2,3-cd)pyrene	UG/KG	16	40%	3200	0	2	5	8.8 J	77 U		16 J		80 U		160 U	
Isophorone	UG/KG	0	0%	4400	0	0	5	80 U	77 U		97 U		80 U		160 U	
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	5	80 U	77 U		97 U		80 U		160 U	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	5	80 U	77 U		97 U		80 U		160 U	
Naphthalene	UG/KG	0	0%	13000	0	0	5	80 U	77 U		97 U		80 U		160 U	
Nitrobenzene	UG/KG	0	0%	200	0	0	5	80 U	77 U		97 U		80 U		160 U	
Pentachlorophenol	UG/KG	0	0%	1000	0	0	5	200 U	190 U		240 R		190 R		390 R	
Phenanthrene	UG/KG	22	60%	50000	0	3	5	14 J	7.9 J		22 J		80 U		160 U	
Phenol	UG/KG	0	0%	30	0	0	5	80 U	77 U		97 U		80 U		160 U	
Pyrene	UG/KG	37	60%	50000	0	3	5	25 J	12 J		37 J		80 U		160 U	
PESTICIDES/PCBS																
4,4'-DDD	UG/KG	0	0%	2900	0	0	5	4 U	3.8 U		4.8 U		4 U		4 U	
4,4'-DDE	UG/KG	0	0%	2100	0	0	5	4 U	3.8 U		4.8 U		4 U		4 U	
4,4'-DDT	UG/KG	0	0%	2100	0	0	5	4 U	3.8 U		4.8 U		4 U		4 U	
Aldrin	UG/KG	0	0%	41	0	0	5	2.1 U	2 U		2.5 U		2 U		2.1 U	
Alpha-BHC	UG/KG	0	0%	110	0	0	5	2.1 U	2 U		2.5 U		2 U		2.1 U	
Alpha-Chlordane	UG/KG	0	0%		0	0	5	2.1 U	2 U		2.5 U		2 U		2.1 U	
Aroclor-1016	UG/KG	0	0%	10000	0	0	5	40 U	38 U		48 U		40 U		40 U	
Aroclor-1221	UG/KG	0	0%	10000	0	0	5	82 U	78 U		98 U		81 U		82 U	

TABLE G-12
EM-5 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		SS12-109		SS12-114		SS12-115	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123068		123079		123303		123308		123309	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		2		0.2		0.2		0.2	
SAMP_DATE								10/4/1998		10/5/1998		17-Nov-98		17-Nov-98		17-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Aroclor-1232	UG/KG	0	0%	10000	0	0	5	40	U	38	U	48	U	40	U	40	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	5	40	U	38	U	48	U	40	U	40	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	5	40	U	38	U	48	U	40	U	40	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	5	40	U	38	U	48	U	40	U	40	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	5	40	U	38	U	48	U	40	U	40	U
Beta-BHC	UG/KG	0	0%	200	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Dieldrin	UG/KG	0	0%	44	0	0	5	4	U	3.8	U	4.8	U	4	U	4	U
Endosulfan I	UG/KG	0	0%	900	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Endosulfan II	UG/KG	0	0%	900	0	0	5	4	U	3.8	U	4.8	U	4	U	4	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	5	4	U	3.8	U	4.8	U	4	U	4	U
Endrin	UG/KG	2.8	20%	100	0	1	5	2.8	J	3.8	U	4.8	U	4	U	4	U
Endrin aldehyde	UG/KG	0	0%		0	0	5	4	U	3.8	U	4.8	U	4	U	4	U
Endrin ketone	UG/KG	0	0%		0	0	5	4	U	3.8	U	4.8	U	4	U	4	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Heptachlor	UG/KG	0	0%	100	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	5	2.1	U	2	U	2.5	U	2	U	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	5	21	U	20	U	25	U	20	U	21	U
Toxaphene	UG/KG	0	0%		0	0	5	210	U	200	U	250	U	200	U	210	U
METALS																	
Aluminum	MG/KG	18100	100%	19520	0	5	5	11100		11900		12300	J	16200	J	18100	J
Antimony	MG/KG	0	0%	6	0	0	5	1.4	R	1.1	R	1.7	R	1.4	R	1.3	R
Arsenic	MG/KG	4.4	100%	8.9	0	5	5	4.4		4.1		4.1		4		4.2	
Barium	MG/KG	150	100%	300	0	5	5	89.7		60.2		150		45.9		45.7	
Beryllium	MG/KG	0.74	100%	1.13	0	5	5	0.34	J	0.42	J	0.42	J	0.53	J	0.74	J
Cadmium	MG/KG	0	0%	2.46	0	0	5	0.07	U	0.05	U	0.5	U	0.4	U	0.39	U
Calcium	MG/KG	14700	100%	125300	0	5	5	3150		2020		14700		1320		981	J
Chromium	MG/KG	26.9	100%	30	0	5	5	15.4		17.3		18.2		22.8		26.9	
Cobalt	MG/KG	15.6	100%	30	0	5	5	9.5	J	8.8	J	8.4	J	9	J	15.6	
Copper	MG/KG	37.3	100%	33	1	5	5	15.8		17.4		37.3		22.6		29	
Cyanide	MG/KG	0	0%	0.35	0	0	5	0.61	U	0.59	UJ	0.74	U	0.63	U	0.62	U
Iron	MG/KG	37000	100%	37410	0	5	5	18300		19900		21200	J	27900	J	37000	J
Lead	MG/KG	142	100%	24.4	2	5	5	34		23.8		142	J	17.8	J	22.9	J
Magnesium	MG/KG	5250	100%	21700	0	5	5	2540	J	3220	J	3900		4990		5250	
Manganese	MG/KG	835	100%	1100	0	5	5	835		374		499		225		359	

TABLE G-12
EM-5 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID							MW12-22		MW12-23		SS12-109		SS12-114		SS12-115	
MATRIX							SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID							123068		123079		123303		123308		123309	
DEPTH_TOP							0		0		0		0		0	
DEPTH_BOT							0.2		2		0.2		0.2		0.2	
SAMP_DATE							10/4/1998		10/5/1998		17-Nov-98		17-Nov-98		17-Nov-98	
QC_CODE							SA		SA		SA		SA		SA	
STUDY_ID							RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES									
Mercury	MG/KG	0.27	60%	0.1	1	3	5	0.06	J	0.06	U	**0.27**		0.05	J	0.06	U
Nickel	MG/KG	36.6	100%	50	0	5	5	17		21.3		23.4		28.3		36.6	
Potassium	MG/KG	2570	100%	2623	0	5	5	1590		1730		2570		1620		1430	
Selenium	MG/KG	1.4	60%	2	0	3	5	1.1	U	0.83	U	1.4	J	0.52	J	0.56	J
Silver	MG/KG	0.35	20%	0.8	0	1	5	0.35	J	0.22	U	0.33	U	0.27	U	0.26	U
Sodium	MG/KG	70.9	20%	188	0	1	5	59	U	45.7	U	70.2	U	55.9	U	70.9	J
Thallium	MG/KG	0	0%	0.855	0	0	5	1.2	U	0.94	U	1.4	U	1.2	U	1.1	U
Vanadium	MG/KG	25.4	100%	150	0	5	5	19.8		20.1		19.5		25.4		25.2	
Zinc	MG/KG	174	100%	115	1	5	5	65.7		69.5		**174**	J	71.2	J	77.2	J
WET CHEMISTRY																
Nitrate/Nitrite	%W/W															
Nitrate/Nitrite	MG/KG															
pH	SU															
TOC-Soil 9060	MG/KG															
Percent Solids	%W/W															
Percent Solids	MG/KG															
Cation exchange capacity	meq/100g															

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		TP12-15A		TP12-15B		TP12-15C		TP12-16A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123069		123080		123031		123032		123033		123044	
DEPTH_TOP								2		2		3.5		2		0.8		0.6	
DEPTH_BOT								4		4		3.5		2		0.8		0.6	
SAMP_DATE								10/4/1998		10/5/1998		10/2/1998		10/2/1998		10/2/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	8	11	UJ	12	U	14	U	14	U	12	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Acetone	UG/KG	0	0%	200	0	0	8	11	UJ	12	U	14	U	14	U	12	U	11	UJ
Benzene	UG/KG	0	0%	60	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Bromoform	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	8	11	UJ	12	U	14	U	14	U	12	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	8	11	UJ	12	U	14	U	14	U	12	U	11	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Styrene	UG/KG	0	0%		0	0	8	11	U	12	R	14	U	14	U	12	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Toluene	UG/KG	20	63%	1500	0	5	8	4	J	12	U	14	U	7	J	7	J	3	J
Total Xylenes	UG/KG	0	0%	1200	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Trichloroethene	UG/KG	0	0%	700	0	0	8	11	U	12	U	14	U	14	U	12	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	8	11	UJ	12	U	14	U	14	U	12	U	11	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	8	72	UJ	72	U	88	U	1200	U	78	U	73	U

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		TP12-15A		TP12-15B		TP12-15C		TP12-16A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123069		123080		123031		123032		123033		123044	
DEPTH_TOP								2		2		3.5		2		0.8		0.6	
DEPTH_BOT								4		4		3.5		2		0.8		0.6	
SAMP_DATE								10/4/1998		10/5/1998		10/2/1998		10/2/1998		10/2/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	8	170	U	170	U	210	U	2900	U	190	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	UJ	73	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	8	72	U	72	U	88	UJ	1200	UJ	78	UJ	73	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	8	170	U	170	U	210	R	2900	U	190	R	180	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	8	72	U	72	U	88	UJ	1200	UJ	78	UJ	73	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
2-Methylnaphthalene	UG/KG	520	13%	36400	0	1	8	72	U	72	U	88	UJ	520	J	78	UJ	73	U
2-Methylphenol	UG/KG	0	0%	100	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	8	170	U	170	U	210	U	2900	U	190	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	8	170	U	170	U	210	UJ	2900	UJ	190	UJ	180	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	8	170	U	170	U	210	UJ	2900	U	190	UJ	180	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	8	72	UJ	72	UJ	88	UJ	1200	UJ	78	UJ	73	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
4-Methylphenol	UG/KG	0	0%	900	0	0	8	72	U	72	U	88	U	1200	U	78	UJ	73	U
4-Nitroaniline	UG/KG	0	0%		0	0	8	170	UJ	170	UJ	210	U	2900	U	190	UJ	180	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	8	170	U	170	U	210	UJ	2900	U	190	UJ	180	U
Acenaphthene	UG/KG	1300	13%	50000	0	1	8	72	U	72	U	88	U	1300		78	U	73	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	8	72	U	72	U	88	UJ	1200	UJ	78	UJ	73	U
Anthracene	UG/KG	2700	13%	50000	0	1	8	72	U	72	U	88	U	2700		78	U	73	U
Benzo(a)anthracene	UG/KG	3500	63%	224	1	5	8	72	U	72	U	15	J	3500		9.2	J	15	J
Benzo(a)pyrene	UG/KG	2600	75%	61	1	6	8	72	U	72	U	16	J	2600		11	J	16	J
Benzo(b)fluoranthene	UG/KG	2200	75%	1100	1	6	8	72	U	72	U	22	J	2200		13	J	20	J
Benzo(ghi)perylene	UG/KG	1400	63%	50000	0	5	8	72	U	72	U	54	J	1400		9.5	J	16	J
Benzo(k)fluoranthene	UG/KG	2600	75%	1100	1	6	8	72	U	72	U	18	J	2600		10	J	18	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		TP12-15A		TP12-15B		TP12-15C		TP12-16A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123069		123080		123031		123032		123033		123044	
DEPTH_TOP								2		2		3.5		2		0.8		0.6	
DEPTH_BOT								4		4		3.5		2		0.8		0.6	
SAMP_DATE								10/4/1998		10/5/1998		10/2/1998		10/2/1998		10/2/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Bis(2-Ethylhexyl)phthalate	UG/KG	16	75%	50000	0	6	8	16	J	72	UJ	5.2	J	1200	U	6	J	10	J
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	8	72	UJ	72	UJ	88	U	1200	U	78	UJ	73	U
Carbazole	UG/KG	1600	13%		0	1	8	72	UJ	72	UJ	88	UJ	1600	J	78	UJ	73	UJ
Chrysene	UG/KG	3000	88%	400	1	7	8	3.7	J	72	U	28	J	**3000**		12	J	22	J
Di-n-butylphthalate	UG/KG	6.6	50%	8100	0	4	8	72	UJ	72	UJ	6.6	J	1200	UJ	4.4	J	4.2	J
Di-n-octylphthalate	UG/KG	11	25%	50000	0	2	8	11	J	4.2	J	88	U	1200	U	78	U	73	U
Dibenz(a,h)anthracene	UG/KG	710	13%	14	1	1	8	72	U	72	U	88	U	**710**	J	78	U	73	U
Dibenzofuran	UG/KG	1000	13%	6200	0	1	8	72	U	72	U	88	U	1000	J	78	U	73	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	8	72	U	72	U	88	UJ	1200	UJ	78	UJ	73	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Fluoranthene	UG/KG	7400	75%	50000	0	6	8	72	U	72	U	27	J	7400		17	J	31	J
Fluorene	UG/KG	1500	13%	50000	0	1	8	72	U	72	U	88	U	1500		78	U	73	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	UJ	73	U
Hexachloroethane	UG/KG	0	0%		0	0	8	72	UJ	72	UJ	88	U	1200	U	78	U	73	U
Indeno(1,2,3-cd)pyrene	UG/KG	1500	63%	3200	0	5	8	72	U	72	U	20	J	1500		7.3	J	14	J
Isophorone	UG/KG	0	0%	4400	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Naphthalene	UG/KG	860	25%	13000	0	2	8	72	U	72	U	4.5	J	860	J	78	U	73	U
Nitrobenzene	UG/KG	0	0%	200	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	8	170	U	170	U	210	U	2900	U	190	UJ	180	UJ
Phenanthrene	UG/KG	8500	63%	50000	0	5	8	72	U	72	U	15	J	8500		12	J	16	J
Phenol	UG/KG	0	0%	30	0	0	8	72	U	72	U	88	U	1200	U	78	U	73	U
Pyrene	UG/KG	5900	75%	50000	0	6	8	72	U	72	U	37	J	5900		19	J	33	J
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	4	13%	2900	0	1	8	3.6	U	3.6	U	4.4	U	4	J	3.8	U	3.7	U
4,4'-DDE	UG/KG	3	13%	2100	0	1	8	3.6	U	3.6	U	4.4	U	3	J	3.8	U	3.7	U
4,4'-DDT	UG/KG	4.5	13%	2100	0	1	8	3.6	U	3.6	U	4.4	U	4.5	J	3.8	U	3.7	U
Aldrin	UG/KG	0	0%	41	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Alpha-Chlordane	UG/KG	0	0%		0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	8	73	U	73	U	89	U	86	U	78	U	74	U

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		TP12-15A		TP12-15B		TP12-15C		TP12-16A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123069		123080		123031		123032		123033		123044	
DEPTH_TOP								2		2		3.5		2		0.8		0.6	
DEPTH_BOT								4		4		3.5		2		0.8		0.6	
SAMP_DATE								10/4/1998		10/5/1998		10/2/1998		10/2/1998		10/2/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	8	36	U	36	U	44	U	42	U	38	U	37	U
Beta-BHC	UG/KG	0	0%	200	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	8	3.6	U	3.6	U	4.4	U	4.2	U	3.8	U	3.7	U
Endosulfan I	UG/KG	1.5	13%	900	0	1	8	1.8	U	1.8	U	2.3	U	1.5	J	2	U	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	8	3.6	U	3.6	U	4.4	U	4.2	U	3.8	U	3.7	U
Endosulfan sulfate	UG/KG	18	13%	1000	0	1	8	3.6	U	3.6	U	4.4	U	18	J	3.8	U	3.7	U
Endrin	UG/KG	0	0%	100	0	0	8	3.6	U	3.6	U	4.4	U	4.2	U	3.8	U	3.7	U
Endrin aldehyde	UG/KG	7.5	13%		0	1	8	3.6	U	3.6	U	4.4	U	7.5	J	3.8	U	3.7	U
Endrin ketone	UG/KG	13	13%		0	1	8	3.6	U	3.6	U	4.4	U	13		3.8	U	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Gamma-Chlordane	UG/KG	3.8	13%	540	0	1	8	1.8	U	1.8	U	2.3	U	3.8	J	2	U	1.9	U
Heptachlor	UG/KG	0	0%	100	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	8	1.8	U	1.8	U	2.3	U	2.2	U	2	U	1.9	U
Methoxychlor	UG/KG	42	13%		0	1	8	18	U	18	U	23	U	42	J	20	U	19	U
Toxaphene	UG/KG	0	0%		0	0	8	180	U	180	U	230	U	220	U	200	U	190	U
METALS																			
Aluminum	MG/KG	15000	100%	19520	0	8	8	14200		13100		13200		12100		14500		15000	
Antimony	MG/KG	0	0%	6	0	0	8	1.3	R	1.2	R	1.4	R	1.5	R	0.96	R	1.1	R
Arsenic	MG/KG	5	100%	8.9	0	8	8	3.8		4.1		4.8		4.4		5		3.6	
Barium	MG/KG	116	100%	300	0	8	8	54.9		55.7		97.4		115		116		105	
Beryllium	MG/KG	0.6	100%	1.13	0	8	8	0.57	J	0.5	J	0.55	J	0.52	J	0.53	J	0.53	J
Cadmium	MG/KG	0.12	13%	2.46	0	1	8	0.06	U	0.06	U	0.07	U	0.07	U	0.05	U	0.05	U
Calcium	MG/KG	28900	100%	125300	0	8	8	28900		15900		8170	J	15400	J	16300	J	13500	J
Chromium	MG/KG	24.8	100%	30	0	8	8	24.8		23.9		19.7		20.8		21.4		18	J
Cobalt	MG/KG	15.4	100%	30	0	8	8	13.3		15.4		10.4	J	10.6	J	11.5		10.8	
Copper	MG/KG	73.3	100%	33	5	8	8	33.7		35.4		24.8		32.6		35.5		27.3	
Cyanide	MG/KG	0	0%	0.35	0	0	8	0.53	U	0.58	UJ	0.69	UJ	0.65	UJ	0.6	UJ	0.58	U
Iron	MG/KG	35800	100%	37410	0	8	8	27600		27300		24300		35800		28400		27400	
Lead	MG/KG	112	100%	24.4	6	8	8	19.7		22.3		56.7		112		63.9		99.3	J
Magnesium	MG/KG	8210	100%	21700	0	8	8	6910	J	5500	J	4220		4420		8210		4930	
Manganese	MG/KG	723	100%	1100	0	8	8	422		487		463		359		639		479	J

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-22		MW12-23		TP12-15A		TP12-15B		TP12-15C		TP12-16A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123069		123080		123031		123032		123033		123044	
DEPTH_TOP								2		2		3.5		2		0.8		0.6	
DEPTH_BOT								4		4		3.5		2		0.8		0.6	
SAMP_DATE								10/4/1998		10/5/1998		10/2/1998		10/2/1998		10/2/1998		10/3/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	1	50%	0.1	3	4	8	0.05	U	0.05	U	0.07	U	1		0.12		0.05	UJ
Nickel	MG/KG	52	100%	50	1	8	8	48.5		52		26.1		30.7		29.2		27.7	J
Potassium	MG/KG	2810	100%	2623	3	8	8	1570		1290		2760		2490		2710		2280	
Selenium	MG/KG	1.2	38%	2	0	3	8	0.98	U	0.88	U	1.1	U	1.1	U	1.2		0.43	J
Silver	MG/KG	0.32	13%	0.8	0	1	8	0.32	J	0.23	U	0.28	U	0.3	U	0.19	U	0.21	U
Sodium	MG/KG	102	50%	188	0	4	8	75.4	J	66.8	J	58.2	U	102	J	39.8	U	44.8	U
Thallium	MG/KG	0	0%	0.855	0	0	8	1.1	U	1	U	1.8	U	1.6	U	1.5	U	0.92	UJ
Vanadium	MG/KG	25.1	100%	150	0	8	8	20.7		18.4		24.2		22.2		25.1		23.4	
Zinc	MG/KG	280	100%	115	6	8	8	95.8		84.8		127		280		129		[illegible]	J
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		
LOC_ID								TP12-16B		TP12-16C		
MATRIX								SOIL		SOIL		
SAMP_ID								123045		123078		
DEPTH_TOP								2		0.5		
DEPTH_BOT								2		2		
SAMP_DATE								10/3/1998		10/3/1998		
QC_CODE								SA		SA		
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES					
VOLATILE ORGANICS												
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	8	12	U	12	UJ	
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	8	12	U	12	UJ	
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	8	12	U	12	UJ	
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	8	12	U	12	UJ	
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	8	12	U	12	UJ	
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	8	12	U	12	UJ	
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	8	12	U	12	UJ	
1,2-Dichloropropane	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Acetone	UG/KG	0	0%	200	0	0	8	12	UJ	12	UJ	
Benzene	UG/KG	0	0%	60	0	0	8	12	U	12	UJ	
Bromodichloromethane	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Bromoform	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Carbon disulfide	UG/KG	0	0%	2700	0	0	8	12	U	12	UJ	
Carbon tetrachloride	UG/KG	0	0%	600	0	0	8	12	U	12	UJ	
Chlorobenzene	UG/KG	0	0%	1700	0	0	8	12	U	12	UJ	
Chlorodibromomethane	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Chloroethane	UG/KG	0	0%	1900	0	0	8	12	U	12	UJ	
Chloroform	UG/KG	0	0%	300	0	0	8	12	U	12	UJ	
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Ethyl benzene	UG/KG	0	0%	5500	0	0	8	12	U	12	UJ	
Methyl bromide	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Methyl butyl ketone	UG/KG	0	0%		0	0	8	12	UJ	12	UJ	
Methyl chloride	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	8	12	UJ	12	UJ	
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	8	12	U	12	UJ	
Methylene chloride	UG/KG	0	0%	100	0	0	8	12	U	12	UJ	
Styrene	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Tetrachloroethene	UG/KG	0	0%	1400	0	0	8	12	U	12	UJ	
Toluene	UG/KG	20	63%	1500	0	5	8	20		8	UJ	
Total Xylenes	UG/KG	0	0%	1200	0	0	8	12	U	12	UJ	
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	8	12	U	12	UJ	
Trichloroethene	UG/KG	0	0%	700	0	0	8	12	U	12	UJ	
Vinyl chloride	UG/KG	0	0%	200	0	0	8	12	U	12	UJ	
SEMI VOLATILE ORGANICS												
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	8	77	U	72	U	

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12	
LOC_ID							TP12-16B			TP12-16C	
MATRIX							SOIL			SOIL	
SAMP_ID							123045			123078	
DEPTH_TOP							2			0.5	
DEPTH_BOT							2			2	
SAMP_DATE							10/3/1998			10/3/1998	
QC_CODE							SA			SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES				
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	8	77	U	72	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	8	77	U	72	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	8	77	U	72	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	8	190	U	170	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	8	77	U	72	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	8	77	U	72	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	8	77	UJ	72	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	8	190	U	170	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	8	77	U	72	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	8	77	U	72	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	8	77	U	72	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	8	77	U	72	U
2-Methylnaphthalene	UG/KG	520	13%	36400	0	1	8	77	U	72	U
2-Methylphenol	UG/KG	0	0%	100	0	0	8	77	U	72	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	8	190	UJ	170	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	8	77	U	72	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	8	77	U	72	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	8	190	U	170	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	8	190	U	170	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	8	77	U	72	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	8	77	U	72	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	8	77	UJ	72	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	8	77	U	72	U
4-Methylphenol	UG/KG	0	0%	900	0	0	8	77	U	72	U
4-Nitroaniline	UG/KG	0	0%		0	0	8	190	U	170	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	8	190	UJ	170	U
Acenaphthene	UG/KG	1300	13%	50000	0	1	8	77	U	72	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	8	77	U	72	U
Anthracene	UG/KG	2700	13%	50000	0	1	8	77	U	72	U
Benzo(a)anthracene	UG/KG	3500	63%	224	1	5	8	77	U	13	J
Benzo(a)pyrene	UG/KG	2600	75%	61	1	6	8	4.4	J	13	J
Benzo(b)fluoranthene	UG/KG	2200	75%	1100	1	6	8	5.8	J	19	J
Benzo(ghi)perylene	UG/KG	1400	63%	50000	0	5	8	77	U	26	J
Benzo(k)fluoranthene	UG/KG	2600	75%	1100	1	6	8	4.7	J	16	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	8	77	U	72	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	8	77	U	72	U

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		
LOC_ID								TP12-16B		TP12-16C		
MATRIX								SOIL		SOIL		
SAMP_ID								123045		123078		
DEPTH_TOP								2		0.5		
DEPTH_BOT								2		2		
SAMP_DATE								10/3/1998		10/3/1998		
QC_CODE								SA		SA		
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES					
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	8	77	U	72	U	
Bis(2-Ethylhexyl)phthalate	UG/KG	16	75%	50000	0	6	8	13	J	8	J	
Butylbenzylphthalate	UG/KG	0	0%	50000	0	0	8	77	UJ	72	U	
Carbazole	UG/KG	1600	13%		0	1	8	77	UJ	72	UJ	
Chrysene	UG/KG	3000	88%	400	1	7	8	5.4	J	26	J	
Di-n-butylphthalate	UG/KG	6.6	50%	8100	0	4	8	77	U	4.3	J	
Di-n-octylphthalate	UG/KG	11	25%	50000	0	2	8	77	UJ	72	U	
Dibenz(a,h)anthracene	UG/KG	710	13%	14	1	1	8	77	U	72	U	
Dibenzofuran	UG/KG	1000	13%	6200	0	1	8	77	U	72	U	
Diethyl phthalate	UG/KG	0	0%	7100	0	0	8	77	U	72	U	
Dimethylphthalate	UG/KG	0	0%	2000	0	0	8	77	U	72	U	
Fluoranthene	UG/KG	7400	75%	50000	0	6	8	5.3	J	30	J	
Fluorene	UG/KG	1500	13%	50000	0	1	8	77	U	72	U	
Hexachlorobenzene	UG/KG	0	0%	410	0	0	8	77	U	72	U	
Hexachlorobutadiene	UG/KG	0	0%		0	0	8	77	U	72	UJ	
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	8	77	U	72	U	
Hexachloroethane	UG/KG	0	0%		0	0	8	77	U	72	U	
Indeno(1,2,3-cd)pyrene	UG/KG	1500	63%	3200	0	5	8	77	U	14	J	
Isophorone	UG/KG	0	0%	4400	0	0	8	77	U	72	U	
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	8	77	U	72	U	
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	8	77	U	72	U	
Naphthalene	UG/KG	860	25%	13000	0	2	8	77	U	72	U	
Nitrobenzene	UG/KG	0	0%	200	0	0	8	77	U	72	U	
Pentachlorophenol	UG/KG	0	0%	1000	0	0	8	190	UJ	170	UJ	
Phenanthrene	UG/KG	8500	63%	50000	0	5	8	77	U	20	J	
Phenol	UG/KG	0	0%	30	0	0	8	77	U	72	U	
Pyrene	UG/KG	5900	75%	50000	0	6	8	5.8	J	30	J	
PESTICIDES/PCBS												
4,4'-DDD	UG/KG	4	13%	2900	0	1	8	3.8	U	3.6	U	
4,4'-DDE	UG/KG	3	13%	2100	0	1	8	3.8	U	3.6	U	
4,4'-DDT	UG/KG	4.5	13%	2100	0	1	8	3.8	U	3.6	U	
Aldrin	UG/KG	0	0%	41	0	0	8	1.9	U	1.8	U	
Alpha-BHC	UG/KG	0	0%	110	0	0	8	1.9	U	1.8	U	
Alpha-Chlordane	UG/KG	0	0%		0	0	8	1.9	U	1.8	U	
Aroclor-1016	UG/KG	0	0%	10000	0	0	8	38	U	36	U	
Aroclor-1221	UG/KG	0	0%	10000	0	0	8	77	U	72	U	

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								TP12-16B		TP12-16C	
MATRIX								SOIL		SOIL	
SAMP_ID								123045		123078	
DEPTH_TOP								2		0.5	
DEPTH_BOT								2		2	
SAMP_DATE								10/3/1998		10/3/1998	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
Aroclor-1232	UG/KG	0	0%	10000	0	0	8	38	U	36	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	8	38	U	36	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	8	38	U	36	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	8	38	U	36	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	8	38	U	36	U
Beta-BHC	UG/KG	0	0%	200	0	0	8	1.9	U	1.8	U
Delta-BHC	UG/KG	0	0%	300	0	0	8	1.9	U	1.8	U
Dieldrin	UG/KG	0	0%	44	0	0	8	3.8	U	3.6	U
Endosulfan I	UG/KG	1.5	13%	900	0	1	8	1.9	U	1.8	U
Endosulfan II	UG/KG	0	0%	900	0	0	8	3.8	U	3.6	U
Endosulfan sulfate	UG/KG	18	13%	1000	0	1	8	3.8	U	3.6	U
Endrin	UG/KG	0	0%	100	0	0	8	3.8	U	3.6	U
Endrin aldehyde	UG/KG	7.5	13%		0	1	8	3.8	U	3.6	U
Endrin ketone	UG/KG	13	13%		0	1	8	3.8	U	3.6	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	8	1.9	U	1.8	U
Gamma-Chlordane	UG/KG	3.8	13%	540	0	1	8	1.9	U	1.8	U
Heptachlor	UG/KG	0	0%	100	0	0	8	1.9	U	1.8	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	8	1.9	U	1.8	U
Methoxychlor	UG/KG	42	13%		0	1	8	19	U	18	U
Toxaphene	UG/KG	0	0%		0	0	8	190	U	180	U
METALS											
Aluminum	MG/KG	15000	100%	19520	0	8	8	14900		9600	
Antimony	MG/KG	0	0%	6	0	0	8	0.95	R	1.1	R
Arsenic	MG/KG	5	100%	8.9	0	8	8	4.8		3.2	
Barium	MG/KG	116	100%	300	0	8	8	70.1		76.3	
Beryllium	MG/KG	0.6	100%	1.13	0	8	8	0.6	J	0.27	J
Cadmium	MG/KG	0.12	13%	2.46	0	1	8	0.05	U	0.12	J
Calcium	MG/KG	28900	100%	125300	0	8	8	20000	J	16400	J
Chromium	MG/KG	24.8	100%	30	0	8	8	19.1	J	15.3	J
Cobalt	MG/KG	15.4	100%	30	0	8	8	11.7		14.9	
Copper	MG/KG	73.3	100%	33	5	8	8	**73.3**		**41**	
Cyanide	MG/KG	0	0%	0.35	0	0	8	0.59	U	0.54	U
Iron	MG/KG	35800	100%	37410	0	8	8	29200		23500	
Lead	MG/KG	112	100%	24.4	6	8	8	**64.7**	J	**88.9**	J
Magnesium	MG/KG	8210	100%	21700	0	8	8	6190		5780	
Manganese	MG/KG	723	100%	1100	0	8	8	351	J	723	J

TABLE G-13
EM-5 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								TP12-16B		TP12-16C	
MATRIX								SOIL		SOIL	
SAMP_ID								123045		123078	
DEPTH_TOP								2		0.5	
DEPTH_BOT								2		2	
SAMP_DATE								10/3/1998		10/3/1998	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
Mercury	MG/KG	1	50%	0.1	3	4	8	0.11		0.08	J
Nickel	MG/KG	52	100%	50	1	8	8	36.4	J	36.4	J
Potassium	MG/KG	2810	100%	2623	3	8	8	2810		1340	
Selenium	MG/KG	1.2	38%	2	0	3	8	0.36	U	0.46	J
Silver	MG/KG	0.32	13%	0.8	0	1	8	0.19	U	0.21	U
Sodium	MG/KG	102	50%	188	0	4	8	39.4	U	97.6	J
Thallium	MG/KG	0	0%	0.855	0	0	8	0.81	UJ	0.92	U
Vanadium	MG/KG	25.1	100%	150	0	8	8	22.4		15.3	
Zinc	MG/KG	280	100%	115	6	8	8	123	J	256	J
WET CHEMISTRY											
Nitrate/Nitrite	%W/W										
Nitrate/Nitrite	MG/KG										
pH	SU										
TOC-Soil 9060	MG/KG										
Percent Solids	%W/W										
Percent Solids	MG/KG										
Cation exchange capacity	meq/100g										

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-25		MW12-26	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123161		123164		123167	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES						
VOLATILE ORGANICS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	3	11	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	3	11	U	12	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	3	11	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	3	11	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	3	11	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Acetone	UG/KG	0	0%	200	0	0	3	11	UJ	12	U	12	U
Benzene	UG/KG	0	0%	60	0	0	3	11	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	3	11	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	3	11	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	3	11	U	12	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	3	11	UJ	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	3	11	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	3	11	U	12	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	3	11	UJ	12	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	3	11	UJ	12	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	3	11	U	12	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	3	11	U	12	U	12	U
Styrene	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	3	11	U	12	U	12	U
Toluene	UG/KG	0	0%	1500	0	0	3	11	U	12	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	3	11	U	12	U	12	U

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-25		MW12-26	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123161		123164		123167	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES						
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	11	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	3	11	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	3	11	U	12	U	12	U
SEMI VOLATILE ORGANICS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	3	76	U	80	U	77	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	3	76	U	80	U	77	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	3	76	U	80	U	77	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	3	76	U	80	U	77	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	3	180	U	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	3	76	U	80	U	77	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	3	76	UJ	80	UJ	77	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	3	180	UJ	190	UJ	190	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	3	76	U	80	U	77	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	3	76	U	80	U	77	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	3	76	U	80	U	77	U
2-Methylphenol	UG/KG	0	0%	100	0	0	3	76	U	80	U	77	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	3	180	U	190	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	3	76	U	80	U	77	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	3	180	UJ	190	U	190	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	3	180	U	190	U	190	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	3	76	U	80	U	77	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	3	76	U	80	U	77	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
4-Methylphenol	UG/KG	0	0%	900	0	0	3	76	U	80	U	77	U
4-Nitroaniline	UG/KG	0	0%		0	0	3	180	UJ	190	UJ	190	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	3	180	U	190	UJ	190	UJ

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12	
LOC_ID							MW12-24		MW12-25		MW12-26	
MATRIX							SOIL		SOIL		SOIL	
SAMP_ID							123161		123164		123167	
DEPTH_TOP							0		0		0	
DEPTH_BOT							0.2		0.2		0.2	
SAMP_DATE							19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE							SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Acenaphthene	UG/KG	0	0%	50000	0	0	3	76	U	80	U	77	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	3	76	U	80	U	77	U
Anthracene	UG/KG	0	0%	50000	0	0	3	76	U	80	U	77	U
Benzo(a)anthracene	UG/KG	0	0%	224	0	0	3	76	U	80	U	77	U
Benzo(a)pyrene	UG/KG	0	0%	61	0	0	3	76	U	80	U	77	U
Benzo(b)fluoranthene	UG/KG	4.3	33%	1100	0	1	3	76	U	4.3	J	77	U
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	3	76	U	80	U	77	U
Benzo(k)fluoranthene	UG/KG	0	0%	1100	0	0	3	76	U	80	U	77	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Bis(2-Ethylhexyl)phthalate	UG/KG	46	100%	50000	0	3	3	36	J	43	J	46	J
Butylbenzylphthalate	UG/KG	67	67%	50000	0	2	3	76	U	55	J	67	J
Carbazole	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Chrysene	UG/KG	4.4	33%	400	0	1	3	76	U	4.4	J	77	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	3	480	UJ	800	UJ	760	UJ
Di-n-octylphthalate	UG/KG	4.2	33%	50000	0	1	3	76	U	80	U	4.2	J
Dibenz(a,h)anthracene	UG/KG	0	0%	14	0	0	3	76	U	80	U	77	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	3	76	U	80	U	77	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	3	76	U	80	U	77	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	3	76	U	80	U	77	U
Fluoranthene	UG/KG	5.8	33%	50000	0	1	3	76	U	5.8	J	77	U
Fluorene	UG/KG	0	0%	50000	0	0	3	76	U	80	U	77	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	3	76	U	80	U	77	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Hexachloroethane	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	3	76	U	80	U	77	U
Isophorone	UG/KG	0	0%	4400	0	0	3	76	U	80	U	77	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	3	76	U	80	U	77	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	3	76	U	80	U	77	U

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-25		MW12-26	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123161		123164		123167	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES						
Naphthalene	UG/KG	0	0%	13000	0	0	3	76	U	80	U	77	U
Nitrobenzene	UG/KG	0	0%	200	0	0	3	76	U	80	U	77	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	3	180	UJ	190	U	190	U
Phenanthrene	UG/KG	0	0%	50000	0	0	3	76	U	80	U	77	U
Phenol	UG/KG	0	0%	30	0	0	3	76	U	80	U	77	U
Pyrene	UG/KG	6.3	33%	50000	0	1	3	76	U	6.3	J	77	U
PESTICIDES/PCBS													
4,4'-DDD	UG/KG	0	0%	2900	0	0	3	3.8	U	4	U	3.8	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	3	3.8	U	4	U	3.8	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	3	3.8	U	4	U	3.8	U
Aldrin	UG/KG	0	0%	41	0	0	3	2	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	3	2	U	2	U	2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	3	2	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	3	77	U	81	U	78	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	3	38	U	40	U	38	U
Beta-BHC	UG/KG	0	0%	200	0	0	3	2	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	3	2	U	2	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	3	3.8	U	4	U	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	3	2	U	2	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	3	3.8	U	4	U	3.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	3	3.8	U	4	U	3.8	U
Endrin	UG/KG	0	0%	100	0	0	3	3.8	U	4	U	3.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	3	3.8	U	4	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	3	3.8	U	4	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	3	2	U	2	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	3	2	U	2	U	2	U

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12	
LOC_ID							MW12-24		MW12-25		MW12-26	
MATRIX							SOIL		SOIL		SOIL	
SAMP_ID							123161		123164		123167	
DEPTH_TOP							0		0		0	
DEPTH_BOT							0.2		0.2		0.2	
SAMP_DATE							19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE							SA		SA		SA	
STUDY_ID							RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES					
Heptachlor	UG/KG	0	0%	100	0	0	3	2 U	2 U		2 U	
Heptachlor epoxide	UG/KG	0	0%	20	0	0	3	2 U	2 U		2 U	
Methoxychlor	UG/KG	0	0%		0	0	3	20 U	20 U		20 U	
Toxaphene	UG/KG	0	0%		0	0	3	200 U	200 U		200 U	
METALS												
Aluminum	MG/KG	13300	100%	19520	0	3	3	12100	13300		12500	
Antimony	MG/KG	0	0%	6	0	0	3	1.3 R	1.2 R		1.3 R	
Arsenic	MG/KG	5.4	100%	8.9	0	3	3	4.1	5.4		4.3	
Barium	MG/KG	84	100%	300	0	3	3	68.2	70.5		84	
Beryllium	MG/KG	0.5	100%	1.13	0	3	3	0.47 J	0.46 J		0.5 J	
Cadmium	MG/KG	0	0%	2.46	0	0	3	0.06 U	0.06 U		0.06 U	
Calcium	MG/KG	23900	100%	125300	0	3	3	20000	2480		23900	
Chromium	MG/KG	19.1	100%	30	0	3	3	18.3	18.7		19.1	
Cobalt	MG/KG	17.7	100%	30	0	3	3	10.9	17.7		12.6	
Copper	MG/KG	26.2	100%	33	0	3	3	21.2	26.2		23.6	
Cyanide	MG/KG	0	0%	0.35	0	0	3	0.59 U	0.62 U		0.57 U	
Iron	MG/KG	27100	100%	37410	0	3	3	23200	25600		27100	
Lead	MG/KG	16.2	100%	24.4	0	3	3	10.4 J	16.2 J		14.8 J	
Magnesium	MG/KG	6560	100%	21700	0	3	3	6560	4350		5450	
Manganese	MG/KG	1120	100%	1100	1	3	3	495	**1120**		644	
Mercury	MG/KG	0	0%	0.1	0	0	3	0.05 UJ	0.06 U		0.05 U	
Nickel	MG/KG	40.8	100%	50	0	3	3	29.8	40.8		30.8	
Potassium	MG/KG	1120	100%	2623	0	3	3	1120	894 J		1020 J	
Selenium	MG/KG	1.1	33%	2	0	1	3	0.96 UJ	1.1 J		1 UJ	
Silver	MG/KG	0	0%	0.8	0	0	3	0.25 U	0.23 U		0.26 U	
Sodium	MG/KG	0	0%	188	0	0	3	52.5 U	47.9 U		54.5 U	
Thallium	MG/KG	2	67%	0.855	2	2	3	1.1 U	**2**		**1.1** J	
Vanadium	MG/KG	20.1	100%	150	0	3	3	18.3	20.1		19.7	
Zinc	MG/KG	75.8	100%	115	0	3	3	64.1	71.5		75.8	
WET CHEMISTRY												
Nitrate/Nitrite	%W/W											

TABLE G-14
EM-6 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-25		MW12-26	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123161		123164		123167	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								19-Oct-98		18-Oct-98		18-Oct-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES						
Nitrate/Nitrite	MG/KG	-											
pH	SU												
TOC-Soil 9060	MG/KG												
Percent Solids	%W/W												
Percent Solids	MG/KG												
Cation exchange capacity	meq/100g												

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	12	11	U	11	U	12	U	11	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	12	11	U	11	U	12	U	11	U	13	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	12	11	U	11	U	12	U	11	U	13	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	12	11	U	11	U	12	U	11	U	13	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	12	11	U	11	U	12	U	11	U	13	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Acetone	UG/KG	160	33%	200	0	4	12	12		5	J	160		11	UJ	98	
Benzene	UG/KG	0	0%	60	0	0	12	11	U	11	U	12	U	11	U	13	U
Bromodichloromethane	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Bromoform	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	12	11	U	11	U	12	U	11	U	13	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	12	11	U	11	U	12	U	11	U	13	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	12	11	U	11	U	12	U	11	U	13	U
Chlorodibromomethane	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Chloroethane	UG/KG	0	0%	1900	0	0	12	11	U	11	U	12	U	11	UJ	13	U
Chloroform	UG/KG	0	0%	300	0	0	12	11	U	11	U	12	U	11	U	13	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Ethyl benzene	UG/KG	3	8%	5500	0	1	12	11	U	11	U	3	J	11	U	13	U
Methyl bromide	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Methyl butyl ketone	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	UJ	13	U
Methyl chloride	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Methyl ethyl ketone	UG/KG	34	17%	300	0	2	12	11	U	11	U	34		11	UJ	28	
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	12	11	U	11	U	12	U	11	U	13	U
Methylene chloride	UG/KG	0	0%	100	0	0	12	11	U	11	U	12	U	11	U	13	U
Styrene	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	12	11	U	11	U	12	U	11	U	13	U
Toluene	UG/KG	8	25%	1500	0	3	12	11	U	11	U	12	U	11	U	8	J
Total Xylenes	UG/KG	0	0%	1200	0	0	12	11	U	11	U	12	U	11	U	13	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	11	U	11	U	12	U	11	U	13	U
Trichloroethene	UG/KG	0	0%	700	0	0	12	11	U	11	U	12	U	11	U	13	U
Vinyl chloride	UG/KG	0	0%	200	0	0	12	11	U	11	U	12	U	11	U	13	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	12	70	UJ	70	UJ	75	U	74	U	81	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	12	70	U	70	U	75	U	74	U	81	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	12	70	U	70	U	75	U	74	U	81	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	12	70	U	70	U	75	U	74	U	81	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	12	170	U	170	U	180	U	180	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	12	70	U	70	U	75	U	74	U	81	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	12	70	UJ	70	UJ	75	UJ	74	UJ	81	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	12	170	UJ	170	UJ	180	UJ	180	UJ	200	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	12	70	U	70	U	75	U	74	U	81	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	12	70	U	70	U	75	U	74	U	81	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	12	70	U	70	U	75	U	74	U	81	U
2-Methylphenol	UG/KG	0	0%	100	0	0	12	70	U	70	U	75	U	74	U	81	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	12	170	U	170	U	180	U	180	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	12	70	U	70	U	75	U	74	U	81	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	12	170	U	170	U	180	U	180	U	200	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	12	170	U	170	U	180	U	180	U	200	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	12	70	U	70	U	75	U	74	U	81	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	12	70	U	70	U	75	U	74	U	81	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
4-Methylphenol	UG/KG	0	0%	900	0	0	12	70	U	70	U	75	U	74	U	81	U
4-Nitroaniline	UG/KG	0	0%		0	0	12	170	U	170	U	180	UJ	180	UJ	200	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	12	170	UJ	170	UJ	180	UJ	180	UJ	200	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Acenaphthene	UG/KG	0	0%	50000	0	0	12	70	U	70	U	75	U	74	U	81	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	12	70	U	70	U	75	U	74	U	81	U
Anthracene	UG/KG	23	8%	50000	0	1	12	70	U	70	U	75	U	74	U	81	U
Benzo(a)anthracene	UG/KG	56	17%	224	0	2	12	70	U	70	U	75	U	74	U	81	U
Benzo(a)pyrene	UG/KG	55	8%	61	0	1	12	70	U	70	U	75	U	74	U	81	U
Benzo(b)fluoranthene	UG/KG	56	8%	1100	0	1	12	70	U	70	U	75	U	74	U	81	U
Benzo(ghi)perylene	UG/KG	32	8%	50000	0	1	12	70	U	70	U	75	U	74	U	81	UJ
Benzo(k)fluoranthene	UG/KG	61	8%	1100	0	1	12	70	U	70	U	75	U	74	U	81	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
Bis(2-Ethylhexyl)phthalate	UG/KG	120	25%	50000	0	3	12	19	J	70	U	84		120		81	U
Butylbenzylphthalate	UG/KG	160	17%	50000	0	2	12	70	U	70	U	100		160		81	U
Carbazole	UG/KG	27	8%		0	1	12	70	UJ	70	UJ	75	U	74	U	81	UJ
Chrysene	UG/KG	55	17%	400	0	2	12	70	U	70	U	75	U	74	U	81	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	12	920	UJ	960	UJ	910	UJ	860	UJ	81	U
Di-n-octylphthalate	UG/KG	6.8	17%	50000	0	2	12	70	U	70	U	4.5	J	6.8	J	81	UJ
Dibenz(a,h)anthracene	UG/KG	13	8%	14	0	1	12	70	U	70	U	75	U	74	U	81	UJ
Dibenzofuran	UG/KG	0	0%	6200	0	0	12	70	U	70	U	75	U	74	U	81	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	12	70	U	70	U	75	U	74	U	81	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	12	70	U	70	U	75	U	74	U	81	U
Fluoranthene	UG/KG	150	25%	50000	0	3	12	70	U	70	U	4.5	J	74	U	81	U
Fluorene	UG/KG	19	8%	50000	0	1	12	70	U	70	U	75	U	74	U	81	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	12	70	U	70	U	75	U	74	U	81	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	12	70	UJ	70	UJ	75	U	74	U	81	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	12	70	UJ	70	UJ	75	U	74	U	81	U
Hexachloroethane	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
Indeno(1,2,3-cd)pyrene	UG/KG	36	8%	3200	0	1	12	70	U	70	U	75	U	74	U	81	UJ
Isophorone	UG/KG	0	0%	4400	0	0	12	70	U	70	U	75	U	74	U	81	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	12	70	U	70	U	75	U	74	U	81	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Naphthalene	UG/KG	0	0%	13000	0	0	12	70	U	70	U	75	U	74	U	81	U
Nitrobenzene	UG/KG	0	0%	200	0	0	12	70	UJ	70	UJ	75	U	74	U	81	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	12	170	UJ	170	UJ	180	U	180	U	200	UJ
Phenanthrene	UG/KG	120	25%	50000	0	3	12	70	U	70	U	75	U	74	U	8	J
Phenol	UG/KG	0	0%	30	0	0	12	70	U	70	U	75	U	74	U	81	U
Pyrene	UG/KG	100	25%	50000	0	3	12	70	U	70	U	4.6	J	74	U	81	U
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Aldrin	UG/KG	0	0%	41	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Alpha-BHC	UG/KG	0	0%	110	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Alpha-Chlordane	UG/KG	0	0%		0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	12	71	U	71	U	76	U	75	U	83	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	12	35	U	35	U	38	U	37	U	41	U
Beta-BHC	UG/KG	0	0%	200	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Dieldrin	UG/KG	0	0%	44	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Endosulfan I	UG/KG	0	0%	900	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Endosulfan II	UG/KG	0	0%	900	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Endrin	UG/KG	0	0%	100	0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Endrin aldehyde	UG/KG	0	0%		0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Endrin ketone	UG/KG	0	0%		0	0	12	3.5	U	3.5	U	3.8	U	3.7	U	4.1	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
Heptachlor	UG/KG	0	0%	100	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	12	1.8	U	1.8	U	1.9	U	1.9	U	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	12	18	U	18	U	19	U	19	U	21	U
Toxaphene	UG/KG	0	0%		0	0	12	180	U	180	U	190	U	190	U	210	U
METALS																	
Aluminum	MG/KG	16500	100%	19520	0	12	12	12400		9690		12300		12300		11500	J
Antimony	MG/KG	0	0%	6	0	0	12	1	R	1	R	1.2	R	1.3	R	1.3	R
Arsenic	MG/KG	6.4	100%	8.9	0	12	12	4.3		3.5		3.6		4.9		3.6	J
Barium	MG/KG	130	100%	300	0	12	12	57.8		53.4		74.6		63.5		78.8	
Beryllium	MG/KG	0.68	92%	1.13	0	11	12	0.48	J	0.36	J	0.44	J	0.45	J	0.46	J
Cadmium	MG/KG	0	0%	2.46	0	0	12	0.05	U	0.05	U	0.06	U	0.06	U	0.06	U
Calcium	MG/KG	76300	100%	125300	0	12	12	76300		52700		9490		36200		24500	J
Chromium	MG/KG	29.6	100%	30	0	12	12	21.4		17.1		19.5		21.5		18.8	
Cobalt	MG/KG	36.3	100%	30	1	12	12	12.4		9.9		12.6		12.6		10.6	J
Copper	MG/KG	28.7	100%	33	0	12	12	26.8		19.4		21.6		28.7		21.4	
Cyanide	MG/KG	0	0%	0.35	0	0	12	0.56	U	0.53	U	0.6	U	0.55	U	0.67	U
Iron	MG/KG	40600	100%	37410	1	12	12	27300		21300		24800		28900		24700	
Lead	MG/KG	34	100%	24.4	2	12	12	7.9		8.9		11.4	J	7.9	J	14	J
Magnesium	MG/KG	15400	100%	21700	0	12	12	15400		8450		5400		7390		7020	
Manganese	MG/KG	4110	100%	1100	1	12	12	459		372		559		522		479	
Mercury	MG/KG	0.06	8%	0.1	0	1	12	0.05	U	0.05	U	0.05	UJ	0.05	UJ	0.06	J
Nickel	MG/KG	47.2	83%	50	0	10	12	36.3		29		32.5		37.3		32.6	J
Potassium	MG/KG	1570	100%	2623	0	12	12	1220		1100		1150		1140		946	J
Selenium	MG/KG	1.6	17%	2	0	2	12	0.79	UJ	0.79	UJ	0.89	UJ	0.98	UJ	0.97	U
Silver	MG/KG	0.2	8%	0.8	0	1	12	0.21	U	0.21	U	0.23	U	0.26	U	0.25	U
Sodium	MG/KG	197	75%	188	1	9	12	102	J	55.7	J	48.5	U	53.6	U	74.2	J
Thallium	MG/KG	3.8	67%	0.855	7	8	12	1.1	J	0.89	U	1.2	J	1.1	U	[illegible]	J
Vanadium	MG/KG	23.8	100%	150	0	12	12	17.8		13.4		18.3		17.5		18.2	
Zinc	MG/KG	391	100%	115	4	12	12	87.7		68.2		69.3		82.2		88.7	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-25		MW12-25		MW12-26		MW12-26		TP12-11A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123165		123166		123168		123169		123109	
DEPTH_TOP								2		6		2		6		6	
DEPTH_BOT								4		8		4		8		6	
SAMP_DATE								18-Oct-98		18-Oct-98		18-Oct-98		18-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	12	12	U	12	U	12	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	12	12	U	12	U	12	U	11	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	12	12	U	12	U	12	U	11	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	12	12	U	12	U	12	U	11	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	12	12	U	12	U	12	U	11	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Acetone	UG/KG	160	33%	200	0	4	12	44	U	12	U	15	UJ	17	UJ	12	UJ
Benzene	UG/KG	0	0%	60	0	0	12	12	U	12	U	12	U	11	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Bromoform	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	12	12	U	12	U	12	U	11	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	12	12	U	12	U	12	U	11	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	12	12	U	12	U	12	U	11	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	12	12	U	12	U	12	UJ	11	UJ	12	UJ
Chloroform	UG/KG	0	0%	300	0	0	12	12	U	12	U	12	U	11	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Ethyl benzene	UG/KG	3	8%	5500	0	1	12	12	U	12	U	12	U	11	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Methyl ethyl ketone	UG/KG	34	17%	300	0	2	12	12	U	12	U	12	UJ	11	UJ	12	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	12	12	U	12	U	12	U	11	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	12	12	U	12	U	12	U	11	U	12	U
Styrene	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	12	12	U	12	U	12	U	11	U	12	U
Toluene	UG/KG	8	25%	1500	0	3	12	12	U	6	J	12	U	11	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	12	12	U	12	U	12	U	11	U	12	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	12	U	12	U	12	U	11	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	12	12	U	12	U	12	U	11	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	12	12	U	12	U	12	U	11	U	12	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	12	78	U	77	U	74	U	77	U	78	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	12	78	U	77	U	74	U	77	UJ	78	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	12	78	U	77	U	74	U	77	UJ	78	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	12	78	U	77	U	74	U	77	UJ	78	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	12	190	U	190	U	180	U	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	U	78	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	12	78	U	77	U	74	U	77	U	78	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	12	78	UJ	77	UJ	74	UJ	77	UJ	78	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	12	190	UJ	190	UJ	180	UJ	190	UJ	190	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	12	78	U	77	U	74	U	77	UJ	78	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	12	78	U	77	U	74	U	77	U	78	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	12	78	U	77	U	74	U	77	UJ	78	U
2-Methylphenol	UG/KG	0	0%	100	0	0	12	78	U	77	U	74	U	77	U	78	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	12	190	U	190	U	180	U	190	UJ	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	12	78	U	77	U	74	U	77	U	78	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	12	190	U	190	U	180	U	190	UJ	190	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	12	190	U	190	U	180	UJ	190	UJ	190	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	12	78	U	77	U	74	U	77	U	78	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	12	78	UJ	77	UJ	74	UJ	77	UJ	78	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
4-Methylphenol	UG/KG	0	0%	900	0	0	12	78	U	77	U	74	U	77	U	78	U
4-Nitroaniline	UG/KG	0	0%		0	0	12	190	UJ	190	UJ	180	UJ	190	UJ	190	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	12	190	U	190	U	180	UJ	190	UJ	190	UJ

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES										
Acenaphthene	UG/KG	0	0%	50000	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Anthracene	UG/KG	23	8%	50000	0	1	12	23	J	77	U	74	U	77	UJ	78	U
Benzo(a)anthracene	UG/KG	56	17%	224	0	2	12	56	J	4.2	J	74	U	77	UJ	78	U
Benzo(a)pyrene	UG/KG	55	8%	61	0	1	12	55	J	77	U	74	U	77	UJ	78	U
Benzo(b)fluoranthene	UG/KG	56	8%	1100	0	1	12	56	J	77	U	74	U	77	UJ	78	U
Benzo(ghi)perylene	UG/KG	32	8%	50000	0	1	12	32	J	77	UJ	74	U	77	UJ	78	U
Benzo(k)fluoranthene	UG/KG	61	8%	1100	0	1	12	61	J	77	U	74	U	77	UJ	78	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
Bis(2-Ethylhexyl)phthalate	UG/KG	120	25%	50000	0	3	12	78	U	77	U	74	UJ	77	UJ	78	UJ
Butylbenzylphthalate	UG/KG	160	17%	50000	0	2	12	78	U	77	U	74	UJ	77	UJ	78	UJ
Carbazole	UG/KG	27	8%		0	1	12	27	J	77	UJ	74	UJ	77	UJ	78	UJ
Chrysene	UG/KG	55	17%	400	0	2	12	55	J	5.6	J	74	U	77	UJ	78	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Di-n-octylphthalate	UG/KG	6.8	17%	50000	0	2	12	78	UJ	77	UJ	74	UJ	77	UJ	78	UJ
Dibenz(a,h)anthracene	UG/KG	13	8%	14	0	1	12	13	J	77	UJ	74	U	77	UJ	78	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Fluoranthene	UG/KG	150	25%	50000	0	3	12	150		9.8	J	74	U	77	UJ	78	U
Fluorene	UG/KG	19	8%	50000	0	1	12	19	J	77	U	74	U	77	UJ	78	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	12	78	UJ	77	UJ	74	UJ	77	UJ	78	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
Hexachloroethane	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
Indeno(1,2,3-cd)pyrene	UG/KG	36	8%	3200	0	1	12	36	J	77	UJ	74	U	77	UJ	78	U
Isophorone	UG/KG	0	0%	4400	0	0	12	78	U	77	U	74	U	77	UJ	78	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	12	78	U	77	U	74	U	77	UJ	78	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Naphthalene	UG/KG	0	0%	13000	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Nitrobenzene	UG/KG	0	0%	200	0	0	12	78	U	77	U	74	U	77	UJ	78	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	12	190	UJ	190	UJ	180	UJ	190	UJ	190	UJ
Phenanthrene	UG/KG	120	25%	50000	0	3	12	120		8	J	74	U	77	UJ	78	U
Phenol	UG/KG	0	0%	30	0	0	12	78	U	77	U	74	U	77	U	78	U
Pyrene	UG/KG	100	25%	50000	0	3	12	100		7.7	J	74	U	77	UJ	78	U
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	0	0%	2900	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Aldrin	UG/KG	0	0%	41	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Alpha-Chlordane	UG/KG	0	0%		0	0	12	2	U	2	U	1.9	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	12	79	U	78	U	75	U	78	U	80	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	12	39	U	38	U	37	U	38	U	39	U
Beta-BHC	UG/KG	0	0%	200	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Endosulfan I	UG/KG	0	0%	900	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Endrin	UG/KG	0	0%	100	0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Endrin aldehyde	UG/KG	0	0%		0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Endrin ketone	UG/KG	0	0%		0	0	12	3.9	U	3.8	U	3.7	U	3.8	U	3.9	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	12	2	U	2	U	1.9	U	2	U	2	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES										
Heptachlor	UG/KG	0	0%	100	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	12	2	U	2	U	1.9	U	2	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	12	20	U	20	U	19	U	20	U	20	U
Toxaphene	UG/KG	0	0%		0	0	12	200	U	200	U	190	U	200	U	200	U
METALS																	
Aluminum	MG/KG	16500	100%	19520	0	12	12	13800	J	14300	J	12900	J	13200	J	13700	J
Antimony	MG/KG	0	0%	6	0	0	12	1.4	R	1.2	R	1.1	R	1.1	R	1.1	R
Arsenic	MG/KG	6.4	100%	8.9	0	12	12	4	J	4.5	J	4.2	J	4.4	J	6.4	J
Barium	MG/KG	130	100%	300	0	12	12	75.7		78.4		61.4		69.8		130	
Beryllium	MG/KG	0.68	92%	1.13	0	11	12	0.56	J	0.61	J	0.56	J	0.56	J	0.02	U
Cadmium	MG/KG	0	0%	2.46	0	0	12	0.07	U	0.06	U	0.05	U	0.05	U	0.05	U
Calcium	MG/KG	76300	100%	125300	0	12	12	38200	J	23400	J	21400	J	19400	J	7370	J
Chromium	MG/KG	29.6	100%	30	0	12	12	22.7		23.1		22.5		23.1		24.9	
Cobalt	MG/KG	36.3	100%	30	1	12	12	12.9		11.6		[illegible]		11.7		10.1	J
Copper	MG/KG	28.7	100%	33	0	12	12	24.2		23.8		21.4		26		25.8	
Cyanide	MG/KG	0	0%	0.35	0	0	12	0.65	U	0.61	U	0.58	U	0.67	U	0.7	U
Iron	MG/KG	40600	100%	37410	1	12	12	28100		27000		40600	J	32000	J	30400	J
Lead	MG/KG	34	100%	24.4	2	12	12	10.7	J	9.5	J	9.2	J	33.5	J	[illegible]	J
Magnesium	MG/KG	15400	100%	21700	0	12	12	8820	J	6970	J	5790	J	5910	J	5000	J
Manganese	MG/KG	4110	100%	1100	1	12	12	447		411		422		458		4110	
Mercury	MG/KG	0.06	8%	0.1	0	1	12	0.05	U	0.06	U	0.05	U	0.05	U	0.06	U
Nickel	MG/KG	47.2	83%	50	0	10	12	38.5	J	33.3	J	47.2	J	37.8	J	28.7	J
Potassium	MG/KG	1570	100%	2623	0	12	12	1570		1180		879	J	839	J	809	J
Selenium	MG/KG	1.6	17%	2	0	2	12	1	U	0.94	U	0.81	U	0.79	U	1.6	
Silver	MG/KG	0.2	8%	0.8	0	1	12	0.27	U	0.25	U	0.21	U	0.21	U	0.21	U
Sodium	MG/KG	197	75%	188	1	9	12	88.8	J	51.5	U	109	J	147	J	197	J
Thallium	MG/KG	3.8	67%	0.855	7	8	12	1.2	J	1.1	U	0.93	J	0.99	J	3.8	
Vanadium	MG/KG	23.8	100%	150	0	12	12	20.8		21		17.9		19.5		22.5	
Zinc	MG/KG	391	100%	115	4	12	12	125	J	81.2	J	126	J	166	J	391	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-11B		TP12-11C		TP12-12A		TP12-12B		TP12-12C	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123110		123111		123118		123119		123120	
DEPTH_TOP								6.5		0.5		0.5		1.5		4	
DEPTH_BOT								6.5		0.5		0.5		1.5		4	
SAMP_DATE								14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
VOLATILE ORGANICS											
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	12	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	12	11	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	12	11	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	12	11	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	12	11	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	12	11	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	12	11	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	12	11	U	12	U
Acetone	UG/KG	160	33%	200	0	4	12	11	UJ	12	UJ
Benzene	UG/KG	0	0%	60	0	0	12	11	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	12	11	U	12	U
Bromoform	UG/KG	0	0%		0	0	12	11	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	12	11	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	12	11	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	12	11	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	12	11	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	12	11	UJ	12	UJ
Chloroform	UG/KG	0	0%	300	0	0	12	11	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	11	U	12	U
Ethyl benzene	UG/KG	3	8%	5500	0	1	12	11	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	12	11	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	12	11	UJ	12	UJ
Methyl chloride	UG/KG	0	0%		0	0	12	11	U	12	U
Methyl ethyl ketone	UG/KG	34	17%	300	0	2	12	11	UJ	12	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	12	11	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	12	11	U	12	U
Styrene	UG/KG	0	0%		0	0	12	11	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	12	11	U	12	U
Toluene	UG/KG	8	25%	1500	0	3	12	11	U	4	J
Total Xylenes	UG/KG	0	0%	1200	0	0	12	11	U	12	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES				
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	12	11	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	12	11	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	12	11	U	12	U
SEMI VOLATILE ORGANICS											
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	12	240	U	250	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	12	240	U	250	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	12	240	U	250	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	12	240	U	250	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	12	580	U	600	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	12	240	U	250	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	12	240	U	250	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	12	240	UJ	250	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	12	580	UJ	600	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	12	240	U	250	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	12	240	U	250	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	12	240	U	250	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	12	240	U	250	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	12	240	U	250	U
2-Methylphenol	UG/KG	0	0%	100	0	0	12	240	U	250	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	12	580	U	600	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	12	240	U	250	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	12	240	UJ	250	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	12	580	UJ	600	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	12	580	U	600	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	12	240	U	250	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	12	240	U	250	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	12	240	UJ	250	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	12	240	U	250	U
4-Methylphenol	UG/KG	0	0%	900	0	0	12	240	U	250	U
4-Nitroaniline	UG/KG	0	0%		0	0	12	580	UJ	600	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	12	580	U	600	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES				
Acenaphthene	UG/KG	0	0%	50000	0	0	12	240	U	250	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	12	240	U	250	U
Anthracene	UG/KG	23	8%	50000	0	1	12	240	U	250	U
Benzo(a)anthracene	UG/KG	56	17%	224	0	2	12	240	U	250	U
Benzo(a)pyrene	UG/KG	55	8%	61	0	1	12	240	U	250	U
Benzo(b)fluoranthene	UG/KG	56	8%	1100	0	1	12	240	U	250	U
Benzo(ghi)perylene	UG/KG	32	8%	50000	0	1	12	240	U	250	U
Benzo(k)fluoranthene	UG/KG	61	8%	1100	0	1	12	240	U	250	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	12	240	U	250	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	12	240	U	250	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	12	240	U	250	U
Bis(2-Ethylhexyl)phthalate	UG/KG	120	25%	50000	0	3	12	240	U	250	U
Butylbenzylphthalate	UG/KG	160	17%	50000	0	2	12	240	U	250	U
Carbazole	UG/KG	27	8%		0	1	12	240	UJ	250	UJ
Chrysene	UG/KG	55	17%	400	0	2	12	240	U	250	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	12	1300	UJ	1000	UJ
Di-n-octylphthalate	UG/KG	6.8	17%	50000	0	2	12	240	U	250	U
Dibenz(a,h)anthracene	UG/KG	13	8%	14	0	1	12	240	U	250	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	12	240	U	250	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	12	240	U	250	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	12	240	U	250	U
Fluoranthene	UG/KG	150	25%	50000	0	3	12	240	U	250	U
Fluorene	UG/KG	19	8%	50000	0	1	12	240	U	250	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	12	240	U	250	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	12	240	U	250	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	12	240	U	250	U
Hexachloroethane	UG/KG	0	0%		0	0	12	240	U	250	U
Indeno(1,2,3-cd)pyrene	UG/KG	36	8%	3200	0	1	12	240	U	250	U
Isophorone	UG/KG	0	0%	4400	0	0	12	240	U	250	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	12	240	U	250	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	12	240	U	250	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
Naphthalene	UG/KG	0	0%	13000	0	0	12	240	U	250	U
Nitrobenzene	UG/KG	0	0%	200	0	0	12	240	U	250	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	12	580	UJ	600	UJ
Phenanthrene	UG/KG	120	25%	50000	0	3	12	240	U	250	U
Phenol	UG/KG	0	0%	30	0	0	12	240	U	250	U
Pyrene	UG/KG	100	25%	50000	0	3	12	240	U	250	U
PESTICIDES/PCBS											
4,4'-DDD	UG/KG	0	0%	2900	0	0	12	3.6	U	3.8	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	12	3.6	U	3.8	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	12	3.6	U	3.8	U
Aldrin	UG/KG	0	0%	41	0	0	12	1.9	U	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	12	1.9	U	1.9	U
Alpha-Chlordane	UG/KG	0	0%		0	0	12	1.9	U	1.9	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	12	74	U	76	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	12	36	U	38	U
Beta-BHC	UG/KG	0	0%	200	0	0	12	1.9	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	12	1.9	U	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	12	3.6	U	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	12	1.9	U	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	12	3.6	U	3.8	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	12	3.6	U	3.8	U
Endrin	UG/KG	0	0%	100	0	0	12	3.6	U	3.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	12	3.6	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	12	3.6	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	12	1.9	U	1.9	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	12	1.9	U	1.9	U

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
Heptachlor	UG/KG	0	0%	100	0	0	12	1.9	U	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	12	1.9	U	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	12	19	U	19	U
Toxaphene	UG/KG	0	0%		0	0	12	190	U	190	U
METALS											
Aluminum	MG/KG	16500	100%	19520	0	12	12	9860	J	16500	
Antimony	MG/KG	0	0%	6	0	0	12	1.3	R	0.89	R
Arsenic	MG/KG	6.4	100%	8.9	0	12	12	4.4		6.2	
Barium	MG/KG	130	100%	300	0	12	12	47.4		68.8	
Beryllium	MG/KG	0.68	92%	1.13	0	11	12	0.36	J	0.68	J
Cadmium	MG/KG	0	0%	2.46	0	0	12	0.38	U	0.26	U
Calcium	MG/KG	76300	100%	125300	0	12	12	20000		8240	
Chromium	MG/KG	29.6	100%	30	0	12	12	13.2	J	29.6	J
Cobalt	MG/KG	36.3	100%	30	1	12	12	7.8	J	17.2	
Copper	MG/KG	28.7	100%	33	0	12	12	23.2		28.3	
Cyanide	MG/KG	0	0%	0.35	0	0	12	0.56	U	0.56	U
Iron	MG/KG	40600	100%	37410	1	12	12	17400	J	34600	J
Lead	MG/KG	34	100%	24.4	2	12	12	5	J	2.6	J
Magnesium	MG/KG	15400	100%	21700	0	12	12	10500		6590	
Manganese	MG/KG	4110	100%	1100	1	12	12	424		564	
Mercury	MG/KG	0.06	8%	0.1	0	1	12	0.05	U	0.06	U
Nickel	MG/KG	47.2	83%	50	0	10	12	12.5	UJ	36.8	UJ
Potassium	MG/KG	1570	100%	2623	0	12	12	1160		1260	
Selenium	MG/KG	1.6	17%	2	0	2	12	0.48	U	0.43	J
Silver	MG/KG	0.2	8%	0.8	0	1	12	0.25	U	0.2	J
Sodium	MG/KG	197	75%	188	1	9	12	98.9	J	148	J
Thallium	MG/KG	3.8	67%	0.855	7	8	12	1.1	U	0.75	J
Vanadium	MG/KG	23.8	100%	150	0	12	12	18.7		23.8	
Zinc	MG/KG	391	100%	115	4	12	12	47.6	J	80.2	J
WET CHEMISTRY											
Nitrate/Nitrite	%W/W										

TABLE G-15
EM-6 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								MW12-24		MW12-24	
MATRIX								SOIL		SOIL	
SAMP_ID								123162		123163	
DEPTH_TOP								2		6	
DEPTH_BOT								4		8	
SAMP_DATE								19-Oct-98		19-Oct-98	
QC_CODE								SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES				
Nitrate/Nitrite	MG/KG										
pH	SU										
TOC-Soil 9060	MG/KG										
Percent Solids	%W/W										
Percent Solids	MG/KG										
Cation exchange capacity	meq/100g										

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178	
DEPTH_TOP								0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU	
STUDY_ID								ESI		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE								
VOLATILE ORGANICS															
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	13	U	12	U	13	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	13	U	12	U	13	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	13	U	12	U	13	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	13	U	12	U	13	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	13	U	12	UJ	13	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Acetone	UG/KG	55	29%	200	0	17	58	13	U	12	UJ	13	UJ	12	UJ
Benzene	UG/KG	0	0%	60	0	0	58	13	U	12	U	13	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Bromoform	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	13	U	12	U	13	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	13	U	12	U	13	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	13	U	12	U	13	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	13	U	12	UJ	13	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	58	13	U	12	U	13	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	13	U	12	U	13	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	13	U	12	U	13	UJ	12	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	13	U	12	UJ	13	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	13	U	12	U	13	UJ	12	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	13	U	12	U	13	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	13	U	12	U	13	U	12	U
Styrene	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	13	U	12	U	13	U	12	U
Toluene	UG/KG	14	10%	1500	0	6	58	13	U	12	U	13	U	4	J
Total Xylenes	UG/KG	0	0%	1200	0	0	58	13	U	12	U	13	U	12	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178		123175	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU		SA	
STUDY_ID								ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	12	U	13	U	12	U	11	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	13	U	12	U	13	U	12	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	13	U	12	UJ	13	U	12	U	11	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	430	U	85	UJ	90	U	90	U	87	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	430	U	85	UJ	90	U	90	U	87	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	430	U	85	UJ	90	U	90	U	87	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	430	U	85	UJ	90	U	90	U	87	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	430	U	200	U	220	U	220	U	210	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	1000	U	85	U	90	U	90	U	87	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	430	U	85	U	90	U	90	U	87	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	430	U	200	U	220	U	220	U	210	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	1000	U	85	U	90	U	90	U	87	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	430	U	85	U	90	U	90	U	87	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	430	U	85	U	90	U	90	U	87	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	430	U	85	U	90	U	90	U	87	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	430	U	85	U	90	U	5.8	J	87	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	430	U	200	U	220	U	220	U	210	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	1000	U	85	UJ	90	U	90	U	87	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	430	U	200	U	220	U	220	U	210	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	1000	U	200	U	220	U	220	U	210	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	1000	U	85	U	90	U	90	U	87	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	430	U	85	U	90	U	90	U	87	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	430	U	85	UJ	90	UJ	90	UJ	87	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	430	U	85	U	15	J	90	U	87	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	430	U	200	U	220	U	220	U	210	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	1000	U	200	U	220	U	220	U	210	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178		123175	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	ESI		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	1000	U	85	U	90	U	90	U	87	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	430	U	85	U	90	U	90	U	87	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	430	U	85	U	90	U	5.1	J	87	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	430	U	6.8	J	12	J	24	J	19	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	430	U	8.1	J	11	J	23	J	17	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	430	U	10	J	15	J	38	J	28	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	430	U	85	UJ	13	J	20	J	16	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	430	U	10	J	12	J	31	J	22	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	430	U	85	UJ	90	U	90	U	87	U
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	430	U	85	UJ	90	U	90	U	87	U
Carbazole	UG/KG	1100	22%		0	13	58	430	U	85	UJ	90	U	9.2	J	5.6	J
Chrysene	UG/KG	3600	93%	400	3	54	58	430	U	11	J	18	J	42	J	31	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	430	U	85	U	90	U	90	U	87	U
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	430	U	85	UJ	90	U	13	J	87	U
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	430	U	85	UJ	90	U	6.9	J	4.6	J
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	430	U	85	U	90	U	90	U	87	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	430	U	85	U	90	U	90	U	87	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	430	U	85	U	90	U	90	U	87	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	430	U	13	J	24	J	59	J	48	J
Fluorene	UG/KG	830	9%	50000	0	5	58	430	U	85	U	90	U	90	U	87	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	430	U	85	U	90	U	90	U	87	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	430	U	85	UJ	90	U	90	U	87	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
Hexachloroethane	UG/KG	0	0%		0	0	58	430	U	85	UJ	90	U	90	U	87	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	430	U	85	UJ	8.1	J	19	J	14	J
Isophorone	UG/KG	0	0%	4400	0	0	58	430	U	85	U	90	U	90	U	87	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	430	U	85	U	90	U	90	U	87	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178		123175	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU		SA	
STUDY_ID								ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	430	U	85	U	90	U	90	U	87	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	430	U	85	U	90	U	90	U	87	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	1000	U	200	U	220	U	220	U	210	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	430	U	10	J	9	J	27	J	16	J
Phenol	UG/KG	42	29%	30	2	17	58	430	U	19	J	90	U	90	U	87	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	430	U	16	J	25	J	61	J	46	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.2	U	2.2	U	2.4		24		51	
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	43	U	42	U	45	U	45	U	43	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	87	U	86	U	92	U	92	U	88	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	43	U	42	U	45	U	45	U	43	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	43	U	42	U	45	U	45	U	43	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	43	U	42	U	45	U	45	U	43	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	43	U	42	U	45	U	45	U	43	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	43	U	42	U	45	U	45	U	43	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.2	U	2.2	U	2.3	U	3.9		6.1	
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.3	U	4.2	U	4.5	U	4.5	U	4.3	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.2	U	2.2	U	2.3	U	2.3	U	17	
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178		123175	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.2	U	2.2	U	2.3	U	2.3	U	2.2	U
Methoxychlor	UG/KG	0	0%		0	0	58	22	U	22	U	23	U	23	U	22	U
Toxaphene	UG/KG	0	0%		0	0	58	220	U	220	U	230	U	230	U	220	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	18700		14800		16700		14500		12300	
Antimony	MG/KG	1.6	3%	6	0	2	58	0.22	UJ	1.2	R	1.5	R	1.5	R	1.3	R
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	5.2		5.2		4.6		2.5		3.9	
Barium	MG/KG	146	100%	300	0	58	58	125		77.3		86.2		126		111	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.8	J	0.47	J	0.67	J	0.71	J	0.61	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.86		0.06	U	0.44	U	0.43	U	0.37	U
Calcium	MG/KG	154000	100%	125300	1	58	58	3370		1690		4800		8100		7610	
Chromium	MG/KG	26.8	100%	30	0	58	58	23.1		22.8		23.1	J	21.3	J	19.8	J
Cobalt	MG/KG	17.1	100%	30	0	58	58	10.9		13		9.4	J	12.2		11.7	
Copper	MG/KG	35.4	100%	33	3	58	58	19.1		16.9		18.5		26.2		21.1	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.6	U	0.62	U	0.71	U	0.69	U	0.66	U
Iron	MG/KG	31500	100%	37410	0	58	58	23500		25200		25100	J	24500		22400	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	21.6		[illegible]		17.1	J	15.9	J	14.6	J
Magnesium	MG/KG	15700	100%	21700	0	58	58	3880		3790	J	3620		4440		3750	
Manganese	MG/KG	2370	100%	1100	4	58	58	939		936		408		[illegible]		2370	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.06	J	0.06	U	0.07	U	0.07	U	0.07	J
Nickel	MG/KG	57.4	95%	50	2	55	58	25.7		28.2		19.9	UJ	28	UJ	23.6	UJ
Potassium	MG/KG	2970	100%	2623	2	58	58	[illegible]	J	1220		1810		1610		1110	
Selenium	MG/KG	2.3	43%	2	2	25	58	1.2		1.5	J	0.56	U	[illegible]		1.6	
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.09	U	0.24	U	0.29	U	0.29	U	0.25	U
Sodium	MG/KG	153	22%	188	0	13	58	16.9	U	50.7	U	153	J	60.4	U	82.7	J
Thallium	MG/KG	2.5	31%	0.855	18	18	58	0.32	U	1	U	1.3	UJ	[illegible]	J	1.1	UJ
Vanadium	MG/KG	33.1	100%	150	0	58	58	33.1		22.5		24.2		22.8		20.3	
Zinc	MG/KG	197	100%	115	5	58	58	77.8		73.1		[illegible]	J	110	J	98.8	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12-27		MW12-31		MW12-32		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-00		123061		123172		123178		123175	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								6/10/1994		10/4/1998		26-Oct-98		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		DU		SA	
STUDY_ID								ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SEAD-12
MATRIX								SOIL		SOIL		SOIL		SOIL		SS12-20
SAMP_ID								123201		123210		123121		123104		SOIL
DEPTH_TOP								0		0		0		0		123214
DEPTH_BOT								0.2		0.2		0.2		0.2		0
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		0.2
QC_CODE								SA		SA		SA		SA		03-Nov-98
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	SA RI Phase 1 Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE									
VOLATILE ORGANICS																
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	11	U	12	U	12	U	12	U	14 U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	11	UJ	12	U	12	U	12	UJ	14 U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	11	U	12	U	12	U	12	U	14 U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	11	U	12	U	12	U	12	U	14 U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	11	U	12	U	12	U	12	UJ	14 U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	U	14 U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 U
Acetone	UG/KG	55	29%	200	0	17	58	8	J	15		12	U	12	U	5 J
Benzene	UG/KG	0	0%	60	0	0	58	11	U	12	U	12	U	12	UJ	14 U
Bromodichloromethane	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 U
Bromoform	UG/KG	0	0%		0	0	58	11	UJ	12	U	12	U	12	UJ	14 U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	11	U	12	U	12	U	12	U	14 U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	11	U	12	U	12	U	12	U	14 U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	11	UJ	12	U	12	U	12	UJ	14 U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 U
Chloroethane	UG/KG	0	0%	1900	0	0	58	11	U	12	U	12	U	12	U	14 U
Chloroform	UG/KG	0	0%	300	0	0	58	11	U	12	U	12	U	12	U	14 U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	11	UJ	12	U	12	U	12	UJ	14 U
Methyl bromide	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	U	14 U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14 UJ
Methyl chloride	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	U	14 U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	11	U	12	U	12	U	12	U	14 UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	11	U	12	U	12	U	12	UJ	14 U
Methylene chloride	UG/KG	0	0%	100	0	0	58	11	U	12	U	12	U	12	U	14 U
Styrene	UG/KG	0	0%		0	0	58	11	UJ	12	U	12	U	12	UJ	14 U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	11	U	12	U	12	U	12	UJ	14 U
Toluene	UG/KG	14	10%	1500	0	6	58	14		12	U	12	U	12	UJ	14 U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	11	UJ	12	U	12	U	12	UJ	14 U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SS12-20	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123201		123210		123121		123104		123214	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	U	12	U	12	U	12	UJ	14	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	11	U	12	U	12	U	12	UJ	14	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	11	U	12	U	12	U	12	U	14	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	1500	U	390	U	86	U	78	UJ	88	UJ
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	3700	U	940	U	210	U	190	U	210	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	1500	U	390	U	86	U	78	U	88	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	1500	U	390	U	86	UJ	78	U	88	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	3700	R	940	R	210	UJ	190	UJ	210	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	1500	U	390	U	86	U	78	U	88	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	160	J	36	J	86	U	8.9	J	88	UJ
2-Methylphenol	UG/KG	36	3%	100	0	2	58	1500	U	390	U	86	U	78	U	88	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	3700	U	940	U	210	U	190	U	210	UJ
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	1500	U	390	U	86	U	78	U	88	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	1500	UJ	390	UJ	86	U	78	U	88	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	3700	UJ	940	UJ	210	U	190	U	210	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	3700	UJ	940	UJ	210	U	190	U	210	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	1500	U	390	U	86	U	78	U	88	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	1500	U	390	U	86	UJ	78	U	88	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
4-Methylphenol	UG/KG	930	7%	900	1	4	58	1500	U	390	U	86	U	78	U	88	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	3700	UJ	940	UJ	210	UJ	190	U	210	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	3700	U	940	U	210	U	190	UJ	210	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SS12-20	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123201		123210		123121		123104		123214	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	1200	J	280	J	86	U	73	J	88	UJ
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	1500	U	390	U	86	U	78	U	88	UJ
Anthracene	UG/KG	1500	16%	50000	0	9	58	1500	J	270	J	86	U	84		88	UJ
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	3500		980		6	J	220		8	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	3200		890		86	U	180	J	10	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	2800		870		86	U	190		13	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	2000		520		86	UJ	96		7.4	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	2900		900		86	U	180		10	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	1500	UJ	390	UJ	86	U	78	U	7.6	J
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	1500	UJ	390	UJ	86	U	78	U	88	UJ
Carbazole	UG/KG	1100	22%		0	13	58	1100	J	260	J	86	UJ	94	J	88	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	3600		1000		17	J	250		11	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	1500	U	390	U	86	U	78	U	7	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	1500	U	390	U	15	J	78	U	88	U
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	680	J	190	J	86	UJ	40	J	88	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	500	J	110	J	86	U	25	J	88	UJ
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	1500	U	390	U	86	U	78	U	88	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	8500		2200		19	J	490		19	J
Fluorene	UG/KG	830	9%	50000	0	5	58	830	J	190	J	86	U	48	J	88	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	1500	U	390	U	86	UJ	78	UJ	88	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	UJ	88	U
Hexachloroethane	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	1700		500		86	UJ	94		7.3	J
Isophorone	UG/KG	0	0%	4400	0	0	58	1500	U	390	U	86	U	78	U	88	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	1500	U	390	U	86	U	78	U	88	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SS12-20	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123201		123210		123121		123104		123214	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	540	J	100	J	86	U	20	J	88	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	58	1500	U	390	U	86	U	78	UJ	88	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	3700	U	940	U	210	UJ	190	UJ	210	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	7500		1800		9.6	J	500		11	J
Phenol	UG/KG	42	29%	30	2	17	58	1500	U	390	U	86	U	78	U	88	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	7000		2200		15	J	370		16	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	3.2	J	3.1	J	4.3	U	3.9	U	4.4	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4	J	3.5	J	4.3	U	5.1		4.4	U
Aldrin	UG/KG	0	0%	41	0	0	58	2	U	2	U	2.2	U	2	U	2.3	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2	U	2	U	2.2	U	2	U	2.3	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2	U	2	U	2.2	U	2	U	2.3	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	39	U	39	U	43	U	39	U	44	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	79	U	79	U	87	U	79	U	89	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	39	U	39	U	43	U	39	U	44	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	39	U	39	U	43	U	39	U	44	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	39	U	39	U	43	U	39	U	44	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	39	U	39	U	43	U	64		44	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	39	U	39	U	43	U	39	U	44	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2	U	2	U	2.2	U	2	U	2.3	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2	U	2	U	2.2	U	2	U	2.3	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2	U	2	U	2.2	U	2	U	2.3	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	3.9	U	3.5	J	4.3	U	3.9	U	4.4	U
Endrin	UG/KG	5.8	5%	100	0	3	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
Endrin ketone	UG/KG	0	0%		0	0	58	3.9	U	3.9	U	4.3	U	3.9	U	4.4	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2	U	2	U	2.2	U	2	U	2.3	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	1.2	J	2	U	2.2	U	2	U	2.3	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SS12-20	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123201		123210		123121		123104		123214	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2	U	2	U	2.2	U	2	U	2.3	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	6.5		5.4	J	2.2	U	2	U	2.3	U
Methoxychlor	UG/KG	0	0%		0	0	58	20	U	20	U	22	U	20	U	23	U
Toxaphene	UG/KG	0	0%		0	0	58	200	U	200	U	220	U	200	U	230	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	6440		6610		13500	J	10300		13800	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.1	UJ	0.96	UJ	1	R	1.4	R	1.3	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	1.9		2.6		4.3	J	2.7		3.6	
Barium	MG/KG	146	100%	300	0	58	58	36.8		40.4		80		58.1		100	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.22	J	0.23	J	0.56	J	0.45	J	0.63	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.05	U	0.05	U	0.05	U	0.07	U	0.06	U
Calcium	MG/KG	154000	100%	125300	1	58	58	21700		34200		13200	J	53100	J	4600	
Chromium	MG/KG	26.8	100%	30	0	58	58	13.1		13.5		22.3		18.7		19.7	
Cobalt	MG/KG	17.1	100%	30	0	58	58	6.8	J	6.5	J	12.9		9.7	J	10.9	
Copper	MG/KG	35.4	100%	33	3	58	58	13		15.6		24.3		25		21.9	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.59	U	0.64	U	0.69	U	0.61	U	0.69	U
Iron	MG/KG	31500	100%	37410	0	58	58	13100	J	14000	J	30900		21700	J	23200	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	25.2	J	24.8	J	18.3	J	19.4		[illegible]	
Magnesium	MG/KG	15700	100%	21700	0	58	58	7410		10600		5710	J	5860		3800	
Manganese	MG/KG	2370	100%	1100	4	58	58	401	J	423	J	475		393		667	J
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.05	U	0.05	U	0.06	U	0.07	J	0.1	J
Nickel	MG/KG	57.4	95%	50	2	55	58	15.1		16.1		40.6	J	33.5		29.2	
Potassium	MG/KG	2970	100%	2623	2	58	58	628	J	627	J	1320		1210		1380	
Selenium	MG/KG	2.3	43%	2	2	25	58	0.83	U	0.72	U	0.76	J	1	U	0.96	U
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.22	U	0.19	U	0.24	J	0.27	U	0.25	U
Sodium	MG/KG	153	22%	188	0	13	58	45.7	U	39.6	U	68.5	J	121	J	52.5	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	0.94	U	0.82	U	1.2	J	1.2	U	1.8	J
Vanadium	MG/KG	33.1	100%	150	0	58	58	11		11.4		21.1		17.3		23.1	
Zinc	MG/KG	197	100%	115	5	58	58	52.5	J	56.9	J	90.6	J	85.1	J	81.2	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-37		MW12-40		SS12-19		SS12-20	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123201		123210		123121		123104		123214	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								01-Nov-98		01-Nov-98		14-Oct-98		13-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	13	U	12	U	14	U	12	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	13	U	12	U	14	UJ	12	UJ	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	13	U	12	U	14	U	12	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	13	U	12	U	14	U	12	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	13	U	12	U	14	U	12	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Acetone	UG/KG	55	29%	200	0	17	58	13	UJ	12	UJ	14	UJ	12	UJ	7	J
Benzene	UG/KG	0	0%	60	0	0	58	13	U	12	U	14	U	12	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Bromoform	UG/KG	0	0%		0	0	58	13	U	12	U	14	UJ	12	UJ	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	13	U	12	U	14	U	12	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	13	U	12	U	14	U	12	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	13	U	12	U	14	UJ	12	UJ	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	13	U	12	U	14	U	12	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	58	13	U	12	U	14	U	12	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	13	U	12	U	14	UJ	12	UJ	12	U
Methyl bromide	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	13	UJ	12	UJ	14	UJ	12	UJ	12	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	13	UJ	12	UJ	14	UJ	12	UJ	12	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	13	U	12	U	14	U	12	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	13	U	12	U	14	U	12	U	12	U
Styrene	UG/KG	0	0%		0	0	58	13	U	12	U	14	UJ	12	UJ	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	13	U	12	U	14	U	12	U	12	U
Toluene	UG/KG	14	10%	1500	0	6	58	13	U	12	U	14	U	12	U	12	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	13	U	12	U	14	UJ	12	UJ	12	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	12	U	14	U	12	U	12	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	13	U	12	U	14	U	12	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	13	U	12	U	14	U	12	U	12	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	210	U	200	U	210	U	190	U	210	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	88	U	81	U	88	U	78	U	87	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	88	U	81	U	88	U	78	U	87	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	210	R	200	R	210	R	190	R	210	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	88	U	81	U	88	U	78	U	87	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
2-Methylphenol	UG/KG	36	3%	100	0	2	58	88	U	81	U	88	U	78	U	87	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	210	UJ	200	UJ	210	UJ	190	UJ	210	UJ
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	88	U	81	U	88	U	78	U	87	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	210	UJ	200	UJ	210	UJ	190	UJ	210	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	210	UJ	200	UJ	210	UJ	190	UJ	210	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	88	U	81	U	88	U	78	U	87	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	88	U	81	U	88	U	78	U	87	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	88	U	81	UJ	88	UJ	78	UJ	87	UJ
4-Methylphenol	UG/KG	930	7%	900	1	4	58	88	U	81	U	88	U	78	U	87	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	210	UJ	200	UJ	210	UJ	190	UJ	210	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	210	U	200	U	210	U	190	U	210	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Anthracene	UG/KG	1500	16%	50000	0	9	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	7.6	J	81	UJ	10	J	78	UJ	4.4	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	9.6	J	81	UJ	14	J	78	UJ	5.6	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	11	J	4.5	J	20	J	4	J	6.3	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	8.3	J	81	U	12	J	78	U	87	U
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	10	J	81	U	14	J	78	U	7.4	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	88	U	81	U	88	U	78	U	87	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	7.1	J	81	UJ	9.1	J	78	UJ	87	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Carbazole	UG/KG	1100	22%		0	13	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	11	J	81	UJ	17	J	78	UJ	6.7	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	6.7	J	5.5	J	7.5	J	6	J	4.6	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	88	U	81	U	88	U	78	U	87	U
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	88	U	81	U	88	U	78	U	87	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	19	J	5.8	J	30	J	4.5	J	12	J
Fluorene	UG/KG	830	9%	50000	0	5	58	88	U	81	U	88	U	78	U	87	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	88	U	81	U	88	UJ	78	U	87	U
Hexachloroethane	UG/KG	0	0%		0	0	58	88	U	81	U	88	U	78	U	87	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	9.2	J	81	U	10	J	78	U	4.5	J
Isophorone	UG/KG	0	0%	4400	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	88	U	81	U	88	U	78	U	87	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	88	U	81	U	88	U	78	U	87	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	58	88	UJ	81	UJ	88	UJ	78	UJ	87	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	210	U	200	U	210	U	190	U	210	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	9.6	J	81	U	15	J	78	U	6	J
Phenol	UG/KG	42	29%	30	2	17	58	88	U	81	U	88	U	78	U	87	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	15	J	5.4	J	22	J	78	U	8.8	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.4	U	4.1	U	4.4	U	3.9	U	2.8	J
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	44	U	41	U	44	U	39	U	43	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	89	U	83	U	89	U	79	U	88	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	44	U	41	U	44	U	39	U	43	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	44	U	41	U	44	U	39	U	43	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	44	U	41	U	44	U	39	U	43	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	44	U	41	U	44	U	39	U	43	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	44	U	41	U	44	U	39	U	43	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.4	U	4.1	U	4.4	U	3.9	U	3	J
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.4	U	4.1	U	4.4	U	3.9	U	4.3	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.3	U	2.1	U	2.3	U	2	U	2.2	U
Methoxychlor	UG/KG	0	0%		0	0	58	23	U	21	U	23	U	20	U	22	U
Toxaphene	UG/KG	0	0%		0	0	58	230	U	210	U	230	U	200	U	220	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	13800		12200		14500		12600		11300	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.3	UJ	1.1	UJ	1.2	UJ	1	UJ	1.3	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	3.3		3		2		3.1		4	
Barium	MG/KG	146	100%	300	0	58	58	106		50.5		145		75.2		83	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.65	J	0.5	J	0.84	J	0.58	J	0.5	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.06	U	0.06	U	0.06	U	0.05	U	0.07	U
Calcium	MG/KG	154000	100%	125300	1	58	58	4880		3170		6120		2960		3200	
Chromium	MG/KG	26.8	100%	30	0	58	58	19.2		18.4		19.6		19.8		18	
Cobalt	MG/KG	17.1	100%	30	0	58	58	9.9	J	10		8.2	J	12.4		11.1	
Copper	MG/KG	35.4	100%	33	3	58	58	20.7		22.1		29		23.1		26.7	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.65	U	0.62	U	0.68	U	0.6	U	0.67	U
Iron	MG/KG	31500	100%	37410	0	58	58	22800	J	23500	J	20400	J	23200	J	22600	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	**24.8**		20.3		23.7		16.1	J	22.9	J
Magnesium	MG/KG	15700	100%	21700	0	58	58	4120		3990		4160		4320		3790	
Manganese	MG/KG	2370	100%	1100	4	58	58	456	J	333	J	220	J	420	J	659	J
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.06	U	0.06	J	0.07	J	0.06	U	0.07	J
Nickel	MG/KG	57.4	95%	50	2	55	58	25.7		28.1		26.8		32.5		33.6	
Potassium	MG/KG	2970	100%	2623	2	58	58	1940		1200		1780		1270		1670	
Selenium	MG/KG	2.3	43%	2	2	25	58	0.98	J	0.86	U	0.89	U	0.78	UJ	1	UJ
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.25	U	0.23	U	0.23	U	0.2	U	0.26	U
Sodium	MG/KG	153	22%	188	0	13	58	53.5	U	47.3	U	70.5	J	42.5	U	55	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	**1.1**	J	0.98	U	1	U	**1.5**	J	**1.3**	J
Vanadium	MG/KG	33.1	100%	150	0	58	58	25		20.4		23.9		20.5		20	
Zinc	MG/KG	197	100%	115	5	58	58	79.2	J	72.9	J	74.3	J	58.4	J	82.4	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-21		SS12-22		SS12-23		SS12-24		SS12-25	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123215		123216		123217		123218		123219	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98		03-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	13	U	13	U	15	U	13	U	17	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	13	U	13	U	15	UJ	13	U	17	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	13	U	13	U	15	U	13	U	17	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	13	U	13	U	15	U	13	U	17	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	13	U	13	U	15	U	13	U	17	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Acetone	UG/KG	55	29%	200	0	17	58	11	J	13	UJ	15	UJ	13	UJ	17	UJ
Benzene	UG/KG	0	0%	60	0	0	58	13	U	13	U	15	U	13	U	17	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Bromoform	UG/KG	0	0%		0	0	58	13	U	13	U	15	UJ	13	U	17	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	13	U	13	U	15	U	13	U	17	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	13	U	13	U	15	U	13	U	17	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	13	U	13	U	15	UJ	13	U	17	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	13	U	13	U	15	U	13	U	17	U
Chloroform	UG/KG	0	0%	300	0	0	58	13	U	13	U	15	U	13	U	17	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	13	U	13	U	15	UJ	13	U	17	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	13	UJ	13	UJ	15	UJ	13	UJ	17	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	13	UJ	13	UJ	15	UJ	13	UJ	17	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	13	U	13	U	15	U	13	U	17	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	13	U	13	U	15	U	13	U	17	U
Styrene	UG/KG	0	0%		0	0	58	13	U	13	U	15	UJ	13	U	17	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	13	U	13	U	15	U	13	U	17	U
Toluene	UG/KG	14	10%	1500	0	6	58	13	U	13	U	15	U	13	U	17	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	13	U	13	U	15	UJ	13	U	17	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	13	U	15	U	13	U	17	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	13	U	13	U	15	U	13	U	17	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	13	U	13	U	15	U	13	U	17	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	85	UJ	190	U	96	U	6.5	R	92	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	85	UJ	190	U	96	U	80	R	92	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	85	UJ	190	U	96	U	80	R	92	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	85	UJ	190	U	96	U	80	R	92	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	200	U	460	U	230	U	200	R	220	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	80	R	92	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	85	U	190	U	96	U	14	R	92	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	80	R	92	R
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	200	R	460	UJ	230	U	200	R	220	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	15	R	92	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	85	UJ	190	U	96	U	16	R	92	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	12	R	92	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	85	U	190	U	96	U	80	R	92	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	85	UJ	11	J	6.8	J	13	R	11	J
2-Methylphenol	UG/KG	36	3%	100	0	2	58	85	U	190	U	96	U	8.8	R	92	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	200	UJ	460	U	230	U	9.5	R	220	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	85	U	190	U	96	U	10	R	92	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	UJ	80	R	92	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	200	UJ	460	UJ	230	UJ	200	R	220	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	200	UJ	460	UJ	230	U	17	R	220	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	16	R	92	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	85	U	190	U	96	U	18	R	92	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	85	U	190	UJ	96	U	80	R	92	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	14	R	92	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	85	U	190	U	96	U	17	R	92	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	200	UJ	460	UJ	230	UJ	200	R	220	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	200	U	460	U	230	U	200	R	220	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	85	UJ	13	J	8.6	J	16	R	92	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	85	UJ	22	J	9.5	J	15	R	92	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	85	UJ	38	J	28	J	16	R	92	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	6.5	J	520	UJ	200	J	7	J	6.3	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	8.2	J	830	J	380	J	11	J	18	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	12	J	1000	J	470	J	18	J	12	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	5.7	J	550	J	230	J	27	R	37	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	9.4	J	970	J	420	J	26	R	10	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	15	R	92	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	11	R	92	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	14	R	92	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	17	J	190	UJ	96	U	80	UJ	92	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	85	UJ	190	U	96	U	19	R	92	UJ
Carbazole	UG/KG	1100	22%		0	13	58	85	UJ	50	J	54	J	34	R	92	U
Chrysene	UG/KG	3600	93%	400	3	54	58	11	J	760	J	370	J	26	J	13	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	7.9	J	190	U	96	U	24	R	4.8	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	85	U	190	U	96	U	19	R	92	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	85	U	220	J	80	J	24	R	92	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	85	UJ	13	J	8.4	J	15	R	92	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	85	UJ	190	U	96	U	19	R	92	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	85	UJ	190	U	96	U	18	R	92	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	16	J	1300	J	720	J	16	J	15	J
Fluorene	UG/KG	830	9%	50000	0	5	58	85	U	19	J	11	J	16	R	92	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	85	UJ	190	U	96	U	16	R	92	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	85	UJ	190	U	96	U	9.4	R	92	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	85	U	190	UJ	96	U	21	R	92	U
Hexachloroethane	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	5.6	R	92	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	6	J	590	J	230	J	27	R	12	J
Isophorone	UG/KG	0	0%	4400	0	0	58	85	UJ	190	UJ	96	UJ	18	R	92	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	8.6	R	92	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	85	U	190	U	96	U	8.6	R	92	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	85	UJ	190	U	5.5	J	12	R	7.3	J
Nitrobenzene	UG/KG	0	0%	200	0	0	58	85	UJ	190	U	96	U	9.5	R	92	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	200	U	460	UJ	230	UJ	15	R	220	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	7.8	J	320		220		9.3	J	13	J
Phenol	UG/KG	42	29%	30	2	17	58	85	U	190	U	5.4	J	23	J	38	J
Pyrene	UG/KG	7000	93%	50000	0	54	58	13	J	980	J	520	J	12	J	15	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.3	UJ	4.7	U	4.8	U	4	U	51	
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.3	UJ	4.7	U	4.8	U	4	U	4.6	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.3	UJ	4.7	U	4.8	U	4	U	4.6	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.8	
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	43	UJ	47	U	48	U	40	U	46	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	88	UJ	96	U	97	U	82	U	93	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	43	UJ	47	U	48	U	40	U	46	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	43	UJ	47	U	48	U	40	U	46	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	43	UJ	47	U	48	U	40	U	46	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	43	UJ	47	U	48	U	40	U	46	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	43	UJ	47	U	48	U	40	U	46	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.3	UJ	4.7	U	4.8	U	4	U	3.2	J
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.2	UJ	2.4	U	2.5	U	2.1	U	1.9	J
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.3	UJ	4.7	U	4.8	U	4	U	4.6	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.3	UJ	5.4	J	5.6	J	4	U	4.6	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.3	UJ	4.7	U	4.8	U	4	U	5.8	J
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.3	UJ	4.7	U	4.8	U	4	U	4.6	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.3	UJ	4.7	U	4.8	U	4	U	4.6	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.2	UJ	2.4	U	2.5	U	2.1	U	1.5	J

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.2	UJ	2.4	U	2.5	U	2.1	U	2.4	U
Methoxychlor	UG/KG	0	0%		0	0	58	22	UJ	24	U	25	U	21	U	24	U
Toxaphene	UG/KG	0	0%		0	0	58	220	UJ	240	U	250	U	210	U	240	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	13800		11200		11800	J	15800		14900	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.6	UJ	1.5	UJ	1.7	UJ	1.4	J	1.6	J
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	3.7		3.8		4.5		4.3		4	
Barium	MG/KG	146	100%	300	0	58	58	88.8		69.7		66.4		93.7		107	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.59	J	0.44	J	0.44	J	0.57	J	0.64	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.08	U	0.07	U	0.08	U	0.07	U	0.08	U
Calcium	MG/KG	154000	100%	125300	1	58	58	2720		51500		57400		16800		4810	
Chromium	MG/KG	26.8	100%	30	0	58	58	19.2		19.9		20.4		25.1		19.1	
Cobalt	MG/KG	17.1	100%	30	0	58	58	9.7	J	13.5		12.7	J	13		7.1	J
Copper	MG/KG	35.4	100%	33	3	58	58	18.6		28.3		27		25.2		18.4	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.68	U	0.77	UJ	0.8	UJ	0.63	UJ	0.77	UJ
Iron	MG/KG	31500	100%	37410	0	58	58	23900	J	24200	J	22500	J	28800		20400	
Lead	MG/KG	43.8	100%	24.4	16	58	58	26.8	J	20.6		18.1	J	15.4		21.4	
Magnesium	MG/KG	15700	100%	21700	0	58	58	3490		7510		7720		7180		3400	
Manganese	MG/KG	2370	100%	1100	4	58	58	623	J	657		630		567		420	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.1	J	0.08	J	[illegible]	J	0.05	J	0.1	J
Nickel	MG/KG	57.4	95%	50	2	55	58	21.5		37.5	J	36.6	J	39.2	J	21	J
Potassium	MG/KG	2970	100%	2623	2	58	58	1220	J	1540		2080		2420		1940	
Selenium	MG/KG	2.3	43%	2	2	25	58	1.2	UJ	1.4		0.63	J	1.1	U	1.2	U
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.31	U	0.29	U	0.33	U	0.28	U	0.32	U
Sodium	MG/KG	153	22%	188	0	13	58	65.7	U	60.8	U	116	J	72.1	J	67.4	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.4	U	1.3	U	2.1	J	1.2	U	1.4	U
Vanadium	MG/KG	33.1	100%	150	0	58	58	24.9		21		21.6		24.1		24.2	
Zinc	MG/KG	197	100%	115	5	58	58	59.2	J	107		107		94.4		88	
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-26		SS12-27		SS12-27		SS12-28		SS12-29	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123220		123224		123223		123225		123226	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								03-Nov-98		09-Nov-98		04-Nov-98		09-Nov-98		09-Nov-98	
QC_CODE								SA		DU		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123227		123228		123229		123230		123231	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	14	U	12	U	14	U	14	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	14	U	12	U	14	U	14	U	13	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	14	U	12	U	14	U	14	U	13	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	14	U	12	U	14	U	14	U	13	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	14	U	12	U	14	U	14	U	13	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Acetone	UG/KG	55	29%	200	0	17	58	14	UJ	12	UJ	14	UJ	14	UJ	15	J
Benzene	UG/KG	0	0%	60	0	0	58	14	U	12	U	14	U	14	U	13	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Bromoform	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	14	U	12	U	14	U	14	U	13	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	14	U	12	U	14	U	14	U	13	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	14	U	12	U	14	U	14	U	13	U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	14	U	12	U	14	U	14	U	13	U
Chloroform	UG/KG	0	0%	300	0	0	58	14	U	12	U	14	U	14	U	13	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	14	U	12	U	14	U	14	U	13	U
Methyl bromide	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	14	UJ	12	UJ	14	UJ	14	UJ	13	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	14	UJ	12	UJ	14	UJ	14	UJ	13	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	14	U	12	U	14	U	14	U	13	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	14	U	12	U	14	U	14	U	13	U
Styrene	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	14	U	12	U	14	U	14	U	13	U
Toluene	UG/KG	14	10%	1500	0	6	58	14	U	12	U	14	U	14	U	13	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	14	U	12	U	14	U	14	U	13	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123227		123228		123229		123230		123231	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	14	U	12	U	14	U	14	U	13	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	14	U	12	U	14	U	14	U	13	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	14	U	12	U	14	U	14	U	13	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	81	U	80	U	88	U	87	U	90	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	81	U	80	U	88	U	87	U	90	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	81	U	80	U	88	U	87	U	90	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	81	U	80	U	88	U	87	U	90	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	200	U	200	U	210	U	210	U	220	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	81	U	80	U	88	U	87	U	90	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	81	R	80	R	88	R	87	R	90	R
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	200	U	200	U	210	U	210	U	220	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	81	U	80	U	88	U	87	U	90	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	81	U	80	U	88	U	87	U	90	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	81	U	80	U	88	U	87	U	90	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	81	U	80	U	88	U	87	U	90	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	200	U	200	U	210	U	210	U	220	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	81	U	80	U	88	U	87	U	90	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	200	U	200	U	210	U	210	U	220	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	200	U	200	U	210	U	210	U	220	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	81	U	80	U	88	U	87	U	90	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	81	U	80	U	88	U	87	U	90	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	81	U	80	U	88	U	87	U	90	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	200	UJ	200	UJ	210	UJ	210	UJ	220	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	200	UJ	200	UJ	210	UJ	210	UJ	220	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID							SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX							SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID							123227		123228		123229		123230		123231	
DEPTH_TOP							0		0		0		0		0	
DEPTH_BOT							0.2		0.2		0.2		0.2		0.2	
SAMP_DATE							09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE							SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	81	U	80	U	88	U	87	U	90	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	81	U	80	U	88	U	87	U	90	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	81	U	80	U	88	U	4.4	J	90	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	8	J	80	U	7.5	J	14	J	6.6	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	8.2	J	80	U	8.7	J	13	J	8	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	9.8	J	5.4	J	9.8	J	15	J	8.9	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	7.3	J	80	U	12	J	10	J	90	U
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	10	J	5.1	J	13	J	15	J	8.3	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	81	UJ	80	UJ	88	UJ	87	UJ	90	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	81	UJ	80	UJ	88	UJ	87	UJ	90	UJ
Carbazole	UG/KG	1100	22%		0	13	58	81	U	80	U	88	U	5.8	J	90	U
Chrysene	UG/KG	3600	93%	400	3	54	58	11	J	6.3	J	12	J	17	J	9.4	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	81	U	80	U	6.1	J	4.4	J	6.1	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	81	UJ	80	U	88	UJ	87	UJ	90	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	81	U	80	UJ	88	U	87	U	90	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	81	U	80	U	88	U	87	U	90	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	81	U	80	U	88	U	87	U	90	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	81	U	80	U	88	U	87	U	90	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	19	J	9.7	J	20	J	35	J	16	J
Fluorene	UG/KG	830	9%	50000	0	5	58	81	U	80	U	88	U	87	U	90	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	81	U	80	U	88	U	87	U	90	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Hexachloroethane	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	6.8	J	80	U	8.1	J	11	J	90	U
Isophorone	UG/KG	0	0%	4400	0	0	58	81	U	80	U	88	U	87	U	90	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	81	U	80	U	88	U	87	U	90	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123227		123228		123229		123230		123231	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	81	U	80	U	88	U	87	U	90	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	81	U	80	U	88	U	87	U	90	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	200	U	200	U	210	U	210	U	220	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	11	J	5.2	J	10	J	23	J	9	J
Phenol	UG/KG	42	29%	30	2	17	58	81	U	80	U	17	J	87	U	90	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	16	J	7.4	J	16	J	27	J	13	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.1	U	4	U	4.4	U	23		4	J
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	41	U	40	U	44	U	43	U	45	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	83	U	81	U	89	U	88	U	91	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	41	U	40	U	44	U	43	U	45	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	41	U	40	U	44	U	43	U	45	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	41	U	40	U	44	U	43	U	45	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	41	U	40	U	44	U	43	U	45	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	41	U	40	U	44	U	43	U	45	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.1	U	4	U	4.4	U	4.3	U	2.7	J
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.1	U	4	U	4.4	U	3.3	J	4.5	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.1	U	4	U	4.4	U	4.3	U	4.5	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123227		123228		123229		123230		123231	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.1	U	2.1	U	2.3	U	2.2	U	2.3	U
Methoxychlor	UG/KG	0	0%		0	0	58	21	U	21	U	23	U	22	U	23	U
Toxaphene	UG/KG	0	0%		0	0	58	210	U	210	U	230	U	220	U	230	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	16300		11000		14000		8670		11900	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.4	UJ	1.3	UJ	1.6	UJ	1.4	UJ	1.5	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	6.2		5.2		3.7		3.6		4.7	
Barium	MG/KG	146	100%	300	0	58	58	104		66.3		111		73.4		112	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.47	J	0.5	J	0.66	J	0.39	J	0.57	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.07	U	0.06	U	0.08	U	0.07	U	0.08	U
Calcium	MG/KG	154000	100%	125300	1	58	58	2060		15500		3100		3480		4110	
Chromium	MG/KG	26.8	100%	30	0	58	58	20.6		18.9		21.1		13.1		18.6	
Cobalt	MG/KG	17.1	100%	30	0	58	58	13.1		11.6		10.1	J	8.4	J	10.3	J
Copper	MG/KG	35.4	100%	33	3	58	58	15.9		30.2		20.3		17.1		18.3	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	1.4	J	0.66	UJ	0.68	UJ	0.68	UJ	0.73	UJ
Iron	MG/KG	31500	100%	37410	0	58	58	26600		24500		25000		17100		22600	
Lead	MG/KG	43.8	100%	24.4	16	58	58	19.9		20		21.4		17.8		18.7	
Magnesium	MG/KG	15700	100%	21700	0	58	58	3460		6580		4050		2760		3540	
Manganese	MG/KG	2370	100%	1100	4	58	58	1010		463		446		521		730	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.07	J	0.06	UJ	0.07	UJ	0.06	UJ	0.06	J
Nickel	MG/KG	57.4	95%	50	2	55	58	19	J	35.5	J	25.5	J	17.3	J	25.4	J
Potassium	MG/KG	2970	100%	2623	2	58	58	1510		1240		1350		1070	J	1280	
Selenium	MG/KG	2.3	43%	2	2	25	58	1.1	U	0.99	U	1.2	U	1.1	U	1.3	J
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.27	U	0.26	U	0.31	U	0.28	U	0.3	U
Sodium	MG/KG	153	22%	188	0	13	58	57.7	U	54.3	U	65.4	U	57.8	U	63.6	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.2	U	1.1	U	1.3	U	1.2	U	1.3	U
Vanadium	MG/KG	33.1	100%	150	0	58	58	29.9		19		22		16.2		19.7	
Zinc	MG/KG	197	100%	115	5	58	58	66.3		81.2		66.3		46.2		64.7	
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-30		SS12-31		SS12-32		SS12-33		SS12-34	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123227		123228		123229		123230		123231	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123232		123233		123234		123235		123236	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	12	U	13	U	15	U	15	U	14	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	12	U	13	U	15	U	15	UJ	14	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	12	U	13	U	15	U	15	U	14	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	12	U	13	U	15	U	15	U	14	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	12	U	13	U	15	U	15	U	14	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Acetone	UG/KG	55	29%	200	0	17	58	12	UJ	13	UJ	15	UJ	8	J	14	UJ
Benzene	UG/KG	0	0%	60	0	0	58	12	U	13	U	15	U	15	U	14	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Bromoform	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	UJ	14	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	12	U	13	U	15	U	15	U	14	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	12	U	13	U	15	U	15	U	14	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	12	U	13	U	15	U	15	UJ	14	U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	12	U	13	U	15	U	15	U	14	U
Chloroform	UG/KG	0	0%	300	0	0	58	12	U	13	U	15	U	15	U	14	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	12	U	13	U	15	U	15	UJ	14	U
Methyl bromide	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	12	UJ	13	UJ	15	UJ	15	U	14	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	12	UJ	13	UJ	15	UJ	15	U	14	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	12	U	13	U	15	U	15	U	14	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	12	U	13	U	15	U	15	U	14	U
Styrene	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	UJ	14	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	12	U	13	U	15	U	15	U	14	U
Toluene	UG/KG	14	10%	1500	0	6	58	12	U	13	U	15	U	15	U	14	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	12	U	13	U	15	U	15	UJ	14	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123232		123233		123234		123235		123236	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	13	U	15	U	15	U	14	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	12	U	13	U	15	U	15	U	14	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	12	U	13	U	15	U	15	U	14	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	94	U	86	U	100	U	100	U	87	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	94	U	86	U	100	U	100	U	87	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	94	U	86	U	100	U	100	U	87	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	94	U	86	U	100	U	100	U	87	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	230	U	210	U	250	U	240	U	210	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	94	U	86	U	100	U	100	U	87	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	94	R	86	R	100	R	100	U	87	R
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	230	U	210	U	250	U	240	UJ	210	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	94	U	86	U	100	U	100	U	87	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	94	U	86	U	100	U	100	U	87	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	94	U	86	U	100	U	100	U	87	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	94	U	86	U	100	U	100	U	87	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	230	U	210	U	250	U	240	U	210	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	94	U	86	U	100	U	100	U	87	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	230	U	210	U	250	U	240	UJ	210	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	230	U	210	U	250	U	240	UJ	210	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	94	U	86	U	100	U	100	U	87	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	94	U	86	U	100	U	100	UJ	87	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	94	U	86	U	100	U	100	U	87	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	230	UJ	210	UJ	250	UJ	240	UJ	210	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	230	UJ	210	UJ	250	UJ	240	U	210	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123232		123233		123234		123235		123236	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	94	U	86	U	100	U	100	U	87	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	94	U	86	U	100	U	100	U	87	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	94	U	86	U	100	U	100	U	87	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	5.9	J	86	U	7.4	J	17	J	7.4	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	8	J	4.8	J	12	J	21	J	9.4	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	8	J	6.3	J	10	J	26	J	9.9	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	19	J	86	U	30	J	22	J	18	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	8.6	J	5.9	J	11	J	21	J	9	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	94	UJ	95	J	100	UJ	10000		87	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	94	UJ	86	UJ	100	UJ	9.5	J	87	UJ
Carbazole	UG/KG	1100	22%		0	13	58	94	U	86	U	100	U	14	J	87	U
Chrysene	UG/KG	3600	93%	400	3	54	58	8.3	J	5.8	J	11	J	23	J	10	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	94	U	86	U	6.7	J	12	J	4.6	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	94	UJ	86	UJ	100	UJ	100	UJ	87	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	94	U	86	U	100	U	14	J	87	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	94	U	86	U	100	U	100	U	87	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	94	U	86	U	100	U	5.4	J	87	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	94	U	86	U	100	U	100	U	87	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	14	J	9.9	J	18	J	32	J	19	J
Fluorene	UG/KG	830	9%	50000	0	5	58	94	U	86	U	100	U	100	U	87	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	94	U	86	U	100	U	100	U	87	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	UJ	87	U
Hexachloroethane	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	6	J	86	U	9.2	J	21	J	6.8	J
Isophorone	UG/KG	0	0%	4400	0	0	58	94	U	86	U	100	U	100	U	87	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	94	U	86	U	100	U	100	U	87	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
FACILITY								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
LOC_ID								SOIL		SOIL		SOIL		SOIL		SOIL	
MATRIX								123232		123233		123234		123235		123236	
SAMP_ID								0		0		0		0		0	
DEPTH_TOP								0.2		0.2		0.2		0.2		0.2	
DEPTH_BOT								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
SAMP_DATE								SA		SA		SA		SA		SA	
QC_CODE								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
STUDY_ID																	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	94	U	86	U	100	U	100	U	87	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	94	U	86	U	100	U	100	U	87	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	230	U	210	U	250	U	240	U	210	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	8.4	J	6	J	10	J	17	J	9.2	J
Phenol	UG/KG	42	29%	30	2	17	58	94	U	11	J	100	U	100	U	87	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	11	J	8.7	J	16	J	28	J	14	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.7	U	4.3	U	5.2	U	5	U	18	
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.7	U	4.3	U	5.2	U	5	U	2.2	J
Aldrin	UG/KG	0	0%	41	0	0	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	47	U	43	U	52	U	50	U	43	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	96	U	87	U	100	U	100	U	88	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	47	U	43	U	52	U	50	U	43	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	47	U	43	U	52	U	50	U	43	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	47	U	43	U	52	U	50	U	43	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	47	U	43	U	52	U	50	U	43	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	47	U	43	U	52	U	50	U	43	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.7	U	4.3	U	5.2	U	5	U	3	J
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.7	U	4.3	U	5.2	U	5	U	4.3	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123232		123233		123234		123235		123236	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.4	U	2.2	U	2.6	U	2.6	U	2.2	U
Methoxychlor	UG/KG	0	0%		0	0	58	24	U	22	U	26	U	26	U	22	U
Toxaphene	UG/KG	0	0%		0	0	58	240	U	220	U	260	U	260	U	220	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	11600	J	12200	J	11200	J	14200	J	11300	J
Antimony	MG/KG	1.6	3%	6	0	2	58	1.7	UJ	1.3	UJ	1.8	UJ	1.7	R	1.3	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	3		4.5		2.1	J	4.9		3.9	
Barium	MG/KG	146	100%	300	0	58	58	101		107		126		137		94.7	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.74	J	0.11	J	0.6	J	0.57	J	0.48	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.08	U	0.06	U	0.09	U	0.08	U	0.06	U
Calcium	MG/KG	154000	100%	125300	1	58	58	5270		2420		7560		7850		3240	
Chromium	MG/KG	26.8	100%	30	0	58	58	16.4		15.5		13.6		21.3		16.3	
Cobalt	MG/KG	17.1	100%	30	0	58	58	5.3	J	10.6		4	J	10.3	J	9.3	J
Copper	MG/KG	35.4	100%	33	3	58	58	17.5		13.8		15.5		16		18.2	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.72	UJ	0.68	UJ	0.8	UJ	0.86	U	0.67	UJ
Iron	MG/KG	31500	100%	37410	0	58	58	15500		21300		14200		29400	J	19400	
Lead	MG/KG	43.8	100%	24.4	16	58	58	21.5		17.6		19.8		25.8	J	18.3	
Magnesium	MG/KG	15700	100%	21700	0	58	58	2800		2830		2650		4060		3220	
Manganese	MG/KG	2370	100%	1100	4	58	58	272		3820		90		633		665	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.08	UJ	0.07	UJ	0.07	UJ	0.11	J	0.06	UJ
Nickel	MG/KG	57.4	95%	50	2	55	58	18.4	J	18.5	J	16.1	J	25.3		21.7	J
Potassium	MG/KG	2970	100%	2623	2	58	58	1030	J	977	J	811	J	1820		1130	
Selenium	MG/KG	2.3	43%	2	2	25	58	1.3	U	1.3		1.7		1.8	J	0.98	U
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.33	U	0.25	U	0.35	U	0.34	U	0.26	U
Sodium	MG/KG	153	22%	188	0	13	58	68.7	U	51.7	U	73.4	U	70.9	U	53.8	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.4	UJ	1.7	J	1.5	UJ	1.5	U	1.1	UJ
Vanadium	MG/KG	33.1	100%	150	0	58	58	17.2		22.6		17.1		23.8		18.9	
Zinc	MG/KG	197	100%	115	5	58	58	78.8		47.9		51.2		151	J	63.4	
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-35		SS12-36		SS12-37		SS12-38		SS12-39	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123232		123233		123234		123235		123236	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		10-Nov-98		09-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID							SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX							SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID							123237		123238		123239		123105		123240	
DEPTH_TOP							0		0		0		0		0	
DEPTH_BOT							0.2		0.2		0.2		0.2		0.2	
SAMP_DATE							09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE							SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	13	U	13	U	12	U	14	U	15	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	13	U	13	U	12	U	14	U	15	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	13	U	13	U	12	U	14	U	15	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	13	U	13	U	12	U	14	U	15	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
Acetone	UG/KG	55	29%	200	0	17	58	13	J	13	U	12	UJ	14	U	7	J
Benzene	UG/KG	0	0%	60	0	0	58	13	U	13	U	12	U	14	U	15	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
Bromoform	UG/KG	0	0%		0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	13	U	13	U	12	U	14	U	15	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	13	U	13	U	12	U	14	U	15	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
Chloroethane	UG/KG	0	0%	1900	0	0	58	13	U	13	U	12	U	14	U	15	U
Chloroform	UG/KG	0	0%	300	0	0	58	13	U	13	U	12	U	14	U	15	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	13	U	13	U	12	UJ	14	U	15	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	13	U	13	U	12	UJ	14	U	15	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	13	U	13	U	12	U	14	U	15	UJ
Methylene chloride	UG/KG	0	0%	100	0	0	58	13	U	13	U	12	U	14	U	15	U
Styrene	UG/KG	0	0%		0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	13	U	13	U	12	U	14	U	15	UJ
Toluene	UG/KG	14	10%	1500	0	6	58	13	U	13	U	12	U	14	U	15	UJ
Total Xylenes	UG/KG	0	0%	1200	0	0	58	13	UJ	13	UJ	12	UJ	14	U	15	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123237		123238		123239		123105		123240	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	13	U	13	U	12	U	14	U	15	UJ
Trichloroethene	UG/KG	0	0%	700	0	0	58	13	U	13	U	12	U	14	U	15	UJ
Vinyl chloride	UG/KG	0	0%	200	0	0	58	13	U	13	U	12	U	14	U	15	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	87	U	84	U	80	U	100	UJ	96	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	87	U	84	U	80	U	100	U	96	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	87	U	84	U	80	U	100	U	96	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	87	U	84	U	80	U	100	U	96	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	210	U	200	U	200	U	240	U	230	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	87	U	84	U	80	U	100	U	96	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	87	U	84	U	80	R	100	U	96	R
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	210	UJ	200	UJ	200	U	240	UJ	230	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	87	U	84	U	80	U	100	U	96	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	87	U	84	U	80	U	100	U	96	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	87	U	84	U	80	U	100	U	96	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	87	U	84	U	80	U	100	U	96	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	210	U	200	U	200	U	240	U	230	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	87	U	84	U	80	U	100	U	96	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	210	UJ	200	UJ	200	U	240	U	230	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	210	UJ	200	UJ	200	U	240	U	230	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	87	U	84	U	80	U	100	U	96	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	87	UJ	84	UJ	80	U	100	U	96	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	87	U	84	U	80	U	100	U	96	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	210	UJ	200	UJ	200	UJ	240	U	230	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	210	U	200	U	200	UJ	240	UJ	230	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123237		123238		123239		123105		123240	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	87	U	84	U	80	U	100	U	96	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	87	U	84	U	80	U	100	U	96	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	87	U	84	U	80	U	100	U	96	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	7.9	J	11	J	80	U	5.8	J	9.4	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	9.3	J	14	J	80	U	10	J	11	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	11	J	23	J	80	U	12	J	14	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	10	J	15	J	9.5	J	100	U	9.6	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	12	J	14	J	80	U	11	J	13	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	87	UJ	84	UJ	80	UJ	100	U	96	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	87	UJ	84	UJ	80	UJ	100	U	96	UJ
Carbazole	UG/KG	1100	22%		0	13	58	87	UJ	7.6	J	80	U	100	UJ	96	U
Chrysene	UG/KG	3600	93%	400	3	54	58	11	J	19	J	4.6	J	12	J	15	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	6.7	J	10	J	5.4	J	100	U	96	U
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	87	UJ	84	UJ	80	UJ	100	U	96	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	87	UJ	6	J	80	U	100	U	96	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	87	U	84	U	80	U	100	U	96	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	87	U	84	U	80	U	100	U	96	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	87	U	84	U	80	U	100	U	96	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	21	J	33	J	7	J	14	J	24	J
Fluorene	UG/KG	830	9%	50000	0	5	58	87	U	84	U	80	U	100	U	96	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	87	U	84	U	80	U	100	U	96	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	UJ	96	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	87	UJ	84	UJ	80	U	100	UJ	96	U
Hexachloroethane	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	9.7	J	14	J	80	U	100	U	9	J
Isophorone	UG/KG	0	0%	4400	0	0	58	87	U	84	U	80	U	100	U	96	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	87	U	84	U	80	U	100	U	96	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123237		123238		123239		123105		123240	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	87	U	84	U	80	U	100	U	96	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	87	U	84	U	80	U	100	UJ	96	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	210	U	200	U	200	U	240	UJ	230	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	10	J	17	J	4.4	J	8.5	J	13	J
Phenol	UG/KG	42	29%	30	2	17	58	87	U	84	U	80	U	100	U	96	U
Pyrene	UG/KG	7000	93%	50000	0	54	58	17	J	23	J	5.6	J	17	J	19	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	12	J	4.2	U	4	U	5	U	4.8	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.3	U	2.3	J	4	U	5	U	2.4	J
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	43	U	42	U	40	U	50	U	48	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	88	U	85	U	82	U	100	U	97	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	43	U	42	U	40	U	50	U	48	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	43	U	42	U	40	U	50	U	48	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	43	U	42	U	40	U	50	U	48	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	43	U	42	U	40	U	50	U	48	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	43	U	42	U	40	U	50	U	48	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	1.6	J	2.2	U	2.1	U	2.6	U	2.4	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.3	U	4.2	U	4	U	5	U	4.8	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123237		123238		123239		123105		123240	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.2	U	2.2	U	2.1	U	2.6	U	2.4	U
Methoxychlor	UG/KG	0	0%		0	0	58	22	U	22	U	21	U	26	U	24	U
Toxaphene	UG/KG	0	0%		0	0	58	220	U	220	U	210	U	260	U	240	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	13000	J	11100	J	13800	J	15600		11400	J
Antimony	MG/KG	1.6	3%	6	0	2	58	1.4	R	1.2	R	1.3	UJ	1.4	R	1.6	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	4.2		4.1		3.9		3.4		3.5	
Barium	MG/KG	146	100%	300	0	58	58	68.6		129		74		133		99.6	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.41	J	0.17	J	0.56	J	0.77	J	0.42	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.07	U	0.06	U	0.06	U	0.07	U	0.08	U
Calcium	MG/KG	154000	100%	125300	1	58	58	2380		3380		18500		8900	J	4270	
Chromium	MG/KG	26.8	100%	30	0	58	58	17.8		14.1		23.4		22.7		14.9	
Cobalt	MG/KG	17.1	100%	30	0	58	58	9.6	J	11		11.9		8.8	J	8.5	J
Copper	MG/KG	35.4	100%	33	3	58	58	18.7		12.7		27		27.6		12.8	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.75	U	0.67	U	0.62	UJ	0.77	U	0.74	UJ
Iron	MG/KG	31500	100%	37410	0	58	58	20800	J	18800	J	27700		23700	J	19800	
Lead	MG/KG	43.8	100%	24.4	16	58	58	[illegible]	J	29.3	J	17		[illegible]		31.8	
Magnesium	MG/KG	15700	100%	21700	0	58	58	3580		2530		5850		4570		2660	
Manganese	MG/KG	2370	100%	1100	4	58	58	512		1730		502		672		513	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.09	J	0.12		0.06	UJ	[illegible]	J	0.06	UJ
Nickel	MG/KG	57.4	95%	50	2	55	58	22.1		21.3		39.2	J	32.7		16.5	J
Potassium	MG/KG	2970	100%	2623	2	58	58	1350		875	J	2060		1260		1060	J
Selenium	MG/KG	2.3	43%	2	2	25	58	1.3	J	1.9	J	0.95	U	1.3		1.2	U
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.27	U	0.23	U	0.25	U	0.27	U	0.32	U
Sodium	MG/KG	153	22%	188	0	13	58	56.5	U	49.3	U	52.3	U	98	J	66.8	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.6	J	2.5		1.1	UJ	1.3	J	1.4	UJ
Vanadium	MG/KG	33.1	100%	150	0	58	58	21.5		18.8		21.1		22.4		21.8	
Zinc	MG/KG	197	100%	115	5	58	58	67.5	J	78.5	J	84.1		197	J	72.6	
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-40		SS12-41		SS12-42		SS12-43		SS12-44	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123237		123238		123239		123105		123240	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		10-Nov-98		09-Nov-98		13-Oct-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	11	U	12	U	14	U	17	U	15	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	11	U	12	U	14	U	17	U	15	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	11	U	12	U	14	U	17	U	15	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	11	U	12	U	14	U	17	U	15	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Acetone	UG/KG	55	29%	200	0	17	58	11	U	12	UJ	14	U	8	J	15	UJ
Benzene	UG/KG	0	0%	60	0	0	58	11	U	12	U	14	U	17	U	15	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Bromoform	UG/KG	0	0%		0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	11	U	12	U	14	U	17	U	15	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	11	U	12	U	14	U	17	U	15	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	11	U	12	U	14	U	17	U	15	U
Chloroform	UG/KG	0	0%	300	0	0	58	11	U	12	U	14	U	17	U	15	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	11	U	12	UJ	14	U	17	UJ	15	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	11	U	12	UJ	14	U	17	UJ	15	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	11	U	12	U	14	U	17	U	15	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	11	U	12	U	14	U	17	U	15	U
Styrene	UG/KG	0	0%		0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	11	U	12	U	14	U	17	U	15	U
Toluene	UG/KG	14	10%	1500	0	6	58	11	U	12	U	14	U	17	U	15	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	11	UJ	12	U	14	U	17	UJ	15	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	U	12	U	14	U	17	U	15	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	11	U	12	U	14	U	17	U	15	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	11	U	12	U	14	U	17	U	15	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	80	U	84	U	85	U	92	U	9.1	R
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	80	U	84	U	85	U	92	U	93	R
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	80	U	84	U	85	U	92	U	93	R
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	80	U	84	U	85	U	92	U	93	R
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	190	U	200	U	200	U	220	U	48	R
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	41	R
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	80	U	84	U	85	U	92	U	22	R
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	80	U	84	R	85	U	92	R	93	R
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	190	UJ	200	U	200	UJ	220	U	45	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	23	R
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	80	U	84	U	85	U	92	U	20	R
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	18	R
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	80	U	84	U	85	U	92	U	18	R
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	80	U	84	U	85	U	92	U	17	R
2-Methylphenol	UG/KG	36	3%	100	0	2	58	80	U	84	U	85	U	92	U	16	R
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	190	U	200	U	200	U	220	U	14	R
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	80	U	84	U	85	U	92	UJ	18	R
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	UJ	93	R
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	190	UJ	200	U	200	UJ	220	UJ	220	R
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	190	U	200	U	200	UJ	220	U	220	R
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	22	R
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	80	U	84	U	85	U	92	U	40	R
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	80	UJ	84	U	85	UJ	92	UJ	93	R
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	17	R
4-Methylphenol	UG/KG	930	7%	900	1	4	58	80	U	84	U	85	U	92	U	42	R
4-Nitroaniline	UG/KG	0	0%		0	0	58	190	U	200	UJ	200	UJ	220	UJ	220	R
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	190	U	200	UJ	200	U	220	U	220	R

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	80	U	84	U	85	U	92	U	21	R
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	80	U	84	U	85	U	92	U	19	R
Anthracene	UG/KG	1500	16%	50000	0	9	58	80	U	4.4	J	85	U	92	U	19	R
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	12	J	19	J	13	J	11	J	6.7	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	14	J	22	J	15	J	12	J	10	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	17	J	22	J	22	J	18	J	26	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	80	UJ	49	J	13	J	30	J	24	R
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	16	J	23	J	19	J	12	J	25	R
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	21	R
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	10	R
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	93	R
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	80	UJ	84	UJ	85	UJ	110	J	93	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	80	UJ	84	UJ	85	UJ	92	UJ	23	J
Carbazole	UG/KG	1100	22%		0	13	58	80	UJ	84	U	85	UJ	92	U	26	R
Chrysene	UG/KG	3600	93%	400	3	54	58	16	J	24	J	19	J	16	J	10	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	9.4	J	6.1	J	7.7	J	8.5	J	28	R
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	80	UJ	84	UJ	85	UJ	92	U	22	R
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	80	UJ	84	U	6	J	92	U	23	R
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	80	U	84	U	85	U	92	U	19	R
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	80	U	84	U	85	U	92	U	22	R
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	80	U	84	U	85	U	92	U	22	R
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	28	J	37	J	35	J	28	J	16	J
Fluorene	UG/KG	830	9%	50000	0	5	58	80	U	84	U	85	U	92	U	21	R
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	80	U	84	U	85	U	92	U	21	R
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	11	R
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	80	U	84	U	85	UJ	92	UJ	90	R
Hexachloroethane	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	6.6	R
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	80	UJ	15	J	14	J	11	J	27	R
Isophorone	UG/KG	0	0%	4400	0	0	58	80	U	84	U	85	U	92	U	93	R
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	10	R
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	20	R

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	80	U	84	U	85	U	92	U	21	R
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	80	U	84	U	85	U	92	U	19	R
Anthracene	UG/KG	1500	16%	50000	0	9	58	80	U	4.4	J	85	U	92	U	19	R
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	12	J	19	J	13	J	11	J	6.7	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	14	J	22	J	15	J	12	J	10	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	17	J	22	J	22	J	18	J	26	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	80	UJ	49	J	13	J	30	J	24	R
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	16	J	23	J	19	J	12	J	25	R
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	21	R
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	10	R
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	93	R
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	80	UJ	84	UJ	85	UJ	110	J	93	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	80	UJ	84	UJ	85	UJ	92	UJ	23	J
Carbazole	UG/KG	1100	22%		0	13	58	80	UJ	84	U	85	UJ	92	U	26	R
Chrysene	UG/KG	3600	93%	400	3	54	58	16	J	24	J	19	J	16	J	10	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	9.4	J	6.1	J	7.7	J	8.5	J	28	R
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	80	UJ	84	UJ	85	UJ	92	U	22	R
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	80	UJ	84	U	6	J	92	U	23	R
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	80	U	84	U	85	U	92	U	19	R
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	80	U	84	U	85	U	92	U	22	R
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	80	U	84	U	85	U	92	U	22	R
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	28	J	37	J	35	J	28	J	16	J
Fluorene	UG/KG	830	9%	50000	0	5	58	80	U	84	U	85	U	92	U	21	R
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	80	U	84	U	85	U	92	U	21	R
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	11	R
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	80	U	84	U	85	UJ	92	UJ	90	R
Hexachloroethane	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	6.6	R
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	80	UJ	15	J	14	J	11	J	27	R
Isophorone	UG/KG	0	0%	4400	0	0	58	80	U	84	U	85	U	92	U	93	R
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	10	R
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	80	U	84	U	85	U	92	U	20	R

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	80	U	84	U	85	U	92	U	15	R
Nitrobenzene	UG/KG	0	0%	200	0	0	58	80	U	84	U	85	U	92	U	15	R
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	190	U	200	U	200	U	220	U	58	R
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	13	J	24	J	15	J	13	J	9.8	J
Phenol	UG/KG	42	29%	30	2	17	58	13	J	14	J	12	J	92	U	38	R
Pyrene	UG/KG	7000	93%	50000	0	54	58	24	J	32	J	28	J	24	J	14	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Aldrin	UG/KG	0	0%	41	0	0	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	40	U	41	U	42	U	45	U	46	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	81	U	84	U	86	U	92	U	93	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	40	U	41	U	42	U	45	U	46	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	40	U	41	U	42	U	45	U	46	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	40	U	41	U	42	U	45	U	46	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	40	U	41	U	42	U	45	U	46	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	40	U	41	U	42	U	45	U	46	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Endrin ketone	UG/KG	0	0%		0	0	58	4	U	4.1	U	4.2	U	4.5	U	4.6	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2	U	2.1	U	2.2	U	2.3	U	2.4	U
Methoxychlor	UG/KG	0	0%		0	0	58	20	U	21	U	22	U	23	U	24	U
Toxaphene	UG/KG	0	0%		0	0	58	200	U	210	U	220	U	230	U	240	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	13500	J	13600	J	12100	J	15900	J	12100	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.1	R	1.1	UJ	1.4	R	1.6	UJ	1.5	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	4.2		3.1		3.8		5.7		3.7	
Barium	MG/KG	146	100%	300	0	58	58	63.7		100		102		146		132	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.51	J	0.55	J	0.55	J	0.69	J	0.65	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.06	U	0.06	U	0.07	U	0.08	U	0.07	U
Calcium	MG/KG	154000	100%	125300	1	58	58	17400		3250		4120		4730		4850	
Chromium	MG/KG	26.8	100%	30	0	58	58	24.1		18.8		18.2		20.5		17	
Cobalt	MG/KG	17.1	100%	30	0	58	58	13.5		14.6		9	J	9.3	J	8.6	J
Copper	MG/KG	35.4	100%	33	3	58	58	33.1		14.6		21.1		22.9		20.1	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.66	U	0.63	UJ	0.71	U	0.71	UJ	0.8	UJ
Iron	MG/KG	31500	100%	37410	0	58	58	29100	J	24400		21600	J	23500	J	21000	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	22	J	33.1		22.8	J	21	J	20.3	
Magnesium	MG/KG	15700	100%	21700	0	58	58	6680		3320		3600		3800		3290	
Manganese	MG/KG	2370	100%	1100	4	58	58	573		771		428		779		698	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.05	U	0.06	UJ	0.09	J	0.06	J	0.08	J
Nickel	MG/KG	57.4	95%	50	2	55	58	44		21.2	J	24.6		22.9	J	21.2	J
Potassium	MG/KG	2970	100%	2623	2	58	58	1250		1170		1290		1840		1140	J
Selenium	MG/KG	2.3	43%	2	2	25	58	0.85	U	0.85	U	1.6	J	0.67	J	1.3	
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.22	U	0.22	U	0.28	U	0.32	U	0.3	U
Sodium	MG/KG	153	22%	188	0	13	58	58.5	J	46.6	U	57.8	U	68.2	U	62.4	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	0.97	U	0.96	UJ	1.2	U	1.7	J	1.3	U
Vanadium	MG/KG	33.1	100%	150	0	58	58	20		21.6		21.1		27		21.3	
Zinc	MG/KG	197	100%	115	5	58	58	92.9	J	67.4		71.4	J	67.7		57.4	
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-45		SS12-46		SS12-47		SS12-48		SS12-49	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123241		123242		123243		123244		123245	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		09-Nov-98		09-Nov-98		10-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		DU	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	14	U	16	U	14	U	14	U	16	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	14	U	16	U	14	U	14	U	16	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	14	U	16	U	14	U	14	U	16	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	14	U	16	U	14	U	14	U	16	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Acetone	UG/KG	55	29%	200	0	17	58	8	J	16	U	8	J	8	J	16	U
Benzene	UG/KG	0	0%	60	0	0	58	14	U	16	U	14	U	14	U	16	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Bromoform	UG/KG	0	0%		0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	14	U	16	U	14	U	14	U	16	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	14	U	16	U	14	U	14	U	16	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	14	U	16	U	14	U	14	U	16	U
Chloroform	UG/KG	0	0%	300	0	0	58	14	U	16	U	14	U	14	U	16	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Methyl chloride	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	14	U	16	U	14	U	14	U	16	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	14	U	16	U	14	U	14	U	16	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	14	U	16	U	14	U	14	U	16	U
Styrene	UG/KG	0	0%		0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	14	U	16	U	14	U	14	U	16	U
Toluene	UG/KG	14	10%	1500	0	6	58	14	U	16	U	14	U	14	U	16	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	14	U	16	UJ	14	UJ	14	UJ	16	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTICATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	14	U	16	U	14	U	14	U	16	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	14	U	16	U	14	U	14	U	16	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	14	U	16	U	14	U	14	U	16	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	180	U	100	U	96	U	97	U	110	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	180	U	100	U	96	U	97	U	110	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	180	U	100	U	96	U	97	U	110	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	180	U	100	U	96	U	97	U	110	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	440	U	250	U	230	U	240	U	270	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	180	U	100	U	96	U	97	U	110	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	440	U	250	UJ	230	UJ	240	UJ	270	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	180	U	100	U	96	U	97	U	110	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	180	U	100	U	96	U	97	U	110	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	180	U	100	U	96	U	97	U	110	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	36	J	100	U	96	U	97	U	110	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	440	U	250	U	230	U	240	U	270	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	180	U	100	U	96	U	97	U	110	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	440	U	250	UJ	230	UJ	240	UJ	270	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	440	U	250	U	230	U	240	U	270	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	180	U	100	U	96	U	97	U	110	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	180	U	100	UJ	96	UJ	97	UJ	110	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	**930**		100	U	96	U	97	U	110	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	440	U	250	U	230	U	240	U	270	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	440	U	250	U	230	U	240	U	270	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	180	U	100	U	96	U	97	U	110	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	180	U	100	U	10	J	97	U	110	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	180	U	100	U	7.9	J	97	U	110	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	180	U	17	J	59	J	10	J	9.4	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	180	U	22	J	52	J	11	J	12	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	180	U	28	J	88	J	14	J	15	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	180	U	23	J	47	J	11	J	12	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	180	U	23	J	76	J	14	J	13	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	180	U	100	UJ	96	UJ	97	UJ	110	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	180	U	100	UJ	96	UJ	97	UJ	110	UJ
Carbazole	UG/KG	1100	22%		0	13	58	180	U	10	J	22	J	97	UJ	110	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	14	J	29	J	85	J	15	J	16	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	180	U	5.6	J	6.3	J	97	U	7.4	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	180	U	100	UJ	96	UJ	97	UJ	110	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	180	U	100	UJ	96	UJ	97	UJ	110	UJ
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	180	U	100	U	96	U	97	U	110	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	180	U	100	U	96	U	97	U	92	J
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	180	U	100	U	96	U	97	U	110	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	20	J	47	J	160	J	26	J	26	J
Fluorene	UG/KG	830	9%	50000	0	5	58	180	U	100	U	96	U	97	U	110	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	180	U	100	U	96	U	97	U	110	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Hexachloroethane	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	180	U	20	J	48	J	10	J	10	J
Isophorone	UG/KG	0	0%	4400	0	0	58	180	U	100	U	96	U	97	U	110	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	180	U	100	U	96	U	97	U	110	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	180	U	100	U	96	U	97	U	110	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	180	U	100	U	96	U	97	U	110	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	440	U	250	U	230	U	240	U	270	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	13	J	26	J	32	J	14	J	14	J
Phenol	UG/KG	42	29%	30	2	17	58	42	J	100	U	96	U	97	U	16	J
Pyrene	UG/KG	7000	93%	50000	0	54	58	12	J	38	J	110	J	22	J	20	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	45	U	51	U	48	U	48	U	55	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	92	U	100	U	97	U	98	U	110	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	45	U	51	U	48	U	48	U	55	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	45	U	51	U	48	U	48	U	55	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	45	U	51	U	48	U	48	U	55	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	45	U	51	U	48	U	48	U	55	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	45	U	51	U	48	U	48	U	55	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.5	U	5.1	U	4.8	U	4.8	U	5.5	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.3	U	2.6	U	2.5	U	2.5	U	2.8	U
Methoxychlor	UG/KG	0	0%		0	0	58	23	U	26	U	25	U	25	U	28	U
Toxaphene	UG/KG	0	0%		0	0	58	230	U	260	U	250	U	250	U	280	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	17000	J	15600	J	10300	J	14900	J	12600	J
Antimony	MG/KG	1.6	3%	6	0	2	58	1.3	R	1.9	R	1.6	R	1.4	R	1.9	R
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	4.4		4.1		3.8		4.4		2.8	J
Barium	MG/KG	146	100%	300	0	58	58	131		143		80.9		115		116	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.59	J	0.96	J	0.52	J	0.7	J	0.55	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.06	U	0.09	U	0.08	U	0.07	U	0.09	U
Calcium	MG/KG	154000	100%	125300	1	58	58	6090		8350		15500		4060		7880	
Chromium	MG/KG	26.8	100%	30	0	58	58	23.4		22.9		16.9		22.5		15.7	
Cobalt	MG/KG	17.1	100%	30	0	58	58	11		6.7	J	9.2	J	10.3	J	4.5	J
Copper	MG/KG	35.4	100%	33	3	58	58	18		27.8		20.6		22.8		14.9	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.79	U	0.81	U	0.87	U	0.85	U	0.9	U
Iron	MG/KG	31500	100%	37410	0	58	58	27000	J	22200	J	20500	J	26100	J	12800	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	43.8	J	34.6		17.7		[redacted]		23.8	
Magnesium	MG/KG	15700	100%	21700	0	58	58	4380		4330		5240		4330		2880	
Manganese	MG/KG	2370	100%	1100	4	58	58	787		293		511		571		390	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.07	J	0.17		0.08	J	0.08	J	0.16	
Nickel	MG/KG	57.4	95%	50	2	55	58	27.2		33.3		26.5		30.5		16.8	
Potassium	MG/KG	2970	100%	2623	2	58	58	[redacted]		1660		1280	J	1630		1450	J
Selenium	MG/KG	2.3	43%	2	2	25	58	1	J	[redacted]	J	1.2	U	2	J	1.6	J
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.26	U	0.37	U	0.31	U	0.27	U	0.38	U
Sodium	MG/KG	153	22%	188	0	13	58	54.3	U	78	U	64.4	U	55.9	U	79	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.1	U	1.6	U	1.3	U	1.4	J	1.6	U
Vanadium	MG/KG	33.1	100%	150	0	58	58	29.1		23.2		16.6		25		15	J
Zinc	MG/KG	197	100%	115	5	58	58	97	J	130	J	69.2	J	96.8	J	90.9	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-49		SS12-50		SS12-51		SS12-52		SS12-53	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123246		123247		123248		123249		123250	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								09-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	12	U	12	U	13	U	12	U	14	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	12	U	12	U	13	U	12	UJ	14	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	12	U	12	U	13	U	12	U	14	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	12	U	12	U	13	U	12	U	14	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	12	U	12	U	13	U	12	U	14	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Acetone	UG/KG	55	29%	200	0	17	58	12	U	12	U	13	U	8	J	14	U
Benzene	UG/KG	0	0%	60	0	0	58	12	U	12	U	13	U	12	U	14	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Bromoform	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	UJ	14	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	12	U	12	U	13	U	12	U	14	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	12	U	12	U	13	U	12	U	14	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	12	U	12	U	13	U	12	UJ	14	U
Chlorodibromomethane	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	12	U	12	U	13	U	12	U	14	U
Chloroform	UG/KG	0	0%	300	0	0	58	12	U	12	U	13	U	12	U	14	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	12	U	12	U	13	U	12	UJ	14	U
Methyl bromide	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Methyl chloride	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	12	U	12	U	13	U	12	U	14	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	12	U	12	U	13	U	12	U	14	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	12	U	12	U	13	U	12	U	14	U
Styrene	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	UJ	14	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	12	U	12	U	13	U	12	U	14	U
Toluene	UG/KG	14	10%	1500	0	6	58	12	U	12	U	13	U	12	U	14	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	12	U	12	U	13	U	12	UJ	14	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	12	U	13	U	12	U	14	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	12	U	12	U	13	U	12	U	14	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	12	U	12	U	13	U	12	U	14	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	80	U	80	UJ	86	U	77	U	80	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	80	U	80	U	86	U	77	U	80	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	80	U	80	U	86	U	77	U	80	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	80	U	80	U	86	U	77	U	80	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	200	U	200	UJ	210	U	190	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	80	U	80	U	86	U	77	U	80	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	200	UJ	200	UJ	210	UJ	190	UJ	200	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	80	U	80	U	86	U	77	U	80	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	80	U	80	U	86	U	77	U	80	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	80	U	80	U	86	U	77	U	80	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	80	U	80	U	86	U	77	U	80	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	200	U	200	U	210	U	190	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	80	U	80	U	86	U	77	U	80	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	200	UJ	200	UJ	210	UJ	190	UJ	200	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	200	U	200	U	210	U	190	U	200	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	80	U	80	U	86	U	77	U	80	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	80	UJ	80	U	86	UJ	77	UJ	80	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	80	U	80	U	86	U	9.9	J	80	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	200	U	200	UJ	210	U	190	U	200	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	200	U	200	U	210	U	190	U	200	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	80	U	80	U	86	U	77	U	80	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	80	U	80	U	86	U	77	U	80	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	80	U	80	U	86	U	77	U	80	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	80	U	80	U	86	U	77	U	4.9	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	4.5	J	80	UJ	86	U	77	U	5.1	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	5.3	J	80	U	6.5	J	77	U	7.4	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	80	UJ	80	U	86	UJ	77	UJ	80	U
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	80	U	80	U	4.5	J	77	U	6.7	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	80	UJ	80	U	86	UJ	77	UJ	80	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	80	UJ	80	U	86	UJ	77	UJ	80	UJ
Carbazole	UG/KG	1100	22%		0	13	58	80	UJ	80	UJ	86	UJ	77	UJ	80	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	4.2	J	80	U	5.8	J	3.9	J	8.3	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	4.1	J	80	U	4.8	J	5	J	6.1	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	80	UJ	80	U	86	UJ	77	UJ	80	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	80	UJ	80	U	86	UJ	77	UJ	80	UJ
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	80	U	80	U	86	U	77	U	80	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	80	U	80	U	86	U	77	U	80	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	80	U	80	U	86	U	77	U	80	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	4.8	J	80	U	9.6	J	4	J	20	J
Fluorene	UG/KG	830	9%	50000	0	5	58	80	U	80	U	86	U	77	U	80	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	80	U	80	U	86	U	77	U	80	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	80	U	80	UJ	86	U	77	U	80	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	80	U	80	UJ	86	U	77	U	80	UJ
Hexachloroethane	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	80	UJ	80	U	86	UJ	77	UJ	80	U
Isophorone	UG/KG	0	0%	4400	0	0	58	80	U	80	U	86	U	77	U	80	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	80	U	80	U	86	U	77	U	80	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Naphthalene	UG/KG	540	9%	13000	0	5	58	80	U	80	U	86	U	77	U	80	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	80	U	80	U	86	U	77	U	80	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	200	U	200	UJ	210	U	190	U	200	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	80	U	80	U	5	J	77	U	10	J
Phenol	UG/KG	42	29%	30	2	17	58	10	J	80	U	86	U	12	J	20	J
Pyrene	UG/KG	7000	93%	50000	0	54	58	4.3	J	80	U	8.2	J	77	UJ	14	J
PESTICIDES/PCBS																	
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4	U	4	U	4.3	U	3.9	U	4	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4	U	4	U	4.3	U	3.9	U	4	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4	U	4	U	4.3	U	3.9	U	4	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	40	U	40	U	43	U	39	U	40	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	82	U	82	U	88	U	79	U	82	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	40	U	40	U	43	U	39	U	40	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	40	U	40	U	43	U	39	U	40	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	40	U	40	U	43	U	39	U	40	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	40	U	40	U	43	U	39	U	40	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	40	U	40	U	43	U	39	U	40	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4	U	4	U	4.3	U	3.9	U	4	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4	U	4	U	4.3	U	3.9	U	4	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4	U	4	U	4.3	U	3.9	U	4	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4	U	4	U	4.3	U	3.9	U	4	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4	U	4	U	4.3	U	3.9	U	4	U
Endrin ketone	UG/KG	0	0%		0	0	58	4	U	4	U	4.3	U	3.9	U	4	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.1	U	2.1	U	2.2	U	2	U	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	58	21	U	21	U	22	U	20	U	21	U
Toxaphene	UG/KG	0	0%		0	0	58	210	U	210	U	220	U	200	U	210	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	11500	J	13300		15700	J	14800	J	12600	J
Antimony	MG/KG	1.6	3%	6	0	2	58	1.3	R	1	R	1.4	R	1.2	R	1.3	R
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	2.6		2.6		4.8		3.5		3.7	
Barium	MG/KG	146	100%	300	0	58	58	60		46.6		80.4		77.3		99.9	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.51	J	0.56	J	0.56	J	0.6	J	0.49	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.06	U	0.05	U	0.07	U	0.06	U	0.06	U
Calcium	MG/KG	154000	100%	125300	1	58	58	25400		2520	J	3210		3490		6650	
Chromium	MG/KG	26.8	100%	30	0	58	58	19.8		24.1		23.5		26.8		20	
Cobalt	MG/KG	17.1	100%	30	0	58	58	12.6		12.1		11.9		16		11.5	
Copper	MG/KG	35.4	100%	33	3	58	58	25.6		28.9		12.1		33.8		22.5	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.63	U	0.64	U	0.75	U	0.7	U	0.59	U
Iron	MG/KG	31500	100%	37410	0	58	58	22200	J	28000	J	28600	J	31500	J	24700	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	12.8		20.6		13.5		23.2		12.7	J
Magnesium	MG/KG	15700	100%	21700	0	58	58	7630		5270		4220		6390		4900	
Manganese	MG/KG	2370	100%	1100	4	58	58	377		384		691		436		541	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.06	U	0.1	J	0.08	J	0.06	U	0.06	J
Nickel	MG/KG	57.4	95%	50	2	55	58	32.4		42.8		26		57.4		33.2	
Potassium	MG/KG	2970	100%	2623	2	58	58	1270		957		1020	J	1600		1560	
Selenium	MG/KG	2.3	43%	2	2	25	58	0.98	U	0.78	U	1.3	J	0.92	U	1.7	J
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.26	U	0.2	U	0.27	U	0.24	U	0.25	U
Sodium	MG/KG	153	22%	188	0	13	58	53.9	U	42.7	U	57.5	U	53.8	J	52	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.1	U	0.88	U	1.2	U	1.2	J	1.5	J
Vanadium	MG/KG	33.1	100%	150	0	58	58	18.2		19		23.2		21		19.3	
Zinc	MG/KG	197	100%	115	5	58	58	69.6	J	65.2	J	65.5	J	131	J	79.1	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-54		SS12-55		SS12-56		SS12-57		SS12-58	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123251		123106		123252		123253		123254	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		13-Oct-98		11-Nov-98		11-Nov-98		11-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-59		SS12-60		SS12-61		SS12-62		SS12-63	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123255		123256		123257		123258		123259	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Nov-98		10-Nov-98		11-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
VOLATILE ORGANICS																	
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	12	U	13	U	12	U	14	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	12	U	13	U	12	U	14	U	13	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	12	U	13	U	12	U	14	U	13	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	12	U	13	U	12	U	14	U	13	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Acetone	UG/KG	55	29%	200	0	17	58	12	U	6	J	17		14	U	55	
Benzene	UG/KG	0	0%	60	0	0	58	12	U	13	U	12	U	14	U	13	U
Bromodichloromethane	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Bromoform	UG/KG	0	0%		0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	12	U	13	U	12	U	14	U	13	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	12	U	13	U	12	U	14	U	13	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Chloroethane	UG/KG	0	0%	1900	0	0	58	12	U	13	U	12	U	14	U	13	U
Chloroform	UG/KG	0	0%	300	0	0	58	12	U	13	U	12	U	14	U	13	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Methyl butyl ketone	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Methyl chloride	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	12	U	13	U	12	U	14	U	13	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	12	U	13	U	12	U	14	U	13	U
Methylene chloride	UG/KG	0	0%	100	0	0	58	12	U	13	U	12	U	14	U	13	U
Styrene	UG/KG	0	0%		0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	12	U	13	U	12	U	14	U	13	U
Toluene	UG/KG	14	10%	1500	0	6	58	12	U	13	U	2	J	14	U	13	U
Total Xylenes	UG/KG	0	0%	1200	0	0	58	12	U	13	UJ	12	U	14	UJ	13	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-59		SS12-60		SS12-61		SS12-62		SS12-63	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123255		123256		123257		123258		123259	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Nov-98		10-Nov-98		11-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	12	U	13	U	12	U	14	U	13	U
Trichloroethene	UG/KG	0	0%	700	0	0	58	12	U	13	U	12	U	14	U	13	U
Vinyl chloride	UG/KG	0	0%	200	0	0	58	12	U	13	U	12	U	14	U	13	U
SEMI VOLATILE ORGANICS																	
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	81	U	85	U	78	U	87	U	82	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	81	U	85	U	78	U	87	U	82	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	81	U	85	U	78	U	87	U	82	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	81	U	85	U	78	U	87	U	82	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	200	U	200	U	190	U	210	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	81	U	85	U	78	U	87	U	82	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	200	UJ	200	UJ	190	UJ	210	UJ	200	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	81	U	85	U	78	U	87	U	82	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	81	U	85	U	78	U	87	U	82	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	81	U	85	U	78	U	87	U	82	U
2-Methylphenol	UG/KG	36	3%	100	0	2	58	81	U	85	U	78	U	87	U	82	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	200	U	200	U	190	U	210	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	81	U	85	U	78	U	87	U	82	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	200	UJ	200	UJ	190	UJ	210	UJ	200	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	200	U	200	U	190	UJ	210	U	200	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	81	U	85	U	78	U	87	U	82	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
4-Methylphenol	UG/KG	930	7%	900	1	4	58	4.3	J	85	U	78	U	87	U	82	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	200	U	200	U	190	UJ	210	U	200	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	200	U	200	U	190	U	210	U	200	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-59		SS12-60		SS12-61		SS12-62		SS12-63	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123255		123256		123257		123258		123259	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Nov-98		10-Nov-98		11-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	81	U	85	U	78	U	87	U	82	U
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	81	U	85	U	78	U	87	U	82	U
Anthracene	UG/KG	1500	16%	50000	0	9	58	81	U	85	U	78	U	87	U	82	U
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	4.6	J	85	U	78	U	87	U	82	U
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	5.4	J	4.7	J	78	U	87	U	82	U
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	6.3	J	6	J	4.8	J	4.5	J	6.6	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	81	UJ	85	UJ	78	U	87	UJ	82	U
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	6.2	J	85	U	78	U	5	J	4.8	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
Carbazole	UG/KG	1100	22%		0	13	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	7.2	J	5.4	J	4.5	J	5	J	6.3	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	81	U	85	U	78	U	87	U	5.4	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	81	UJ	85	UJ	78	UJ	87	UJ	82	UJ
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	81	U	85	U	78	U	87	U	82	U
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	81	U	85	U	78	U	87	U	82	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	81	U	85	U	78	U	87	U	82	U
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	11	J	10	J	6.2	J	8.2	J	9.8	J
Fluorene	UG/KG	830	9%	50000	0	5	58	81	U	85	U	78	U	87	U	82	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	81	U	85	U	78	U	87	U	82	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	81	U	85	U	78	UJ	87	U	82	UJ
Hexachloroethane	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	81	UJ	85	UJ	78	U	87	UJ	82	U
Isophorone	UG/KG	0	0%	4400	0	0	58	81	U	85	U	78	U	87	U	82	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	81	U	85	U	78	U	87	U	82	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOC_ID								SS12-59			SS12-60			SS12-61			SS12-62			SS12-63	
MATRIX								SOIL			SOIL			SOIL			SOIL			SOIL	
SAMP_ID								123255			123256			123257			123258			123259	
DEPTH_TOP								0			0			0			0			0	
DEPTH_BOT								0.2			0.2			0.2			0.2			0.2	
SAMP_DATE								11-Nov-98			12-Nov-98			10-Nov-98			11-Nov-98			10-Nov-98	
QC_CODE								SA			SA			SA			SA			SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE														
Naphthalene	UG/KG	540	9%	13000	0	5	58	81	U		85	U		78	U		87	U		82	U
Nitrobenzene	UG/KG	0	0%	200	0	0	58	81	U		85	U		78	U		87	U		82	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	200	U		200	U		190	U		210	U		200	U
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	5.8	J		4.9	J		78	U		87	U		6.7	J
Phenol	UG/KG	42	29%	30	2	17	58	10	J		85	U		8.7	J		87	U		12	J
Pyrene	UG/KG	7000	93%	50000	0	54	58	9.2	J		7.6	J		5.2	J		6.6	J		7.5	J
PESTICIDES/PCBS																					
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Aldrin	UG/KG	0	0%	41	0	0	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Alpha-BHC	UG/KG	51	5%	110	0	3	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	2.1	U		1.2	J		2	U		2.2	U		2.1	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	41	U		42	U		39	U		43	U		41	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	82	U		86	U		80	U		88	U		84	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	41	U		42	U		39	U		43	U		41	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	41	U		42	U		39	U		43	U		41	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	41	U		42	U		39	U		43	U		41	U
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	41	U		42	U		39	U		43	U		41	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	41	U		42	U		39	U		43	U		41	U
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Dieldrin	UG/KG	3.2	2%	44	0	1	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Endosulfan II	UG/KG	3	3%	900	0	2	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Endrin	UG/KG	5.8	5%	100	0	3	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Endrin aldehyde	UG/KG	0	0%		0	0	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Endrin ketone	UG/KG	0	0%		0	0	58	4.1	U		4.2	U		3.9	U		4.3	U		4.1	U
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	2.1	U		2.2	U		2	U		2.2	U		2.1	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-59		SS12-60		SS12-61		SS12-62		SS12-63	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123255		123256		123257		123258		123259	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Nov-98		10-Nov-98		11-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Heptachlor	UG/KG	0	0%	100	0	0	58	2.1	U	2.2	U	2	U	2.2	U	2.1	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	2.1	U	2.2	U	2	U	2.2	U	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	58	21	U	22	U	20	U	22	U	21	U
Toxaphene	UG/KG	0	0%		0	0	58	210	U	220	U	200	U	220	U	210	U
METALS																	
Aluminum	MG/KG	18700	100%	19520	0	58	58	12300	J	13700	J	13200	J	13300	J	14500	J
Antimony	MG/KG	1.6	3%	6	0	2	58	1.4	R	1.2	R	1.2	R	1.4	R	1.2	R
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	4.2		3.9		2.4		4.3		2.6	
Barium	MG/KG	146	100%	300	0	58	58	62		85		49.9		89.7		57.1	
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.5	J	0.48	J	0.48	J	0.49	J	0.46	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.07	U	0.06	U	0.06	U	0.07	U	0.06	U
Calcium	MG/KG	154000	100%	125300	1	58	58	13000		2800		2880		12000		3260	
Chromium	MG/KG	26.8	100%	30	0	58	58	20.6		20.7		23.9		22.5		26.2	
Cobalt	MG/KG	17.1	100%	30	0	58	58	11	J	12.6		14.5		12.4		17.1	
Copper	MG/KG	35.4	100%	33	3	58	58	18.6		20.5		24.9		28.7		29.4	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.64	U	0.71	U	0.62	U	0.78	U	0.65	U
Iron	MG/KG	31500	100%	37410	0	58	58	24200	J	25100	J	27300	J	27000	J	30600	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	8.9	J	21.3		15.4	J	20.1		21.9	J
Magnesium	MG/KG	15700	100%	21700	0	58	58	5360		4090		5640		5630		6000	
Manganese	MG/KG	2370	100%	1100	4	58	58	386		717		573		740		852	
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.05	U	0.07	J	0.06	U	0.06	U	0.06	U
Nickel	MG/KG	57.4	95%	50	2	55	58	31.8		28.3		42.6		40.1		44.9	
Potassium	MG/KG	2970	100%	2623	2	58	58	1200		1160		1350		1900		1450	
Selenium	MG/KG	2.3	43%	2	2	25	58	1.1	U	0.91	U	0.94	U	1.1	U	1.2	J
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.28	U	0.24	U	0.25	U	0.28	U	0.23	U
Sodium	MG/KG	153	22%	188	0	13	58	58.7	U	50	U	51.5	U	59.6	U	49.2	U
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.2	U	1.6	J	1.1	U	1.2	U	1.4	J
Vanadium	MG/KG	33.1	100%	150	0	58	58	17.9		22.1		17.3		21.7		19.7	
Zinc	MG/KG	197	100%	115	5	58	58	74.5	J	84.5	J	84.7	J	92.7	J	83.8	J
WET CHEMISTRY																	
Nitrate/Nitrite	%W/W																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-59		SS12-60		SS12-61		SS12-62		SS12-63	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123255		123256		123257		123258		123259	
DEPTH_TOP								0		0		0		0		0	
DEPTH_BOT								0.2		0.2		0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Nov-98		10-Nov-98		11-Nov-98		10-Nov-98	
QC_CODE								SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE										
Nitrate/Nitrite	MG/KG																
pH	SU																
TOC-Soil 9060	MG/KG																
Percent Solids	%W/W																
Percent Solids	MG/KG																
Cation exchange capacity	meq/100g																

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-66		SS12-67		SS12-68	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123260		123108		123213	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE						
VOLATILE ORGANICS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	58	11	U	12	U	11	UJ
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	58	11	UJ	12	U	11	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	58	11	U	12	U	11	UJ
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	58	11	U	12	U	11	UJ
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	58	11	U	12	U	11	UJ
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	58	11	U	12	U	11	UJ
1,2-Dichloropropane	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Acetone	UG/KG	55	29%	200	0	17	58	11	U	12	U	17	UJ
Benzene	UG/KG	0	0%	60	0	0	58	11	U	12	U	11	UJ
Bromodichloromethane	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Bromoform	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	58	11	U	12	U	11	UJ
Carbon tetrachloride	UG/KG	0	0%	600	0	0	58	11	U	12	U	11	UJ
Chlorobenzene	UG/KG	0	0%	1700	0	0	58	11	UJ	12	U	11	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Chloroethane	UG/KG	0	0%	1900	0	0	58	11	U	12	U	11	UJ
Chloroform	UG/KG	0	0%	300	0	0	58	11	U	12	U	11	UJ
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Ethyl benzene	UG/KG	0	0%	5500	0	0	58	11	UJ	12	U	11	UJ
Methyl bromide	UG/KG	0	0%		0	0	58	11	U	12	U	11	UJ
Methyl butyl ketone	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Methyl chloride	UG/KG	0	0%		0	0	58	11	U	12	U	11	UJ
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	58	11	U	12	U	11	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	58	11	UJ	12	U	11	UJ
Methylene chloride	UG/KG	0	0%	100	0	0	58	11	U	12	U	11	UJ
Styrene	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	58	11	UJ	12	U	11	UJ
Toluene	UG/KG	14	10%	1500	0	6	58	4	J	5	J	4	J
Total Xylenes	UG/KG	0	0%	1200	0	0	58	11	UJ	12	U	11	UJ

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-66		SS12-67		SS12-68	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123260		123108		123213	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSE						
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	58	11	UJ	12	U	11	UJ
Trichloroethene	UG/KG	0	0%	700	0	0	58	11	UJ	12	U	11	UJ
Vinyl chloride	UG/KG	0	0%	200	0	0	58	11	U	12	U	11	UJ
SEMI VOLATILE ORGANICS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	58	73	U	71	UJ	72	UJ
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	58	73	U	71	U	72	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	58	73	U	71	U	72	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	58	73	U	71	U	72	UJ
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	58	180	U	170	UJ	170	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	58	73	U	71	U	72	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	58	73	U	71	U	72	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	58	180	UJ	170	UJ	170	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	58	73	U	71	U	72	UJ
2-Chloronaphthalene	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	58	73	U	71	U	72	U
2-Methylnaphthalene	UG/KG	160	10%	36400	0	6	58	73	U	71	U	72	UJ
2-Methylphenol	UG/KG	36	3%	100	0	2	58	73	U	71	U	72	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	58	180	U	170	U	170	UJ
2-Nitrophenol	UG/KG	0	0%	330	0	0	58	73	U	71	U	72	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	58	180	UJ	170	UJ	170	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	58	180	U	170	U	170	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	58	73	U	71	U	72	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	58	73	UJ	71	U	72	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
4-Methylphenol	UG/KG	930	7%	900	1	4	58	73	U	71	U	72	U
4-Nitroaniline	UG/KG	0	0%		0	0	58	180	U	170	UJ	170	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	58	180	U	170	U	170	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-66		SS12-67		SS12-68	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123260		123108		123213	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE						
Acenaphthene	UG/KG	1200	9%	50000	0	5	58	73	U	71	U	72	UJ
Acenaphthylene	UG/KG	22	5%	41000	0	3	58	73	U	71	U	72	UJ
Anthracene	UG/KG	1500	16%	50000	0	9	58	73	U	71	U	72	UJ
Benzo(a)anthracene	UG/KG	3500	72%	224	3	42	58	6.3	J	9.5	J	5.6	J
Benzo(a)pyrene	UG/KG	3200	78%	61	5	45	58	6	J	10	J	5.4	J
Benzo(b)fluoranthene	UG/KG	2800	90%	1100	1	52	58	13	J	16	J	8	J
Benzo(ghi)perylene	UG/KG	2000	57%	50000	0	33	58	73	UJ	8.5	J	5	J
Benzo(k)fluoranthene	UG/KG	2900	78%	1100	1	45	58	8	J	11	J	7.1	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	58	73	U	71	U	72	UJ
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	58	73	U	71	U	72	U
Bis(2-Ethylhexyl)phthalate	UG/KG	10000	14%	50000	0	8	58	73	UJ	71	U	7.9	J
Butylbenzylphthalate	UG/KG	23	3%	50000	0	2	58	73	UJ	71	U	72	UJ
Carbazole	UG/KG	1100	22%		0	13	58	3.8	J	71	UJ	72	UJ
Chrysene	UG/KG	3600	93%	400	3	54	58	13	J	17	J	12	J
Di-n-butylphthalate	UG/KG	23	55%	8100	0	32	58	3.8	J	23	J	3.8	J
Di-n-octylphthalate	UG/KG	15	3%	50000	0	2	58	73	UJ	71	U	72	U
Dibenz(a,h)anthracene	UG/KG	680	17%	14	5	10	58	73	UJ	71	U	72	U
Dibenzofuran	UG/KG	500	9%	6200	0	5	58	73	U	71	U	72	UJ
Diethyl phthalate	UG/KG	92	5%	7100	0	3	58	4.1	J	71	U	72	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	58	73	U	71	U	72	UJ
Fluoranthene	UG/KG	8500	97%	50000	0	56	58	17	J	18	J	17	J
Fluorene	UG/KG	830	9%	50000	0	5	58	73	U	71	U	72	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	58	73	U	71	U	72	UJ
Hexachlorobutadiene	UG/KG	0	0%		0	0	58	73	U	71	UJ	72	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	58	73	U	71	UJ	72	U
Hexachloroethane	UG/KG	0	0%		0	0	58	73	U	71	U	72	U
Indeno(1,2,3-cd)pyrene	UG/KG	1700	57%	3200	0	33	58	73	UJ	7.6	J	3.8	J
Isophorone	UG/KG	0	0%	4400	0	0	58	73	U	71	U	72	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	58	73	U	71	U	72	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	58	73	U	71	U	72	U

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		
LOC_ID								SS12-66		SS12-67		SS12-68		
MATRIX								SOIL		SOIL		SOIL		
SAMP_ID								123260		123108		123213		
DEPTH_TOP								0		0		0		
DEPTH_BOT								0.2		0.2		0.2		
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98		
QC_CODE								SA		SA		SA		
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE							
Naphthalene	UG/KG	540	9%	13000	0	5	58	73	U	71	U	72	UJ	
Nitrobenzene	UG/KG	0	0%	200	0	0	58	73	U	71	U	72	UJ	
Pentachlorophenol	UG/KG	0	0%	1000	0	0	58	180	U	170	UJ	170	U	
Phenanthrene	UG/KG	7500	86%	50000	0	50	58	9.7	J	11	J	14	J	
Phenol	UG/KG	42	29%	30	2	17	58	73	U	71	U	72	U	
Pyrene	UG/KG	7000	93%	50000	0	54	58	13	J	18	J	13	J	
PESTICIDES/PCBS														
4,4'-DDD	UG/KG	51	10%	2900	0	6	58	3.7	U	3.5	U	3.6	U	
4,4'-DDE	UG/KG	5	12%	2100	0	7	58	4		5		2.3	J	
4,4'-DDT	UG/KG	5.1	10%	2100	0	6	58	3.6	J	3.4	J	3.6	U	
Aldrin	UG/KG	0	0%	41	0	0	58	1.9	U	1.8	U	1.8	U	
Alpha-BHC	UG/KG	51	5%	110	0	3	58	1.9	U	1.8	U	1.8	U	
Alpha-Chlordane	UG/KG	2.8	3%		0	2	58	1.9	U	1.8	U	1.8	U	
Aroclor-1016	UG/KG	0	0%	10000	0	0	58	37	U	35	U	36	U	
Aroclor-1221	UG/KG	0	0%	10000	0	0	58	74	U	72	U	73	U	
Aroclor-1232	UG/KG	0	0%	10000	0	0	58	37	U	35	U	36	U	
Aroclor-1242	UG/KG	0	0%	10000	0	0	58	37	U	35	U	36	U	
Aroclor-1248	UG/KG	0	0%	10000	0	0	58	37	U	35	U	36	U	
Aroclor-1254	UG/KG	64	2%	10000	0	1	58	37	U	35	U	36	U	
Aroclor-1260	UG/KG	0	0%	10000	0	0	58	37	U	35	U	36	U	
Beta-BHC	UG/KG	6.1	5%	200	0	3	58	1.9	U	1.8	U	1.3	J	
Delta-BHC	UG/KG	0	0%	300	0	0	58	1.9	U	1.8	U	1.8	U	
Dieldrin	UG/KG	3.2	2%	44	0	1	58	3.7	U	3.5	U	3.6	U	
Endosulfan I	UG/KG	1.9	3%	900	0	2	58	1.9	U	1.8	U	1.8	U	
Endosulfan II	UG/KG	3	3%	900	0	2	58	3.7	U	3.5	U	3.6	U	
Endosulfan sulfate	UG/KG	5.6	5%	1000	0	3	58	3.7	U	3.5	U	3.6	U	
Endrin	UG/KG	5.8	5%	100	0	3	58	3.7	U	3.5	U	3.6	U	
Endrin aldehyde	UG/KG	0	0%		0	0	58	3.7	U	3.5	U	3.6	U	
Endrin ketone	UG/KG	0	0%		0	0	58	3.7	U	3.5	U	3.6	U	
Gamma-BHC/Lindane	UG/KG	17	2%	60	0	1	58	1.9	U	1.8	U	1.8	U	
Gamma-Chlordane	UG/KG	1.5	3%	540	0	2	58	1.9	U	1.8	U	1.8	U	

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12	
LOC_ID								SS12-66		SS12-67		SS12-68	
MATRIX								SOIL		SOIL		SOIL	
SAMP_ID								123260		123108		123213	
DEPTH_TOP								0		0		0	
DEPTH_BOT								0.2		0.2		0.2	
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98	
QC_CODE								SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSE						
Heptachlor	UG/KG	0	0%	100	0	0	58	1.9	U	1.8	U	1.8	U
Heptachlor epoxide	UG/KG	6.5	3%	20	0	2	58	1.9	U	1.8	U	1.8	U
Methoxychlor	UG/KG	0	0%		0	0	58	19	U	18	U	18	U
Toxaphene	UG/KG	0	0%		0	0	58	190	U	180	U	180	U
METALS													
Aluminum	MG/KG	18700	100%	19520	0	58	58	9540	J	3040	J	8820	
Antimony	MG/KG	1.6	3%	6	0	2	58	1.1	R	1.2	R	1.2	UJ
Arsenic	MG/KG	6.2	100%	8.9	0	58	58	4.7		3.4		4.1	
Barium	MG/KG	146	100%	300	0	58	58	41.7		19.6	J	24.3	J
Beryllium	MG/KG	0.96	100%	1.13	0	58	58	0.41	J	0.14	J	0.39	J
Cadmium	MG/KG	0.86	2%	2.46	0	1	58	0.06	U	0.06	U	0.06	U
Calcium	MG/KG	154000	100%	125300	1	58	58	80400		154000	J	53900	
Chromium	MG/KG	26.8	100%	30	0	58	58	17.9		6.1		17.9	
Cobalt	MG/KG	17.1	100%	30	0	58	58	11.3		5.6	J	11.9	
Copper	MG/KG	35.4	100%	33	3	58	58	25.8		17.7		[illegible]	
Cyanide	MG/KG	1.4	2%	0.35	1	1	58	0.63	U	0.53	U	0.54	U
Iron	MG/KG	31500	100%	37410	0	58	58	21600	J	8760	J	23200	J
Lead	MG/KG	43.8	100%	24.4	16	58	58	16		13.7		31	
Magnesium	MG/KG	15700	100%	21700	0	58	58	7490		15700		6210	
Manganese	MG/KG	2370	100%	1100	4	58	58	400		340		316	J
Mercury	MG/KG	0.17	53%	0.1	6	31	58	0.05	U	0.05	J	0.05	U
Nickel	MG/KG	57.4	95%	50	2	55	58	36.3		14.7		53.1	
Potassium	MG/KG	2970	100%	2623	2	58	58	1270		743	J	1080	
Selenium	MG/KG	2.3	43%	2	2	25	58	0.72	J	0.93	U	0.9	U
Silver	MG/KG	0.25	3%	0.8	0	2	58	0.22	U	0.24	U	0.25	J
Sodium	MG/KG	153	22%	188	0	13	58	65.5	J	132	J	55.8	J
Thallium	MG/KG	2.5	31%	0.855	18	18	58	1.1	J	1	U	1	U
Vanadium	MG/KG	33.1	100%	150	0	58	58	15.7		7.5	J	15.6	
Zinc	MG/KG	197	100%	115	5	58	58	106	J	95.8	J	76.3	J
WET CHEMISTRY													
Nitrate/Nitrite	%W/W												

TABLE G-16
CLASS 3 METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		
LOC_ID								SS12-66		SS12-67		SS12-68		
MATRIX								SOIL		SOIL		SOIL		
SAMP_ID								123260		123108		123213		
DEPTH_TOP								0		0		0		
DEPTH_BOT								0.2		0.2		0.2		
SAMP_DATE								11-Nov-98		12-Oct-98		03-Nov-98		
QC_CODE								SA		SA		SA		
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSE							
Nitrate/Nitrite	MG/KG													
pH	SU													
TOC-Soil 9060	MG/KG													
Percent Solids	%W/W													
Percent Solids	MG/KG													
Cation exchange capacity	meq/100g													

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12A-1		MW12-27		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-03		MW12A-1-05		123062		123063		123174		123177	
DEPTH_TOP								4		8		2		4		2		2	
DEPTH_BOT								6		9 5		4		6		4		3	
SAMP_DATE								6/10/1994		6/10/1994		10/4/1998		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								ESI		ESI		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	11	U	11	U	11	UJ	11	UJ	11	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Acetone	UG/KG	100	26%	200	0	10	38	11	U	11	U	11	UJ	4	J	10	J	12	UJ
Benzene	UG/KG	0	0%	60	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Bromoform	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	11	U	11	U	11	UJ	11	UJ	11	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	UJ	12	UJ
Methyl chloride	UG/KG	0	0%		0	0	38	11	U	11	U	11	UJ	11	UJ	11	U	12	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	11	U	11	U	11	U	11	U	11	UJ	12	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Styrene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Toluene	UG/KG	10	21%	1500	0	8	38	11	U	11	U	9	J	5	J	11	U	12	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	11	U	11	U	11	U	11	U	11	U	12	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	12	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	11	U	11	U	11	U	11	U	11	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	11	U	11	U	11	UJ	11	UJ	11	U	12	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12A-1		MW12-27		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-03		MW12A-1-05		123062		123063		123174		123177	
DEPTH_TOP								4		8		2		4		2		2	
DEPTH_BOT								6		9.5		4		6		4		3	
SAMP_DATE								6/10/1994		6/10/1994		10/4/1998		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	ESI		ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	370	U	350	U	180	U	180	U	180	U	170	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	890	U	860	U	74	U	73	U	74	U	72	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	370	U	350	U	180	U	180	U	180	U	170	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	890	U	860	U	74	U	73	U	74	U	72	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	370	U	350	U	180	U	180	U	180	U	170	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	890	U	860	U	74	UJ	73	UJ	74	U	72	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	370	U	350	U	180	U	180	U	180	U	170	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	890	U	860	U	180	U	180	U	180	U	170	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	890	U	860	U	74	U	73	U	74	U	72	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	370	U	350	U	74	UJ	73	UJ	74	UJ	72	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	370	U	350	U	74	U	73	U	74	U	72	U
4-Nitroaniline	UG/KG	0	0%		0	0	38	370	U	350	U	180	U	180	U	180	U	170	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	890	U	860	U	180	U	180	U	180	U	170	U
Acenaphthene	UG/KG	28	5%	50000	0	2	38	890	U	860	U	74	U	73	U	74	U	72	U
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	370	U	350	U	74	U	73	U	74	U	72	U
Anthracene	UG/KG	74	16%	50000	0	6	38	370	U	350	U	74	U	73	U	74	U	72	U
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	370	U	350	U	74	U	73	U	74	U	5.9	J
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	370	U	350	U	74	U	73	U	74	U	4.5	J
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	370	U	350	U	74	U	73	U	74	U	5.9	J
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	370	U	350	U	74	U	73	U	74	U	4.3	J
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	370	U	350	U	74	U	73	U	74	U	5.6	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12A-1		MW12-27		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-03		MW12A-1-05		123062		123063		123174		123177	
DEPTH_TOP								4		8		2		4		2		2	
DEPTH_BOT								6		9.5		4		6		4		3	
SAMP_DATE								6/10/1994		6/10/1994		10/4/1998		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	ESI		ESI		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	73	J	350	U	13	J	16	J	74	U	72	UJ
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	370	U	350	U	74	UJ	73	UJ	74	U	72	UJ
Carbazole	UG/KG	120	13%		0	5	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
Chrysene	UG/KG	1000	53%	400	1	20	38	370	U	350	U	74	U	4.1	J	74	U	8.1	J
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	370	U	350	U	23	J	34	J	74	U	4.1	J
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	370	U	350	U	74	U	73	U	74	U	72	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	370	U	350	U	74	U	73	U	74	U	72	U
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	370	U	350	U	74	U	73	U	74	U	72	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	370	U	350	U	74	U	73	U	74	U	8.2	J
Fluorene	UG/KG	44	8%	50000	0	3	38	370	U	350	U	74	U	73	U	74	U	72	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	UJ
Hexachloroethane	UG/KG	0	0%		0	0	38	370	U	350	U	74	UJ	73	UJ	74	U	72	U
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	370	U	350	U	74	U	73	U	74	U	72	U
Isophorone	UG/KG	0	0%	4400	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	370	U	350	U	74	U	73	U	74	U	72	U
Nitrobenzene	UG/KG	0	0%	200	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	890	U	860	U	180	U	180	U	180	U	170	U
Phenanthrene	UG/KG	680	45%	50000	0	17	38	370	U	350	U	74	U	73	U	74	U	5.5	J
Phenol	UG/KG	0	0%	30	0	0	38	370	U	350	U	74	U	73	U	74	U	72	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	370	U	350	U	74	U	73	U	74	U	6	J
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Aldrin	UG/KG	0	0%	41	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	74	U	72	U	75	U	74	U	75	U	73	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12A-1		MW12-27		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-03		MW12A-1-05		123062		123063		123174		123177	
DEPTH_TOP								4		8		2		4		2		2	
DEPTH_BOT								6		9.5		4		6		4		3	
SAMP_DATE								6/10/1994		6/10/1994		10/4/1998		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								ESI		ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	37	U	35	U	37	U	37	U	37	U	36	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Dieldrin	UG/KG	0	0%	44	0	0	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Endrin	UG/KG	20	3%	100	0	1	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Endrin ketone	UG/KG	0	0%		0	0	38	3.7	U	3.5	U	3.7	U	3.7	U	3.7	U	3.6	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Heptachlor	UG/KG	0	0%	100	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	1.9	U	1.8	U	1.9	U	1.9	U	1.9	U	1.8	U
Methoxychlor	UG/KG	0	0%		0	0	38	19	U	18	U	19	U	19	U	19	U	18	U
Toxaphene	UG/KG	0	0%		0	0	38	190	U	180	U	190	U	190	U	190	U	180	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	11000		12400		14200		13600		9860		14800	
Antimony	MG/KG	0	0%	6	0	0	38	0.24	UJ	0.2	UJ	1	R	1.3	R	0.9	R	0.79	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	3.5		3.6		6.4		8.4		1.7		2.3	
Barium	MG/KG	186	100%	300	0	38	38	82.8		78.3		61		61.4		30.4		57.9	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.46	J	0.58	J	0.45	J	0.36	J	0.46	J	0.67	
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.52	J	0.85		0.05	U	0.06	U	0.26	U	0.23	U
Calcium	MG/KG	73300	100%	125300	0	38	38	71200		70300		21900		3510		1470		7850	
Chromium	MG/KG	26	100%	30	0	38	38	15.3		19.7		25.2		24.1		18.2	J	25.9	J
Cobalt	MG/KG	19.6	100%	30	0	38	38	10.1		10.8		15.5		19.6		12.6		17	
Copper	MG/KG	34	100%	33	3	38	38	20.6		29.6		30.7		33.8		9.3		20.9	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.53	U	0.43	U	0.56	UJ	0.56	UJ	0.57	U	0.55	U
Iron	MG/KG	53400	100%	37410	3	38	38	17400		22600		29200		30700		21900	J	32000	
Lead	MG/KG	284	100%	24.4	10	38	38	7.6		10.8		13.2		9.2		2.7	J	3.8	J
Magnesium	MG/KG	19200	100%	21700	0	38	38	19200		12000		5830	J	5590	J	4500		6580	
Manganese	MG/KG	3200	100%	1100	3	38	38	414		409		696		706		383		550	

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12A-1		MW12A-1		MW12-27		MW12-27		MW12-31		MW12-32	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								MW12A-1-03		MW12A-1-05		123062		123063		123174		123177	
DEPTH_TOP								4		8		2		4		2		2	
DEPTH_BOT								6		9.5		4		6		4		3	
SAMP_DATE								6/10/1994		6/10/1994		10/4/1998		10/4/1998		26-Oct-98		26-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								ESI		ESI		RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.02	J	0.03	J	0.05	U	0.05	U	0.05	U	0.05	U
Nickel	MG/KG	51.3	95%	50	1	36	38	23.7		35.5		46.2		46		28.1	UJ	41.2	UJ
Potassium	MG/KG	3460	100%	2623	2	38	38	3460	J	[illegible]	J	1150		1010	J	531	J	1020	
Selenium	MG/KG	1.8	21%	2	0	8	38	0.5	U	0.41	U	0.75	U	0.96	U	0.34	U	0.7	
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.09	U	0.08	U	0.2	J	0.25	U	0.18	U	0.15	U
Sodium	MG/KG	748	47%	188	3	18	38	79.9	J	136	J	82.4	J	107	J	57.1	J	57.2	J
Thallium	MG/KG	1.6	26%	0.855	10	10	38	0.35	U	0.29	U	0.85	U	1.1	U	0.77	UJ	1.3	J
Vanadium	MG/KG	29.3	100%	150	0	38	38	21.7		20.2		20.2		16.6		12.4		19.8	
Zinc	MG/KG	3370	100%	115	4	38	38	41.4		82.1		91.8		143		70.9	J	98.7	J
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-38		MW12-38		MW12-39		MW12-40		MW12-40	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123203		123204		123206		123207		123122		123123	
DEPTH_TOP								2		1		3		1.5		2		4	
DEPTH_BOT								4		1.2		4		2.4		4		6	
SAMP_DATE								01-Nov-98		01-Nov-98		01-Nov-98		01-Nov-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Acetone	UG/KG	100	26%	200	0	10	38	14		30		45		11		11	U	11	U
Benzene	UG/KG	0	0%	60	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Bromoform	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	11	U	11	U	11	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Styrene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Toluene	UG/KG	10	21%	1500	0	8	38	11	U	2	J	11	U	11	U	5	J	11	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	11	U	2	J	11	U	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	54		11	U	11	U	11	U	11	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	11	U	11	U	11	U	11	U	11	U	11	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-38		MW12-38		MW12-39		MW12-40		MW12-40	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123203		123204		123206		123207		123122		123123	
DEPTH_TOP								2		1		3		1.5		2		4	
DEPTH_BOT								4		1.2		4		2.4		4		6	
SAMP_DATE								01-Nov-98		01-Nov-98		01-Nov-98		01-Nov-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	170	U	170	U	180	U	170	U	170	U	170	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	72	U	71	UJ	76	U	69	U	72	UJ	71	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	170	UJ	170	U	180	UJ	170	R	170	UJ	170	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	170	U	170	U	180	U	170	U	170	U	170	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	UJ	72	U	71	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	170	UJ	170	UJ	180	UJ	170	UJ	170	U	170	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	170	UJ	170	UJ	180	UJ	170	UJ	170	U	170	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	72	UJ	71	UJ	76	UJ	69	U	72	UJ	71	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	72	U	71	U	76	U	69	U	72	U	71	U
4-Nitroaniline	UG/KG	0	0%		0	0	38	170	U	170	U	180	U	170	UJ	170	UJ	170	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	170	U	170	U	180	U	170	U	170	UJ	170	UJ
Acenaphthene	UG/KG	28	5%	50000	0	2	38	72	U	71	U	76	U	69	U	72	U	71	U
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	72	U	71	U	76	U	69	U	72	U	71	U
Anthracene	UG/KG	74	16%	50000	0	6	38	72	U	71	U	76	U	69	U	72	U	71	U
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	72	U	71	U	76	U	69	U	72	U	71	U
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	72	U	71	U	76	U	69	U	72	U	71	U
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	72	U	71	U	76	U	69	U	72	U	71	U
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	72	U	71	U	76	U	69	U	72	U	71	U
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	72	U	71	U	76	U	69	U	72	U	71	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-38		MW12-38		MW12-39		MW12-40		MW12-40	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123203		123204		123206		123207		123122		123123	
DEPTH_TOP								2		1		3		1.5		2		4	
DEPTH_BOT								4		1.2		4		2.4		4		6	
SAMP_DATE								01-Nov-98		01-Nov-98		01-Nov-98		01-Nov-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	72	UJ	71	UJ	76	UJ	69	UJ	72	UJ	71	UJ
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	72	U	71	U	76	U	69	UJ	72	UJ	71	UJ
Carbazole	UG/KG	120	13%		0	5	38	72	U	71	U	76	U	69	UJ	72	UJ	71	UJ
Chrysene	UG/KG	1000	53%	400	1	20	38	72	U	71	U	76	U	69	U	72	U	71	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	72	U	3.9	J	76	U	69	U	7.3	J	8.7	J
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	72	UJ	71	UJ	76	UJ	69	U	72	U	71	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	72	U	71	U	76	U	69	U	72	U	71	U
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	72	U	71	U	76	U	69	U	4.3	J	71	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	72	U	71	U	76	U	69	U	72	U	71	U
Fluorene	UG/KG	44	8%	50000	0	3	38	72	U	71	U	76	U	69	U	72	U	71	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	UJ	71	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	72	UJ	71	UJ	76	UJ	69	U	72	U	71	U
Hexachloroethane	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	72	U	71	U	76	U	69	U	72	U	71	U
Isophorone	UG/KG	0	0%	4400	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	72	U	71	U	76	U	69	U	72	U	71	U
Nitrobenzene	UG/KG	0	0%	200	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	170	U	170	U	180	U	170	U	170	UJ	170	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	3.7	J	71	U	76	U	69	U	72	U	6.1	J
Phenol	UG/KG	0	0%	30	0	0	38	72	U	71	U	76	U	69	U	72	U	71	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	72	U	71	U	76	U	69	U	72	U	71	U
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Aldrin	UG/KG	0	0%	41	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	73	U	72	U	75	U	70	U	73	U	72	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-38		MW12-38		MW12-39		MW12-40		MW12-40	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123203		123204		123206		123207		123122		123123	
DEPTH_TOP								2		1		3		1.5		2		4	
DEPTH_BOT								4		1.2		4		2.4		4		6	
SAMP_DATE								01-Nov-98		01-Nov-98		01-Nov-98		01-Nov-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	36	U	35	U	37	U	35	U	36	U	35	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Dieldrin	UG/KG	0	0%	44	0	0	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Endrin	UG/KG	20	3%	100	0	1	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Endrin ketone	UG/KG	0	0%		0	0	38	3.6	U	3.5	U	3.7	U	3.5	U	3.6	U	3.5	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Heptachlor	UG/KG	0	0%	100	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U
Methoxychlor	UG/KG	0	0%		0	0	38	18	U	18	U	19	U	18	U	18	U	18	U
Toxaphene	UG/KG	0	0%		0	0	38	180	U	180	U	190	U	180	U	180	U	180	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	10600		3120		10700		9350		10100	J	10900	J
Antimony	MG/KG	0	0%	6	0	0	38	1.1	UJ	1.1	UJ	1.1	UJ	1.1	UJ	1.3	R	1	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	3.2		1.8	J	2.7		2.8		2.9	J	3.5	J
Barium	MG/KG	186	100%	300	0	38	38	74.7		24.1	J	76.7		37.8		60.2		66.5	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.46	J	0.05	J	0.54	J	0.26	J	0.48	J	0.5	J
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.06	U	0.06	U	0.05	U	0.05	U	0.06	U	0.05	U
Calcium	MG/KG	73300	100%	125300	0	38	38	49100		60800		20000		73300		30900	J	41700	J
Chromium	MG/KG	26	100%	30	0	38	38	19.6		4.5		19		16.5		18.2		20	
Cobalt	MG/KG	19.6	100%	30	0	38	38	14.3		3.4	J	10.2		10.7		13.8		11.5	
Copper	MG/KG	34	100%	33	3	38	38	24.8		21.3		26.3		17.6		22.9		27	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.58	U	0.52	U	0.65	U	0.55	U	0.61	U	0.6	U
Iron	MG/KG	53400	100%	37410	3	38	38	25300	J	7350	J	24000	J	20800	J	30900		25600	
Lead	MG/KG	284	100%	24.4	10	38	38	17.2	J	3.5	J	14.2	J	5.7	J	14.7	J	17.4	J
Magnesium	MG/KG	19200	100%	21700	0	38	38	8150		14400		5760		18100		4820	J	7480	J
Manganese	MG/KG	3200	100%	1100	3	38	38	422	J	349	J	387	J	612	J	364		307	

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								MW12-37		MW12-38		MW12-38		MW12-39		MW12-40		MW12-40	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123203		123204		123206		123207		123122		123123	
DEPTH_TOP								2		1		3		1.5		2		4	
DEPTH_BOT								4		1.2		4		2.4		4		6	
SAMP_DATE								01-Nov-98		01-Nov-98		01-Nov-98		01-Nov-98		14-Oct-98		14-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.05	U	0.05	U	0.06	J	0.05	U	0.05	U	0.05	U
Nickel	MG/KG	51.3	95%	50	1	36	38	41.2		7.5	J	38.2		25.9		51.3	J	40.5	J
Potassium	MG/KG	3460	100%	2623	2	38	38	876	J	597	J	635	J	1320		817	J	1240	
Selenium	MG/KG	1.8	21%	2	0	8	38	0.86	U	0.87	U	0.82	U	0.81	U	0.98	U	0.78	U
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.22	U	0.23	U	0.21	U	0.21	U	0.25	U	0.2	U
Sodium	MG/KG	748	47%	188	3	18	38	71.3	J	53.5	J	201	J	399	J	53.4	U	61.3	J
Thallium	MG/KG	1.6	26%	0.855	10	10	38	1.6	J	0.98	U	0.93	J	0.92	U	1.1	U	0.98	J
Vanadium	MG/KG	29.3	100%	150	0	38	38	16.1		6.2	J	16.8		14.5		14.3		16.2	
Zinc	MG/KG	3370	100%	115	4	38	38	54.8	J	36.6	J	60.7	J	48.6	J	71.4	J	57.3	J
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-9A		TP12-9B		TP12-9C		TP12-10A		TP12-10A		TP12-10B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123124		123125		123126		123067		123055		123056	
DEPTH_TOP								0.5		1		2.5		1		1		2	
DEPTH_BOT								0.5		1		2.5		1		1		2	
SAMP_DATE								15-Oct-98		15-Oct-98		15-Oct-98		10/4/1998		10/4/1998		10/4/1998	
QC_CODE								SA		SA		SA		DU		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	13	U	12	U	12	U	12	UJ	12	U	13	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Acetone	UG/KG	100	26%	200	0	10	38	13	UJ	13	J	12	UJ	12	UJ	12	UJ	13	UJ
Benzene	UG/KG	0	0%	60	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Bromoform	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Chlorodibromomethane	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	13	UJ	12	UJ	12	UJ	12	UJ	12	U	13	U
Chloroform	UG/KG	0	0%	300	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Methyl bromide	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Methyl chloride	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	UJ	12	U	13	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	13	UJ	12	UJ	12	UJ	12	U	12	UJ	13	UJ
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Styrene	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Toluene	UG/KG	10	21%	1500	0	8	38	13	U	12	U	12	U	3	J	12	U	13	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	13	U	12	U	12	U	12	U	12	UJ	13	UJ
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	13	U	12	U	12	U	12	U	12	U	13	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	13	U	12	U	12	U	12	U	12	U	13	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	13	U	12	U	12	U	12	UJ	12	U	13	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-9A		TP12-9B		TP12-9C		TP12-10A		TP12-10A		TP12-10B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123124		123125		123126		123067		123055		123056	
DEPTH_TOP								0.5		1		2.5		1		1		2	
DEPTH_BOT								0.5		1		2.5		1		1		2	
SAMP_DATE								15-Oct-98		15-Oct-98		15-Oct-98		10/4/1998		10/4/1998		10/4/1998	
QC_CODE								SA		SA		SA		DU		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	210	U	180	U	190	U	190	U	190	U	200	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	UJ	81	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	210	U	180	U	190	U	190	U	190	U	200	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	210	U	180	U	190	U	190	U	190	U	200	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	210	U	180	U	190	U	190	U	190	UJ	200	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	210	U	180	U	190	U	190	U	190	U	200	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	86	UJ	76	UJ	78	UJ	78	UJ	77	UJ	81	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	86	U	76	U	78	U	78	U	77	U	8.6	J
4-Nitroaniline	UG/KG	0	0%		0	0	38	210	UJ	180	UJ	190	UJ	190	U	190	U	200	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	210	UJ	180	UJ	190	UJ	190	UJ	190	UJ	200	U
Acenaphthene	UG/KG	28	5%	50000	0	2	38	86	U	76	U	78	U	78	U	77	U	81	U
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	86	U	76	U	78	U	78	U	77	U	81	U
Anthracene	UG/KG	74	16%	50000	0	6	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	8.5	J	76	U	78	U	78	U	77	U	14	J
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	9.1	J	76	UJ	78	UJ	78	U	77	U	15	J
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	10	J	76	U	78	U	78	U	77	U	19	J
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	86	U	76	U	78	U	78	U	77	U	14	J
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	86	U	76	U	78	U	78	U	77	U	17	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-9A		TP12-9B		TP12-9C		TP12-10A		TP12-10A		TP12-10B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123124		123125		123126		123067		123055		123056	
DEPTH_TOP								0.5		1		2.5		1		1		2	
DEPTH_BOT								0.5		1		2.5		1		1		2	
SAMP_DATE								15-Oct-98		15-Oct-98		15-Oct-98		10/4/1998		10/4/1998		10/4/1998	
QC_CODE								SA		SA		SA		DU		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	86	U	76	U	78	U	78	UJ	9.2	J	81	U
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	86	U	76	U	78	U	78	UJ	6.2	J	5.2	J
Carbazole	UG/KG	120	13%		0	5	38	86	UJ	76	UJ	78	UJ	78	UJ	77	UJ	81	UJ
Chrysene	UG/KG	1000	53%	400	1	20	38	12	J	76	U	78	U	4.6	J	77	U	20	J
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	86	UJ	76	UJ	78	UJ	78	UJ	77	UJ	81	U
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	86	U	76	U	78	U	78	U	77	U	6.7	J
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	86	U	76	U	78	U	78	U	77	U	81	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	16	J	76	U	78	U	4.9	J	77	U	28	J
Fluorene	UG/KG	44	8%	50000	0	3	38	86	U	76	U	78	U	78	U	77	U	81	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	86	UJ	76	UJ	78	UJ	78	UJ	77	U	81	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Hexachloroethane	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	UJ	77	U	81	U
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	86	U	76	U	78	U	78	U	77	U	12	J
Isophorone	UG/KG	0	0%	4400	0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
Nitrobenzene	UG/KG	0	0%	200	0	0	38	86	UJ	76	UJ	78	UJ	78	U	77	U	81	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	210	R	180	R	190	R	190	U	190	UJ	200	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	12	J	76	U	78	U	78	U	77	U	17	J
Phenol	UG/KG	0	0%	30	0	0	38	86	U	76	U	78	U	78	U	77	U	81	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	17	J	76	UJ	78	UJ	5.3	J	77	U	28	J
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Aldrin	UG/KG	0	0%	41	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	87	U	77	U	78	U	80	U	78	U	82	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-9A		TP12-9B		TP12-9C		TP12-10A		TP12-10A		TP12-10B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123124		123125		123126		123067		123055		123056	
DEPTH_TOP								0.5		1		2.5		1		1		2	
DEPTH_BOT								0.5		1		2.5		1		1		2	
SAMP_DATE								15-Oct-98		15-Oct-98		15-Oct-98		10/4/1998		10/4/1998		10/4/1998	
QC_CODE								SA		SA		SA		DU		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	43	U	38	U	38	U	39	U	38	U	41	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Dieldrin	UG/KG	0	0%	44	0	0	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Endrin	UG/KG	20	3%	100	0	1	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Endrin ketone	UG/KG	0	0%		0	0	38	4.3	U	3.8	U	3.8	U	3.9	U	3.8	U	4.1	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Heptachlor	UG/KG	0	0%	100	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	2.2	U	2	U	2	U	2	U	2	U	2.1	U
Methoxychlor	UG/KG	0	0%		0	0	38	22	U	20	U	20	U	20	U	20	U	21	U
Toxaphene	UG/KG	0	0%		0	0	38	220	U	200	U	200	U	200	U	200	U	210	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	13400	J	15500	J	16400	J	13400		13500		13100	
Antimony	MG/KG	0	0%	6	0	0	38	1.5	R	1.1	R	99	R	1	R	1.1	R	1.1	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	4.8		4.3		5.3		4.3		3		3.2	
Barium	MG/KG	186	100%	300	0	38	38	90.2	J	69.4	J	181	J	136		121		130	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.53	J	0.55	J	1.1		0.52	J	0.54	J	0.46	J
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.07	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Calcium	MG/KG	73300	100%	125300	0	38	38	2940		1160		2780		5920		9190	J	4990	J
Chromium	MG/KG	26	100%	30	0	38	38	17		19		20.3		20.3		18.6	J	15.7	J
Cobalt	MG/KG	19.6	100%	30	0	38	38	8.9	J	7.5	J	12.7		11.3		12.6		11.7	
Copper	MG/KG	34	100%	33	3	38	38	15.2		15.4		26.1		24.6		27.4		16.1	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.69	U	0.61	U	0.64	U	0.59	UJ	0.61	U	0.62	U
Iron	MG/KG	53400	100%	37410	3	38	38	22100	J	27700	J	28300	J	23500		26700		28600	
Lead	MG/KG	284	100%	24.4	10	38	38	23.1	J	12	J	11.1	J	13.5		13.8	J	67	J
Magnesium	MG/KG	19200	100%	21700	0	38	38	3290	J	3940	J	5120	J	4540	J	5220		4010	
Manganese	MG/KG	3200	100%	1100	3	38	38	666		139		713		537		487	J	882	J

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-9A		TP12-9B		TP12-9C		TP12-10A		TP12-10A		TP12-10B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123124		123125		123126		123067		123055		123056	
DEPTH_TOP								0.5		1		2.5		1		1		2	
DEPTH_BOT								0.5		1		2.5		1		1		2	
SAMP_DATE								15-Oct-98		15-Oct-98		15-Oct-98		10/4/1998		10/4/1998		10/4/1998	
QC_CODE								SA		SA		SA		DU		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.07	J	0.06	U	0.06	U	0.05	U	0.06	UJ	0.05	UJ
Nickel	MG/KG	51.3	95%	50	1	36	38	18.8	J	20.2	J	32.5	J	32.5		35.4	J	25.2	J
Potassium	MG/KG	3460	100%	2623	2	38	38	905	J	771	J	1070		1080		1110		1170	
Selenium	MG/KG	1.8	21%	2	0	8	38	1.1	J	0.79	UJ	0.75	UJ	0.79	U	0.42	U	0.43	J
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.29	U	0.21	U	0.2	U	0.21	U	0.22	U	0.25	J
Sodium	MG/KG	748	47%	188	3	18	38	61.4	U	43.4	U	41	U	43.2	U	46.1	U	45.9	U
Thallium	MG/KG	1.6	26%	0.855	10	10	38	1.3	U	**0.93**	J	**1.3**	J	0.89	U	0.95	U	0.95	U
Vanadium	MG/KG	29.3	100%	150	0	38	38	22.8		24.7		24.5		19.7		19.7		21.3	
Zinc	MG/KG	3370	100%	115	4	38	38	62.1	J	47.7	J	61.4	J	76		79.8	J	77.6	J
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-10C		TP12-13A		TP12-13B		TP12-13C		TP12-14A		TP12-14B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123057		123052		123053		123054		123004		123005	
DEPTH_TOP								5.5		0.8		5.5		1.5		0.5		1.5	
DEPTH_BOT								5.5		0.8		5.5		1.5		0.5		1.5	
SAMP_DATE								10/4/1998		10/3/1998		10/3/1998		10/3/1998		9/30/1998		9/30/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Acetone	UG/KG	100	26%	200	0	10	38	12	UJ	11	UJ	11	UJ	11	UJ	11	U	12	U
Benzene	UG/KG	0	0%	60	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Bromoform	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Chloroform	UG/KG	0	0%	300	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Methyl bromide	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	12	UJ	11	U	11	U	11	UJ	11	U	12	U
Methyl chloride	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	12	UJ	11	U	11	U	11	UJ	11	U	12	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Styrene	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Toluene	UG/KG	10	21%	1500	0	8	38	12	U	4	J	11	U	6	J	11	U	12	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	12	U	11	U	11	U	11	U	11	U	12	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	12	U	11	U	11	U	11	U	11	U	12	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	12	U	11	U	11	U	11	U	11	U	12	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-10C		TP12-13A		TP12-13B		TP12-13C		TP12-14A		TP12-14B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123057		123052		123053		123054		123004		123005	
DEPTH_TOP								5.5		0.8		5.5		1.5		0.5		1.5	
DEPTH_BOT								5.5		0.8		5.5		1.5		0.5		1.5	
SAMP_DATE								10/4/1998		10/3/1998		10/3/1998		10/3/1998		9/30/1998		9/30/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	160	U	180	U	180	U	180	U	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	66	UJ	76	UJ	76	UJ	73	UJ	78	U	78	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	160	U	180	U	180	U	180	U	190	R	190	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	160	U	180	U	180	U	180	U	190	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	160	UJ	180	U	180	UJ	180	UJ	190	UJ	190	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	160	U	180	U	180	U	180	U	190	UJ	190	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	66	UJ	76	UJ	76	UJ	73	UJ	78	UJ	78	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	6.6	J	76	U	76	U	73	U	78	UJ	78	UJ
4-Nitroaniline	UG/KG	0	0%		0	0	38	160	U	180	U	180	U	180	U	190	UJ	190	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	160	UJ	180	U	180	UJ	180	UJ	190	UJ	190	UJ
Acenaphthene	UG/KG	28	5%	50000	0	2	38	15	J	76	U	76	U	73	U	78	UJ	78	UJ
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	66	U	76	U	7.2	J	73	U	78	UJ	78	UJ
Anthracene	UG/KG	74	16%	50000	0	6	38	21	J	4.8	J	17	J	5.8	J	78	UJ	78	UJ
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	60	J	27	J	78		38	J	78	U	78	U
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	**63**	J	30	J	**76**		44	J	78	UJ	78	UJ
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	66		29	J	66	J	49	J	5.6	J	78	UJ
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	43	J	48	J	63	J	58	J	78	U	78	U
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	65	J	41	J	89		45	J	78	U	78	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-10C		TP12-13A		TP12-13B		TP12-13C		TP12-14A		TP12-14B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123057		123052		123053		123054		123004		123005	
DEPTH_TOP								5.5		0.8		5.5		1.5		0.5		1.5	
DEPTH_BOT								5.5		0.8		5.5		1.5		0.5		1.5	
SAMP_DATE								10/4/1998		10/3/1998		10/3/1998		10/3/1998		9/30/1998		9/30/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	66	UJ	12	J	9.8	J	8.5	J	78	UJ	78	UJ
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	66	UJ	76	U	76	UJ	73	UJ	78	UJ	78	UJ
Carbazole	UG/KG	120	13%		0	5	38	27	J	5.4	J	15	J	7.2	J	78	UJ	78	UJ
Chrysene	UG/KG	1000	53%	400	1	20	38	72		38	J	87		49	J	4	J	78	UJ
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	66	UJ	76	U	76	UJ	73	UJ	78	U	78	U
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	18	J	11	J	23	J	19	J	78	U	78	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	7.1	J	76	U	76	U	73	U	78	UJ	78	UJ
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	170		64	J	180		71	J	5.2	J	78	UJ
Fluorene	UG/KG	44	8%	50000	0	3	38	14	J	76	U	10	J	73	U	78	U	78	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	66	U	76	UJ	76	U	73	U	78	UJ	78	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Hexachloroethane	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	45	J	27	J	62	J	45	J	78	U	78	U
Isophorone	UG/KG	0	0%	4400	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	8.6	J	76	U	76	U	73	U	78	UJ	78	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	38	66	U	76	U	76	U	73	U	78	UJ	78	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	160	UJ	180	UJ	180	UJ	180	UJ	190	UJ	190	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	140		39	J	110		38	J	78	U	78	U
Phenol	UG/KG	0	0%	30	0	0	38	66	U	76	U	76	U	73	U	78	U	78	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	160		64	J	180		81		6.4	J	78	U
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Aldrin	UG/KG	0	0%	41	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	83	U	77	U	77	U	74	U	80	U	79	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-10C		TP12-13A		TP12-13B		TP12-13C		TP12-14A		TP12-14B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123057		123052		123053		123054		123004		123005	
DEPTH_TOP								5.5		0.8		5.5		1.5		0.5		1.5	
DEPTH_BOT								5.5		0.8		5.5		1.5		0.5		1.5	
SAMP_DATE								10/4/1998		10/3/1998		10/3/1998		10/3/1998		9/30/1998		9/30/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	41	U	38	U	38	U	37	U	39	U	39	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Endrin	UG/KG	20	3%	100	0	1	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Endrin ketone	UG/KG	0	0%		0	0	38	4.1	U	3.8	U	3.8	U	3.7	U	3.9	U	3.9	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Heptachlor	UG/KG	0	0%	100	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	2.1	U	2	U	1.9	U	1.9	U	2	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	38	21	U	20	U	19	U	19	U	20	U	20	U
Toxaphene	UG/KG	0	0%		0	0	38	210	U	200	U	190	U	190	U	200	U	200	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	11400		9630		8880		10000		16700		15600	
Antimony	MG/KG	0	0%	6	0	0	38	1.1	R	0.95	R	1.2	R	1.2	R	1.3	R	1.3	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	1.8	J	3.9		3.2		4.2		3.8		4	
Barium	MG/KG	186	100%	300	0	38	38	87.4		86.6		79.7		99		55.9		52.5	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.58	J	0.29	J	0.32	J	0.34	J	0.63	J	0.58	J
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.06	U	[redacted]		0.06	U	0.06	U	0.06	U	0.06	U
Calcium	MG/KG	73300	100%	125300	0	38	38	8680	J	11600	J	31800	J	7320	J	653	J	415	J
Chromium	MG/KG	26	100%	30	0	38	38	13.3	J	11.8	J	11.7	J	11.4	J	25		23.9	
Cobalt	MG/KG	19.6	100%	30	0	38	38	9	J	10.4		8.5	J	8.7	J	9.4	J	7.5	J
Copper	MG/KG	34	100%	33	3	38	38	19.6		[redacted]		23.8		26.8		24.6		23.7	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.69	U	0.59	U	0.59	U	0.57	U	0.61	U	0.59	U
Iron	MG/KG	53400	100%	37410	3	38	38	20300		34500		17600		19300		31400	J	30100	J
Lead	MG/KG	284	100%	24.4	10	38	38	16.8	J	[redacted]	J	[redacted]	J	[redacted]	J	10.7		11.9	
Magnesium	MG/KG	19200	100%	21700	0	38	38	3920		5250		15200		4380		4510		3900	
Manganese	MG/KG	3200	100%	1100	3	38	38	296	J	792	J	430	J	541	J	267		223	

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-10C		TP12-13A		TP12-13B		TP12-13C		TP12-14A		TP12-14B	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123057		123052		123053		123054		123004		123005	
DEPTH_TOP								5.5		0.8		5.5		1.5		0.5		1.5	
DEPTH_BOT								5.5		0.8		5.5		1.5		0.5		1.5	
SAMP_DATE								10/4/1998		10/3/1998		10/3/1998		10/3/1998		9/30/1998		9/30/1998	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.08	J	0.14	J	0.1	J	0.16	J	0.05	UJ	0.06	J
Nickel	MG/KG	51.3	95%	50	1	36	38	23.8	J	24.5	J	19	J	16.4	J	29.6		26.9	
Potassium	MG/KG	3460	100%	2623	2	38	38	1060		1470		1200		1630		1140		1000	J
Selenium	MG/KG	1.8	21%	2	0	8	38	0.43	U	0.36	U	0.45	U	0.52	J	0.96	U	0.98	U
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.22	U	0.19	U	0.24	U	0.24	U	0.25	U	0.26	U
Sodium	MG/KG	748	47%	188	3	18	38	46.9	U	748	J	49.6	U	50.4	U	52.8	U	53.7	U
Thallium	MG/KG	1.6	26%	0.855	10	10	38	0.97	U	0.81	U	1	U	1	U	1.1	U	1.1	U
Vanadium	MG/KG	29.3	100%	150	0	38	38	18		17.2		15.3		17.5		24.2		24.7	
Zinc	MG/KG	3370	100%	115	4	38	38	74.9	J	3370	J	117	J	114	J	70.2		66	
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-14C		TP12-20A		TP12-20A		TP12-20B		TP12-20C		TP12-21A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123006		123000		123019		123020		123021		123001	
DEPTH_TOP								2		0.5		0.5		2.5		6		0.7	
DEPTH_BOT								2		0.5		0.5		2.5		6		0.7	
SAMP_DATE								9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/29/1998	
QC_CODE								SA		DU		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	11	U	12	U	12	UJ	11	U	11	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Acetone	UG/KG	100	26%	200	0	10	38	11	U	12	U	12	U	11	U	4	J	14	
Benzene	UG/KG	0	0%	60	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Bromoform	UG/KG	0	0%		0	0	38	11	U	12	U	12	UJ	11	U	11	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	11	U	12	U	12	UJ	11	U	11	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	11	U	12	U	12	UJ	11	U	11	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	11	U	12	U	12	U	11	U	11	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Styrene	UG/KG	0	0%		0	0	38	11	U	12	U	12	UJ	11	U	11	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Toluene	UG/KG	10	21%	1500	0	8	38	11	U	12	U	12	U	11	U	11	U	11	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	11	U	12	U	12	UJ	11	U	11	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	11	U	12	U	12	U	11	U	11	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	11	U	12	U	12	U	11	U	11	U	11	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-14C		TP12-20A		TP12-20A		TP12-20B		TP12-20C		TP12-21A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123006		123000		123019		123020		123021		123001	
DEPTH_TOP								2		0.5		0.5		2.5		6		0.7	
DEPTH_BOT								2		0.5		0.5		2.5		6		0.7	
SAMP_DATE								9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/29/1998	
QC_CODE								SA		DU		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	180	U	190	U	190	U	180	U	180	U	180	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	UJ
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	180	U	190	U	190	U	180	U	180	U	180	R
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
2-Methylphenol	UG/KG	0	0%	100	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	180	U	190	U	190	U	180	U	180	U	180	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	180	U	190	U	190	UJ	180	UJ	180	UJ	180	UJ
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	180	U	190	U	190	U	180	U	180	U	180	UJ
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	73	U	78	U	77	U	76	U	72	U	74	UJ
4-Nitroaniline	UG/KG	0	0%		0	0	38	180	UJ	190	UJ	190	U	180	U	180	U	180	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	180	U	190	U	190	U	180	U	180	U	180	UJ
Acenaphthene	UG/KG	28	5%	50000	0	2	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Anthracene	UG/KG	74	16%	50000	0	6	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	73	U	6.7	J	5.9	J	5.2	J	72	U	74	U
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	5.8	J	9.8	J	9.6	J	5.2	J	72	UJ	74	UJ
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	6.6	J	13	J	15	J	76	U	72	U	74	UJ
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	6.2	J	7.9	J	16	J	76	U	72	U	74	U
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	5.9	J	11	J	14	J	76	U	72	U	74	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-14C		TP12-20A		TP12-20A		TP12-20B		TP12-20C		TP12-21A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123006		123000		123019		123020		123021		123001	
DEPTH_TOP								2		0.5		0.5		2.5		6		0.7	
DEPTH_BOT								2		0.5		0.5		2.5		6		0.7	
SAMP_DATE								9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/29/1998	
QC_CODE								SA		DU		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	73	U	78	U	77	U	76	U	72	U	74	UJ
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	73	U	78	U	77	U	76	U	72	U	74	UJ
Carbazole	UG/KG	120	13%		0	5	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Chrysene	UG/KG	1000	53%	400	1	20	38	5.1	J	12	J	14	J	5.4	J	72	UJ	74	UJ
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	73	U	78	U	77	U	76	U	72	U	74	U
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	73	U	78	U	77	U	76	U	72	U	74	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	4.9	J	15	J	15	J	76	UJ	72	UJ	74	UJ
Fluorene	UG/KG	44	8%	50000	0	3	38	73	U	78	U	77	U	76	U	72	U	74	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	UJ
Hexachloroethane	UG/KG	0	0%		0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	5.5	J	7.2	J	10	J	5.7	J	72	U	74	U
Isophorone	UG/KG	0	0%	4400	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Nitrobenzene	UG/KG	0	0%	200	0	0	38	73	UJ	78	UJ	77	UJ	76	UJ	72	UJ	74	UJ
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	180	U	190	U	190	R	180	R	180	R	180	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	73	U	8.8	J	8.9	J	76	U	72	U	74	U
Phenol	UG/KG	0	0%	30	0	0	38	73	U	78	U	77	U	76	U	72	U	74	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	4.9	J	13	J	18	J	76	U	72	U	74	U
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	3.7	U	3.9	U	3.8	U	2.1	J	3.6	U	3.7	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Aldrin	UG/KG	0	0%	41	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	1.9	U	2	U	2	U	7.5		1.9	U	1.9	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	74	U	80	U	78	U	77	U	74	U	75	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-14C		TP12-20A		TP12-20A		TP12-20B		TP12-20C		TP12-21A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123006		123000		123019		123020		123021		123001	
DEPTH_TOP								2		0.5		0.5		2.5		6		0.7	
DEPTH_BOT								2		0.5		0.5		2.5		6		0.7	
SAMP_DATE								9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/29/1998	
QC_CODE								SA		DU		SA		SA		SA		SA	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	37	U	39	U	38	U	38	U	36	U	37	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Dieldrin	UG/KG	0	0%	44	0	0	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Endrin	UG/KG	20	3%	100	0	1	38	3.7	U	3.9	U	3.8	U	20	J	3.6	U	3.7	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Endrin ketone	UG/KG	0	0%		0	0	38	3.7	U	3.9	U	3.8	U	3.8	U	3.6	U	3.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Heptachlor	UG/KG	0	0%	100	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	1.9	U	2	U	2	U	2	U	1.9	U	1.9	U
Methoxychlor	UG/KG	0	0%		0	0	38	19	U	20	U	20	U	20	U	19	U	19	U
Toxaphene	UG/KG	0	0%		0	0	38	190	U	200	U	200	U	200	U	190	U	190	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	13000		10300		12000		12000		10500		15800	
Antimony	MG/KG	0	0%	6	0	0	38	1.1	R	1.4	R	1.3	R	1.3	R	1.2	R	1.3	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	2.7		3.4		3		[illegible]		3.6		4.9	
Barium	MG/KG	186	100%	300	0	38	38	47		109		113		186		78.6		60.8	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.41	J	0.52	J	0.52	J	0.02	U	0.41	J	0.64	J
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.05	U	0.07	U	0.06	U	0.06	U	0.06	U	0.06	U
Calcium	MG/KG	73300	100%	125300	0	38	38	430	J	5170		4190		3970		66000		3730	
Chromium	MG/KG	26	100%	30	0	38	38	16.4		14		15.8		20.7		18.5		26	
Cobalt	MG/KG	19.6	100%	30	0	38	38	8.7		6.8	J	8.5	J	12		11.3		13.3	
Copper	MG/KG	34	100%	33	3	38	38	12.9		20.8		15.1		33		29.2		22	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.56	U	0.61	U	0.64	U	0.63	U	0.6	U	0.57	U
Iron	MG/KG	53400	100%	37410	3	38	38	22200	J	19100	J	19900	J	[illegible]	J	25000	J	33800	J
Lead	MG/KG	284	100%	24.4	10	38	38	10.4		[illegible]		21.2		15.1		11.8		11.2	
Magnesium	MG/KG	19200	100%	21700	0	38	38	2970		2680		2890		4340		12300		5080	
Manganese	MG/KG	3200	100%	1100	3	38	38	371		419		605		[illegible]		426		512	

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-14C		TP12-20A		TP12-20A		TP12-20B		TP12-20C		TP12-21A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123006		123000		123019		123020		123021		123001	
DEPTH_TOP								2		0.5		0.5		2.5		6		0.7	
DEPTH_BOT								2		0.5		0.5		2.5		6		0.7	
SAMP_DATE								9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/30/1998		9/29/1998	
QC_CODE								SA		DU		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.05	UJ	0.08	J	0.06	U	0.05	U	0.06	U	**0.13**	J
Nickel	MG/KG	51.3	95%	50	1	36	38	18		16.6		18.2	J	40.5	J	36.4	J	38.3	
Potassium	MG/KG	3460	100%	2623	2	38	38	745	J	880	J	1090		908	J	1540		1290	
Selenium	MG/KG	1.8	21%	2	0	8	38	0.8	U	1.1	U	0.99	U	0.96	U	0.87	U	0.97	U
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.21	U	0.28	U	0.26	U	0.25	U	0.23	U	0.25	U
Sodium	MG/KG	748	47%	188	3	18	38	43.6	U	59.1	UJ	54.9	J	70.2	J	78.1	J	53	U
Thallium	MG/KG	1.6	26%	0.855	10	10	38	0.9	U	1.2	U	1.1	U	1.1	U	0.99	U	**1.6**	J
Vanadium	MG/KG	29.3	100%	150	0	38	38	20.7		17.8		19.7		27.4		16.7		22.6	
Zinc	MG/KG	3370	100%	115	4	38	38	48.6		58.5		58.3		99.4		71.6		82.3	
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-21B		TP12-21C		TP12-22AA		TP12-22BA		TP12-22BB		TP12-24A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123002		123003		123058		123059		123060		123093	
DEPTH_TOP								3		5.5		0.5		0.5		1.5		0.5	
DEPTH_BOT								3		5.5		0.5		0.5		1.5		0.5	
SAMP_DATE								9/29/1998		9/29/1998		10/4/1998		10/4/1998		10/4/1998		13-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
VOLATILE ORGANICS																			
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Acetone	UG/KG	100	26%	200	0	10	38	12	U	100		12	UJ	12	UJ	12	UJ	11	U
Benzene	UG/KG	0	0%	60	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Bromoform	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	UJ	11	U
Methyl chloride	UG/KG	0	0%		0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	12	U	35		12	UJ	12	UJ	12	UJ	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
Styrene	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Toluene	UG/KG	10	21%	1500	0	8	38	12	U	14	U	10	J	12	UJ	12	U	11	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	12	U	14	U	12	UJ	12	UJ	12	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	12	U	14	U	12	U	12	U	12	U	11	U
SEMI VOLATILE ORGANICS																			
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-21B		TP12-21C		TP12-22AA		TP12-22BA		TP12-22BB		TP12-24A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123002		123003		123058		123059		123060		123093	
DEPTH_TOP								3		5 5		0.5		0 5		1.5		0.5	
DEPTH_BOT								3		5.5		0.5		0 5		1.5		0 5	
SAMP_DATE								9/29/1998		9/29/1998		10/4/1998		10/4/1998		10/4/1998		13-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	190	U	680	U	200	U	190	U	180	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	77	UJ	280	U	80	U	80	U	72	U	77	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	77	UJ	280	UJ	80	UJ	80	UJ	72	UJ	77	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	190	R	680	U	200	U	190	U	180	U	190	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	190	U	680	U	200	U	190	U	180	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	190	UJ	680	U	200	U	190	U	180	U	190	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	190	UJ	680	U	200	U	190	U	180	U	190	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	77	UJ	280	UJ	80	UJ	80	UJ	72	UJ	77	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	77	UJ	280	U	80	U	80	U	72	U	77	U
4-Nitroaniline	UG/KG	0	0%		0	0	38	190	UJ	680	UJ	200	U	190	U	180	U	190	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	190	UJ	680	U	200	U	190	U	180	U	190	UJ
Acenaphthene	UG/KG	28	5%	50000	0	2	38	77	UJ	28	J	80	U	80	U	72	U	77	U
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	4.4	J	21	J	80	U	80	U	72	U	77	U
Anthracene	UG/KG	74	16%	50000	0	6	38	4.2	J	74	J	80	U	80	U	72	U	77	U
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	45	J	**760**		8.9	J	6.4	J	72	U	77	U
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	50	J	**1000**	J	10	J	8.5	J	72	U	77	UJ
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	58	J	1100		12	J	12	J	72	U	77	U
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	42	J	820		11	J	7.6	J	72	U	77	U
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	42	J	1100		14	J	9.9	J	72	U	77	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-21B		TP12-21C		TP12-22AA		TP12-22BA		TP12-22BB		TP12-24A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123002		123003		123058		123059		123060		123093	
DEPTH_TOP								3		5.5		0.5		0.5		1.5		0.5	
DEPTH_BOT								3		5.5		0.5		0.5		1.5		0.5	
SAMP_DATE								9/29/1998		9/29/1998		10/4/1998		10/4/1998		10/4/1998		13-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	77	UJ	280	U	14	J	11	J	72	U	77	U
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	77	UJ	280	U	80	U	80	U	72	U	77	U
Carbazole	UG/KG	120	13%		0	5	38	77	UJ	120	J	80	UJ	80	UJ	72	UJ	77	U
Chrysene	UG/KG	1000	53%	400	1	20	38	55	J	1000	J	14	J	12	J	72	U	77	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	77	U	280	U	80	U	80	U	72	U	77	U
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	12	J	300		80	U	80	U	72	U	77	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	77	UJ	16	J	80	U	80	U	72	U	77	U
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	71	J	1900	J	18	J	16	J	72	U	77	U
Fluorene	UG/KG	44	8%	50000	0	3	38	77	U	44	J	80	U	80	U	72	U	77	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	77	UJ	280	UJ	80	UJ	80	UJ	72	UJ	77	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	77	UJ	280	U	80	U	80	U	72	U	77	U
Hexachloroethane	UG/KG	0	0%		0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	36	J	830		9.4	J	6.9	J	72	U	77	U
Isophorone	UG/KG	0	0%	4400	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Nitrobenzene	UG/KG	0	0%	200	0	0	38	77	UJ	280	UJ	80	U	80	U	72	U	77	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	190	UJ	680	U	200	UJ	190	UJ	180	UJ	190	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	28	J	680		12	J	11	J	72	U	77	U
Phenol	UG/KG	0	0%	30	0	0	38	77	U	280	U	80	U	80	U	72	U	77	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	90		1500		18	J	14	J	72	U	77	U
PESTICIDES/PCBS																			
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	3.8	U	4.2	U	3.2	J	3.9	U	3.6	U	3.8	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Aldrin	UG/KG	0	0%	41	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	78	U	86	U	81	U	79	U	74	U	78	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-21B		TP12-21C		TP12-22AA		TP12-22BA		TP12-22BB		TP12-24A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123002		123003		123058		123059		123060		123093	
DEPTH_TOP								3		5.5		0.5		0.5		1.5		0.5	
DEPTH_BOT								3		5.5		0.5		0.5		1.5		0.5	
SAMP_DATE								9/29/1998		9/29/1998		10/4/1998		10/4/1998		10/4/1998		13-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	4046	TAGM	DETECTS	ANALYSES												
Aroclor-1232	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	38	38	U	42	U	40	U	39	U	36	U	38	U
Beta-BHC	UG/KG	0	0%	200	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Delta-BHC	UG/KG	0	0%	300	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Dieldrin	UG/KG	0	0%	44	0	0	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Endosulfan I	UG/KG	0	0%	900	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Endosulfan II	UG/KG	0	0%	900	0	0	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Endosulfan sulfate	UG/KG	3	3%	1000	0	1	38	3.8	U	3	J	4	U	3.9	U	3.6	U	3.8	U
Endrin	UG/KG	20	3%	100	0	1	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Endrin aldehyde	UG/KG	0	0%		0	0	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Endrin ketone	UG/KG	0	0%		0	0	38	3.8	U	4.2	U	4	U	3.9	U	3.6	U	3.8	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Heptachlor	UG/KG	0	0%	100	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	38	2	U	2.2	U	2	U	2	U	1.9	U	2	U
Methoxychlor	UG/KG	0	0%		0	0	38	20	U	22	U	20	U	20	U	19	U	20	U
Toxaphene	UG/KG	0	0%		0	0	38	200	U	220	U	200	U	200	U	190	U	200	U
METALS																			
Aluminum	MG/KG	16700	100%	19520	0	38	38	13200		12100		14800		13200		13100		14400	
Antimony	MG/KG	0	0%	6	0	0	38	1.2	R	1.6	R	1	R	1.4	R	1.2	R	1.2	R
Arsenic	MG/KG	9.8	100%	8.9	1	38	38	5.5		4.1		3.1		2.8		3.7		3.8	
Barium	MG/KG	186	100%	300	0	38	38	105		73.8		128		135		70.9		91.5	
Beryllium	MG/KG	1.1	97%	1.13	0	37	38	0.29	J	0.46	J	0.76	J	0.09	J	0.59	J	0.64	J
Cadmium	MG/KG	13.3	8%	2.46	1	3	38	0.06	U	0.08	U	0.05	U	0.07	U	0.06	U	0.06	U
Calcium	MG/KG	73300	100%	125300	0	38	38	19100		18000		5610	J	3330	J	1550	J	7080	J
Chromium	MG/KG	26	100%	30	0	38	38	21		18.7		13.1	J	15.9	J	23.4	J	23.4	
Cobalt	MG/KG	19.6	100%	30	0	38	38	15.1		10.2	J	7.8	J	16.6		9.6	J	11.6	
Copper	MG/KG	34	100%	33	3	38	38	29.8		24.7		29.2		12.8		14.7		25.1	
Cyanide	MG/KG	0	0%	0.35	0	0	38	0.59	U	0.66	U	0.62	U	0.64	U	0.56	U	0.59	U
Iron	MG/KG	53400	100%	37410	3	38	38	30300	J	24200	J	20200		24800		24800		42500	J
Lead	MG/KG	284	100%	24.4	10	38	38	84		25.4		21.1	J	42	J	10.3	J	13.7	
Magnesium	MG/KG	19200	100%	21700	0	38	38	5220		6110		3510		3160		4290		5100	
Manganese	MG/KG	3200	100%	1100	3	38	38	1230		492		558	J	2240	J	367	J	469	

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOC_ID								TP12-21B		TP12-21C		TP12-22AA		TP12-22BA		TP12-22BB		TP12-24A	
MATRIX								SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMP_ID								123002		123003		123058		123059		123060		123093	
DEPTH_TOP								3		5.5		0.5		0.5		1.5		0.5	
DEPTH_BOT								3		5.5		0.5		0.5		1.5		0.5	
SAMP_DATE								9/29/1998		9/29/1998		10/4/1998		10/4/1998		10/4/1998		13-Oct-98	
QC_CODE								SA		SA		SA		SA		SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Mercury	MG/KG	0.2	42%	0.1	8	16	38	0.1	J	0.13	J	0.06	UJ	0.06	UJ	0.05	UJ	[illegible]	J
Nickel	MG/KG	51.3	95%	50	1	36	38	32.6		28.8		22.7	J	21.9	J	20.5	J	42.2	
Potassium	MG/KG	3460	100%	2623	2	38	38	1420		1460		1990		1350		1290		1400	
Selenium	MG/KG	1.8	21%	2	0	8	38	0.93	U	1.2	U	0.59	J	1.8		0.47	U	0.93	J
Silver	MG/KG	0.26	8%	0.8	0	3	38	0.24	U	0.31	U	0.2	U	0.27	U	0.26	J	0.24	U
Sodium	MG/KG	748	47%	188	3	18	38	51	U	64.4	U	41.5	U	55.9	U	51	U	86.2	J
Thallium	MG/KG	1.6	26%	0.855	10	10	38	1.1	U	1.3	U	0.86	U	1.2	U	1.1	U	1.1	J
Vanadium	MG/KG	29.3	100%	150	0	38	38	21.4		26.2		20.4		23.5		29.3		22.7	
Zinc	MG/KG	3370	100%	115	4	38	38	109		120		75.2	J	60.9	J	38.8	J	109	J
WET CHEMISTRY																			
Nitrate/Nitrite	%W/W																		
Nitrate/Nitrite	MG/KG																		
pH	SU																		
TOC-Soil 9060	MG/KG																		
Percent Solids	%W/W																		
Percent Solids	MG/KG																		
Cation exchange capacity	meq/100g																		

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								TP12-24B		TP12-24C	
MATRIX								SOIL		SOIL	
SAMP_ID								123094		123095	
DEPTH_TOP								0.5		1	
DEPTH_BOT								0.5		1	
SAMP_DATE								13-Oct-98		13-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
VOLATILE ORGANICS											
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	38	11	U	11	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	38	11	U	11	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	38	11	U	11	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	38	11	U	11	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	38	11	U	11	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	38	11	U	11	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	38	11	U	11	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	38	11	U	11	U
Acetone	UG/KG	100	26%	200	0	10	38	11	U	11	U
Benzene	UG/KG	0	0%	60	0	0	38	11	U	11	U
Bromodichloromethane	UG/KG	0	0%		0	0	38	11	U	11	U
Bromoform	UG/KG	0	0%		0	0	38	11	U	11	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	38	11	U	11	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	38	11	U	11	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	38	11	U	11	U
Chlorodibromomethane	UG/KG	0	0%		0	0	38	11	U	11	U
Chloroethane	UG/KG	0	0%	1900	0	0	38	11	U	11	U
Chloroform	UG/KG	0	0%	300	0	0	38	11	U	11	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	38	11	U	11	U
Methyl bromide	UG/KG	0	0%		0	0	38	11	U	11	U
Methyl butyl ketone	UG/KG	0	0%		0	0	38	11	U	11	U
Methyl chloride	UG/KG	0	0%		0	0	38	11	U	11	U
Methyl ethyl ketone	UG/KG	35	3%	300	0	1	38	11	U	11	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	38	11	U	11	U
Methylene chloride	UG/KG	0	0%	100	0	0	38	11	U	11	U
Styrene	UG/KG	0	0%		0	0	38	11	U	11	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	38	11	U	11	U
Toluene	UG/KG	10	21%	1500	0	8	38	11	U	11	U
Total Xylenes	UG/KG	2	3%	1200	0	1	38	11	U	11	U
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	38	11	U	11	U
Trichloroethene	UG/KG	54	3%	700	0	1	38	11	U	11	U
Vinyl chloride	UG/KG	0	0%	200	0	0	38	11	U	11	U
SEMI VOLATILE ORGANICS											
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	38	80	U	78	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								TP12-24B		TP12-24C	
MATRIX								SOIL		SOIL	
SAMP_ID								123094		123095	
DEPTH_TOP								0.5		1	
DEPTH_BOT								0.5		1	
SAMP_DATE								13-Oct-98		13-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1	Step 1	RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	38	80	U	78	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	38	80	U	78	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	38	80	U	78	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	38	190	U	190	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	38	80	U	78	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	38	80	U	78	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	38	80	U	78	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	38	190	UJ	190	UJ
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	38	80	U	78	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	38	80	U	78	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	38	80	U	78	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	38	80	U	78	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	38	80	U	78	U
2-Methylphenol	UG/KG	0	0%	100	0	0	38	80	U	78	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	38	190	U	190	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	38	80	U	78	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	38	80	UJ	78	UJ
3-Nitroaniline	UG/KG	0	0%	500	0	0	38	190	U	190	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	38	190	U	190	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	38	80	U	78	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	38	80	U	78	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	38	80	U	78	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	38	80	U	78	U
4-Methylphenol	UG/KG	8.6	5%	900	0	2	38	80	U	78	U
4-Nitroaniline	UG/KG	0	0%		0	0	38	190	UJ	190	UJ
4-Nitrophenol	UG/KG	0	0%	100	0	0	38	190	UJ	190	UJ
Acenaphthene	UG/KG	28	5%	50000	0	2	38	80	U	78	U
Acenaphthylene	UG/KG	21	8%	41000	0	3	38	80	U	78	U
Anthracene	UG/KG	74	16%	50000	0	6	38	80	U	78	U
Benzo(a)anthracene	UG/KG	760	42%	224	1	16	38	9.2	J	9.6	J
Benzo(a)pyrene	UG/KG	1000	45%	61	3	17	38	9.4	J	9.2	J
Benzo(b)fluoranthene	UG/KG	1100	45%	1100	0	17	38	14	J	15	J
Benzo(ghi)perylene	UG/KG	820	34%	50000	0	13	38	80	U	78	U
Benzo(k)fluoranthene	UG/KG	1100	39%	1100	0	15	38	13	J	17	J
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	38	80	U	78	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	38	80	U	78	U

TABLE G-17
CLASS 3 METALS DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12	
LOC_ID								TP12-24B		TP12-24C	
MATRIX								SOIL		SOIL	
SAMP_ID								123094		123095	
DEPTH_TOP								0.5		1	
DEPTH_BOT								0.5		1	
SAMP_DATE								13-Oct-98		13-Oct-98	
QC_CODE								SA		SA	
STUDY_ID								RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NYSDEC TAGM 4046	NUMBER ABOVE TAGM	NUMBER OF DETECTS	NUMBER OF ANALYSES				
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	38	80	U	78	U
Bis(2-Ethylhexyl)phthalate	UG/KG	73	24%	50000	0	9	38	80	U	78	U
Butylbenzylphthalate	UG/KG	6.2	5%	50000	0	2	38	80	U	78	U
Carbazole	UG/KG	120	13%		0	5	38	80	U	78	U
Chrysene	UG/KG	1000	53%	400	1	20	38	15	J	18	J
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	38	80	U	78	U
Di-n-octylphthalate	UG/KG	34	16%	50000	0	6	38	80	U	78	U
Dibenz(a,h)anthracene	UG/KG	300	18%	14	4	7	38	80	U	78	U
Dibenzofuran	UG/KG	16	5%	6200	0	2	38	80	U	78	U
Diethyl phthalate	UG/KG	4.3	3%	7100	0	1	38	80	U	78	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	38	80	U	78	U
Fluoranthene	UG/KG	1900	47%	50000	0	18	38	16	J	26	J
Fluorene	UG/KG	44	8%	50000	0	3	38	80	U	78	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	38	80	U	78	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	38	80	U	78	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	38	80	U	78	U
Hexachloroethane	UG/KG	0	0%		0	0	38	80	U	78	U
Indeno(1,2,3-cd)pyrene	UG/KG	830	34%	3200	0	13	38	80	U	78	U
Isophorone	UG/KG	0	0%	4400	0	0	38	80	U	78	U
N-Nitrosodiphenylamine	UG/KG	0	0%		0	0	38	80	U	78	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	38	80	U	78	U
Naphthalene	UG/KG	8.6	3%	13000	0	1	38	80	U	78	U
Nitrobenzene	UG/KG	0	0%	200	0	0	38	80	U	78	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	38	190	UJ	190	UJ
Phenanthrene	UG/KG	680	45%	50000	0	17	38	6.3	J	14	J
Phenol	UG/KG	0	0%	30	0	0	38	80	U	78	U
Pyrene	UG/KG	1500	47%	50000	0	18	38	14	J	19	J
PESTICIDES/PCBS											
4,4'-DDD	UG/KG	3.2	3%	2900	0	1	38	4	U	3.9	U
4,4'-DDE	UG/KG	2.1	3%	2100	0	1	38	4	U	3.9	U
4,4'-DDT	UG/KG	2.6	3%	2100	0	1	38	4	U	2.6	J
Aldrin	UG/KG	0	0%	41	0	0	38	2	U	2	U
Alpha-BHC	UG/KG	0	0%	110	0	0	38	2	U	2	U
Alpha-Chlordane	UG/KG	7.5	3%		0	1	38	2	U	2	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	38	40	U	39	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	38	81	U	80	U

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1	
LOC_ID								SS12-64		SS12-64		72117	
MATRIX								SOIL		SOIL		SS12-65	
SAMP_ID								123171		123170		123107	
DEPTH_TOP								0		0		SA	
DEPTH_BOT								0.5		0.5		0	
SAMP_DATE								20-Oct-98		20-Oct-98		0.2	
QC_CODE								DU		SA		SOIL	
STUDY_ID			FREQUENCY	NYSDEC	NUMBER	NUMBER	NUMBER	RI Phase 1 Step 1		RI Phase 1 Step 1		7-Jan-99	
PARAMETER	UNIT	MAXIMUM	OF DETECTION	TAGM 4046	ABOVE TAGM	OF DETECTS	OF ANALYSES						
VOLATILE ORGANICS													
1,1,1-Trichloroethane	UG/KG	0	0%	800	0	0	3	14	U	17	U	26	U
1,1,2,2-Tetrachloroethane	UG/KG	0	0%	600	0	0	3	14	U	17	U	26	U
1,1,2-Trichloroethane	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
1,1-Dichloroethane	UG/KG	0	0%	200	0	0	3	14	U	17	U	26	U
1,1-Dichloroethene	UG/KG	0	0%	400	0	0	3	14	U	17	U	26	U
1,2-Dichloroethane	UG/KG	0	0%	100	0	0	3	14	U	17	U	26	U
1,2-Dichloroethene (total)	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
1,2-Dichloropropane	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Acetone	UG/KG	110	33%	200	0	1	3	14	U	17	U	110	
Benzene	UG/KG	0	0%	60	0	0	3	14	U	17	U	26	U
Bromodichloromethane	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Bromoform	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Carbon disulfide	UG/KG	0	0%	2700	0	0	3	14	U	17	U	26	U
Carbon tetrachloride	UG/KG	0	0%	600	0	0	3	14	U	17	U	26	U
Chlorobenzene	UG/KG	0	0%	1700	0	0	3	14	U	17	U	26	U
Chlorodibromomethane	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Chloroethane	UG/KG	0	0%	1900	0	0	3	14	U	17	U	26	U
Chloroform	UG/KG	0	0%	300	0	0	3	14	U	17	U	26	U
Cis-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Ethyl benzene	UG/KG	0	0%	5500	0	0	3	14	U	17	U	26	U
Methyl bromide	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Methyl butyl ketone	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Methyl chloride	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Methyl ethyl ketone	UG/KG	0	0%	300	0	0	3	14	U	17	U	26	U
Methyl isobutyl ketone	UG/KG	0	0%	1000	0	0	3	14	U	17	U	26	U
Methylene chloride	UG/KG	0	0%	100	0	0	3	14	U	17	U	26	U
Styrene	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Tetrachloroethene	UG/KG	0	0%	1400	0	0	3	14	U	17	U	26	U
Toluene	UG/KG	0	0%	1500	0	0	3	14	U	17	U	26	U
Total Xylenes	UG/KG	0	0%	1200	0	0	3	14	U	17	U	26	U

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1	
LOC_ID								SS12-64		SS12-64		72117	
MATRIX								SOIL		SOIL		SS12-65	
SAMP_ID								123171		123170		123107	
DEPTH_TOP								0		0		SA	
DEPTH_BOT								0.5		0.5		0	
SAMP_DATE								20-Oct-98		20-Oct-98		0.2	
QC_CODE								DU		SA		SOIL	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	7-Jan-99	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Trans-1,3-Dichloropropene	UG/KG	0	0%		0	0	3	14	U	17	U	26	U
Trichloroethene	UG/KG	0	0%	700	0	0	3	14	U	17	U	26	U
Vinyl chloride	UG/KG	0	0%	200	0	0	3	14	U	17	U	26	U
SEMI VOLATILE ORGANICS													
1,2,4-Trichlorobenzene	UG/KG	0	0%	3400	0	0	3	100	U	110	U	150	U
1,2-Dichlorobenzene	UG/KG	0	0%	7900	0	0	3	100	U	110	U	150	U
1,3-Dichlorobenzene	UG/KG	0	0%	1600	0	0	3	100	U	110	U	150	U
1,4-Dichlorobenzene	UG/KG	0	0%	8500	0	0	3	100	U	110	U	150	U
2,4,5-Trichlorophenol	UG/KG	0	0%	100	0	0	3	250	U	270	U	370	U
2,4,6-Trichlorophenol	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
2,4-Dichlorophenol	UG/KG	0	0%	400	0	0	3	100	U	110	U	150	U
2,4-Dimethylphenol	UG/KG	0	0%		0	0	3	100	UJ	110	UJ	150	U
2,4-Dinitrophenol	UG/KG	0	0%	200	0	0	3	250	UJ	270	UJ	370	U
2,4-Dinitrotoluene	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
2,6-Dinitrotoluene	UG/KG	0	0%	1000	0	0	3	100	U	110	U	150	U
2-Chloronaphthalene	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
2-Chlorophenol	UG/KG	0	0%	800	0	0	3	100	U	110	U	150	U
2-Methylnaphthalene	UG/KG	0	0%	36400	0	0	3	100	U	110	U	150	U
2-Methylphenol	UG/KG	0	0%	100	0	0	3	100	U	110	U	150	U
2-Nitroaniline	UG/KG	0	0%	430	0	0	3	250	U	270	U	370	U
2-Nitrophenol	UG/KG	0	0%	330	0	0	3	100	U	110	U	150	U
3,3'-Dichlorobenzidine	UG/KG	0	0%		0	0	3	100	U	110	UJ	150	U
3-Nitroaniline	UG/KG	0	0%	500	0	0	3	250	UJ	270	UJ	370	U
4,6-Dinitro-2-methylphenol	UG/KG	0	0%		0	0	3	250	U	270	U	370	U
4-Bromophenyl phenyl ether	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
4-Chloro-3-methylphenol	UG/KG	0	0%	240	0	0	3	100	U	110	U	150	U
4-Chloroaniline	UG/KG	0	0%	220	0	0	3	100	U	110	U	150	U
4-Chlorophenyl phenyl ether	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
4-Methylphenol	UG/KG	0	0%	900	0	0	3	100	U	110	U	150	U
4-Nitroaniline	UG/KG	0	0%		0	0	3	250	UJ	270	UJ	370	U
4-Nitrophenol	UG/KG	0	0%	100	0	0	3	250	U	270	U	370	U

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1	
LOC_ID								SS12-64		SS12-64		72117	
MATRIX								SOIL		SOIL		SS12-65	
SAMP_ID								123171		123170		123107	
DEPTH_TOP								0		0		SA	
DEPTH_BOT								0.5		0.5		0	
SAMP_DATE								20-Oct-98		20-Oct-98		0.2	
QC_CODE								DU		SA		SOIL	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		RI Phase 1 Step 1		7-Jan-99	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Acenaphthene	UG/KG	0	0%	50000	0	0	3	100	U	110	U	150	U
Acenaphthylene	UG/KG	0	0%	41000	0	0	3	100	U	110	U	150	U
Anthracene	UG/KG	0	0%	50000	0	0	3	100	U	110	U	150	U
Benzo(a)anthracene	UG/KG	14	67%	224	0	2	3	7.8	J	14	J	150	U
Benzo(a)pyrene	UG/KG	16	100%	61	0	3	3	9.3	J	16	J	14	J
Benzo(b)fluoranthene	UG/KG	21	67%	1100	0	2	3	12	J	21	J	25	UJ
Benzo(ghi)perylene	UG/KG	0	0%	50000	0	0	3	100	U	110	UJ	150	U
Benzo(k)fluoranthene	UG/KG	15	67%	1100	0	2	3	11	J	15	J	150	U
Bis(2-Chloroethoxy)methane	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Bis(2-Chloroethyl)ether	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Bis(2-Chloroisopropyl)ether	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Bis(2-Ethylhexyl)phthalate	UG/KG	37	33%	50000	0	1	3	100	U	110	UJ	37	J
Butylbenzylphthalate	UG/KG	130	33%	50000	0	1	3	100	U	130	J	150	U
Carbazole	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Chrysene	UG/KG	20	67%	400	0	2	3	13	J	20	J	150	U
Di-n-butylphthalate	UG/KG	0	0%	8100	0	0	3	1400	UJ	770	UJ	150	U
Di-n-octylphthalate	UG/KG	12	33%	50000	0	1	3	100	U	110	UJ	12	J
Dibenz(a,h)anthracene	UG/KG	110	33%	14	1	1	3	100	U	110	J	150	U
Dibenzofuran	UG/KG	0	0%	6200	0	0	3	100	U	110	U	150	U
Diethyl phthalate	UG/KG	0	0%	7100	0	0	3	100	U	110	U	150	U
Dimethylphthalate	UG/KG	0	0%	2000	0	0	3	100	U	110	U	150	U
Fluoranthene	UG/KG	25	100%	50000	0	3	3	18	J	25	J	22	J
Fluorene	UG/KG	0	0%	50000	0	0	3	100	U	110	U	150	U
Hexachlorobenzene	UG/KG	0	0%	410	0	0	3	100	U	110	U	150	U
Hexachlorobutadiene	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Hexachlorocyclopentadiene	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Hexachloroethane	UG/KG	0	0%		0	0	3	100	U	110	U	150	U
Indeno(1,2,3-cd)pyrene	UG/KG	0	0%	3200	0	0	3	100	U	110	UJ	150	U
Isophorone	UG/KG	0	0%	4400	0	0	3	100	U	110	U	150	U
N-Nitrosodiphenylamine	UG/KG	49	33%		0	1	3	49	J	110	U	150	U
N-Nitrosodipropylamine	UG/KG	0	0%		0	0	3	100	U	110	U	150	U

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1	
LOC_ID								SS12-64		SS12-64		72117	
MATRIX								SOIL		SOIL		SS12-65	
SAMP_ID								123171		123170		123107	
DEPTH_TOP								0		0		SA	
DEPTH_BOT								0.5		0.5		0	
SAMP_DATE								20-Oct-98		20-Oct-98		0.2	
QC_CODE								DU		SA		SOIL	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	7-Jan-99	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Naphthalene	UG/KG	0	0%	13000	0	0	3	100	U	110	U	150	U
Nitrobenzene	UG/KG	0	0%	200	0	0	3	100	U	110	U	150	U
Pentachlorophenol	UG/KG	0	0%	1000	0	0	3	250	UJ	270	UJ	370	U
Phenanthrene	UG/KG	17	100%	50000	0	3	3	9.9	J	17	J	16	J
Phenol	UG/KG	0	0%	30	0	0	3	100	U	110	U	150	U
Pyrene	UG/KG	30	100%	50000	0	3	3	18	J	30	J	20	J
PESTICDES/PCBS													
4,4'-DDD	UG/KG	0	0%	2900	0	0	3	5.2	U	5.5	U	7.7	U
4,4'-DDE	UG/KG	0	0%	2100	0	0	3	5.2	U	5.5	U	7.7	U
4,4'-DDT	UG/KG	0	0%	2100	0	0	3	5.2	U	5.5	U	7.7	U
Aldrin	UG/KG	0	0%	41	0	0	3	2.7	U	2.8	U	4	U
Alpha-BHC	UG/KG	0	0%	110	0	0	3	2.7	U	2.8	U	4	U
Alpha-Chlordane	UG/KG	0	0%		0	0	3	2.7	U	2.8	U	4	U
Aroclor-1016	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Aroclor-1221	UG/KG	0	0%	10000	0	0	3	110	U	110	U	160	U
Aroclor-1232	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Aroclor-1242	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Aroclor-1248	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Aroclor-1254	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Aroclor-1260	UG/KG	0	0%	10000	0	0	3	52	U	55	U	77	U
Beta-BHC	UG/KG	0	0%	200	0	0	3	2.7	U	2.8	U	4	U
Delta-BHC	UG/KG	0	0%	300	0	0	3	2.7	U	2.8	U	4	U
Dieldrin	UG/KG	0	0%	44	0	0	3	5.2	U	5.5	U	7.7	U
Endosulfan I	UG/KG	0	0%	900	0	0	3	2.7	U	2.8	U	4	U
Endosulfan II	UG/KG	0	0%	900	0	0	3	5.2	U	5.5	U	7.7	U
Endosulfan sulfate	UG/KG	0	0%	1000	0	0	3	5.2	U	5.5	U	7.7	U
Endrin	UG/KG	0	0%	100	0	0	3	5.2	U	5.5	U	7.7	U
Endrin aldehyde	UG/KG	0	0%		0	0	3	5.2	U	5.5	U	7.7	U
Endrin ketone	UG/KG	0	0%		0	0	3	5.2	U	5.5	U	7.7	U
Gamma-BHC/Lindane	UG/KG	0	0%	60	0	0	3	2.7	U	2.8	U	4	U
Gamma-Chlordane	UG/KG	0	0%	540	0	0	3	2.7	U	2.8	U	4	U

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1	
LOC_ID								SS12-64		SS12-64		72117	
MATRIX								SOIL		SOIL		SS12-65	
SAMP_ID								123171		123170		123107	
DEPTH_TOP								0		0		SA	
DEPTH_BOT								0.5		0.5		0	
SAMP_DATE								20-Oct-98		20-Oct-98		0.2	
QC_CODE								DU		SA		SOIL	
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	7-Jan-99	
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES						
Heptachlor	UG/KG	0	0%	100	0	0	3	2.7	U	2.8	U	4	U
Heptachlor epoxide	UG/KG	0	0%	20	0	0	3	2.7	U	2.8	U	4	U
Methoxychlor	UG/KG	0	0%		0	0	3	27	U	28	U	40	U
Toxaphene	UG/KG	0	0%		0	0	3	270	U	280	U	400	U
METALS													
Aluminum	MG/KG	13600	100%	19520	0	3	3	13100		11600		13600	
Antimony	MG/KG	0	0%	6	0	0	3	1.7	R	1.9	R	1.1	U
Arsenic	MG/KG	6.4	100%	8.9	0	3	3	4.6		3.5		6.4	
Barium	MG/KG	114	100%	300	0	3	3	114		114		55.1	J
Beryllium	MG/KG	0.54	100%	1.13	0	3	3	0.54	J	0.4	J	0.54	J
Cadmium	MG/KG	0	0%	2.46	0	0	3	0.51	U	0.09	U	0.07	U
Calcium	MG/KG	29000	100%	125300	0	3	3	25200		29000		21900	
Chromium	MG/KG	25	100%	30	0	3	3	23.2	J	19.3		25	
Cobalt	MG/KG	13.6	100%	30	0	3	3	13.6	J	10.7	J	13.4	J
Copper	MG/KG	60.3	100%	33	3	3	3	[illegible]		[illegible]		50.3	
Cyanide	MG/KG	0	0%	0.35	0	0	3	0.81	U	0.87	U	1.2	U
Iron	MG/KG	32100	100%	37410	0	3	3	27700	J	23300		32100	
Lead	MG/KG	34.4	100%	24.4	3	3	3	29.5	J	34.4	J	24.4	
Magnesium	MG/KG	7320	100%	21700	0	3	3	5750		5910		7320	
Manganese	MG/KG	1240	100%	1100	1	3	3	1240		658		331	
Mercury	MG/KG	0.48	100%	0.1	3	3	3	0.48		0.34	J	0.15	J
Nickel	MG/KG	40.5	67%	50	0	2	3	29.7	UJ	33.5		40.5	
Potassium	MG/KG	1470	100%	2623	0	3	3	1400	J	1090	J	1470	J
Selenium	MG/KG	1.8	67%	2	0	2	3	1.6		1.8	J	1.3	U
Silver	MG/KG	0	0%	0.8	0	0	3	0.34	U	0.36	U	0.35	U
Sodium	MG/KG	243	100%	188	1	3	3	85.4	J	90.8	J	243	J
Thallium	MG/KG	1.5	33%	0.855	1	1	3	1.5	J	1.6	U	1.3	U
Vanadium	MG/KG	22.1	100%	150	0	3	3	22.1		17.8		21.1	
Zinc	MG/KG	246	100%	115	3	3	3	206	J	186		246	
WET CHEMISTRY													
Nitrate/Nitrite	%W/W												

TABLE G-18
WASTE WATER TREATMENT PLANT METALS DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12		SEAD-12		RI Phase 1		
LOC_ID								SS12-64		SS12-64		72117		
MATRIX								SOIL		SOIL		SS12-65		
SAMP_ID								123171		123170		123107		
DEPTH_TOP								0		0		SA		
DEPTH_BOT								0.5		0.5		0		
SAMP_DATE								20-Oct-98		20-Oct-98		0.2		
QC_CODE								DU		SA		SOIL		
STUDY_ID			FREQUENCY OF	NYSDEC TAGM	NUMBER ABOVE	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1	7-Jan-99		
PARAMETER	UNIT	MAXIMUM	DETECTION	4046	TAGM	DETECTS	ANALYSES							
Nitrate/Nitrite	MG/KG													
pH	SU													
TOC-Soil 9060	MG/KG													
Percent Solids	%W/W													
Percent Solids	MG/KG													
Cation exchange capacity	meq/100g													

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-1			MW12-1			MW12-1			MW12-2		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12507			12506			12508			12512		
DEPTH TO TOP OF SAMPLE						0			0.2			4			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			2			6			0.2		
SAMPLE DATE						05-Nov-97			05-Nov-97			05-Nov-97			06-Nov-97		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.3	UJ		1.2	J	+/-0.3	1.4	J	+/-0.3	1.1	J	+/-0.4
Cesium-137	pCi/g	0.7	34%	12	35	0.6		+/-0.2	0.2	U		0.2	U		0.7		+/-0.2
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	17%	6	35	0.2	U		0.2	U		0.3	U		0.4	U	
Lead-210	pCi/g	4.3	14%	5	35	23.2	U		21.6	U		1.2	U		25.9	U	
Lead-211	pCi/g	10	11%	4	35	13.8	U		4.5	U		2	U		11.6	U	
Lead-214	pCi/g	2.5	94%	33	35	1.3		+/-0.3	1.2		+/-0.2	1.2		+/-0.3	1.3		+/-0.2
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	25.2			16.9			9.9			29.3		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.2	J	+/-0.3	0.2		+/-0.2	0.1		+/-0.1	0.3	U	+/-0.1
Promethium-147	pCi/g	17.8	34%	10	29	14.4	U	+/-5.1	13.3	U	+/-5.1	9.6	U	+/-5	10.3	U	+/-5
Radium-223	pCi/g	0.7	3%	1	35	0.3	U		0.4	U		0.4	U		0.4	U	
Radium-226	pCi/g	2.6	77%	27	35	1.3	UJ		1.2	J	+/-0.3	1.4	J	+/-0.3	1.1	J	+/-0.4
Radium-228	pCi/g	3.5	97%	34	35	1.8	J	+/-0.4	2	J	+/-0.5	2.1	J	+/-0.4	1.7	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29	0.6	U	+/-0.1	0.3	UJ	+/-0.1	0.4	UJ	+/-0.1	0.1	J	+/-0.2
Thorium-230	pCi/g	2.7	26%	9	35	1.8	U	+/-0.9	1.7	UJ	+/-0.8	1.8	UJ	+/-0.9	2.1	UJ	+/-1
Thorium-232	pCi/g	2	97%	34	35	1.3		+/-0.8	0.9	J	+/-0.5	1.1	J	+/-0.6	1.2	J	+/-0.7
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.6	UJ	+/-0.3	1.1	UJ	+/-0.4	1.1	UJ	+/-0.4	1.6	UJ	+/-0.4
Uranium-235	pCi/g	0.4	54%	19	35	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.7		+/-0.3	0.6	J	+/-0.3	1		+/-0.3	0.8		+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-2			MW12-3			MW12-3			MW12-3		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12513			12509			12510			12511		
DEPTH TO TOP OF SAMPLE						2			0			0.2			6		
DEPTH TO BOTTOM OF SAMPLE						4			0.2			2			8		
SAMPLE DATE						06-Nov-97			06-Nov-97			06-Nov-97			06-Nov-97		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.6	UJ		1.4	J	+/-0.4	1.5	J	+/-0.4	1.5	J	+/-0.4
Cesium-137	pCi/g	0.7	34%	12	35	0.2	U		0.9	U		0.1	U		0.1	U	
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	17%	6	35	0.4	U		0.1	U		0.3	U		0.5	U	
Lead-210	pCi/g	4.3	14%	5	35	3.1	U		2.3	U		14.7	U		4.1	U	
Lead-211	pCi/g	10	11%	4	35	1.4	U		6.3	U		4.1	U		5.3	U	
Lead-214	pCi/g	2.5	94%	33	35	1.8		+/-0.4	1.3		+/-0.3	1.5		+/-0.3	1.1		+/-0.3
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	13.1			22.2			16.9			9.4		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.3	UJ	+/-0.1	0.2	J	+/-0.2	0.3	UJ	+/-0.1	0.2		+/-0.2
Promethium-147	pCi/g	17.8	34%	10	29	5.1	U	+/-5	8.3	U	+/-5	5.6	U	+/-5	6.5	U	+/-5
Radium-223	pCi/g	0.7	3%	1	35	0.4	U		0.5	U		0.4	U		0.4	U	
Radium-226	pCi/g	2.6	77%	27	35	1.6	UJ		1.4	J	+/-0.4	1.5	J	+/-0.4	1.5	J	+/-0.4
Radium-228	pCi/g	3.5	97%	34	35	3.5	J	+/-0.6	1.4	J	+/-0.5	2.1	J	+/-0.5	1.7	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29	0.1		+/-0.2	0.1		+/-0.1	0.2	U	+/-0.1	0.2		+/-0.2
Thorium-230	pCi/g	2.7	26%	9	35	1	U	+/-0.6	1.5	U	+/-0.7	2.9	U	+/-1.1	1.1	U	+/-0.6
Thorium-232	pCi/g	2	97%	34	35	0.9		+/-0.5	1.1		+/-0.6	1.2		+/-0.6	0.8		+/-0.5
Tritium	pCi/g	60.4	17%	6	35	0.1	U	+/-0.1	0.4	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.7	UJ	+/-0.3	0.7	UJ	+/-0.3	0.5	UJ	+/-0.2	1	UJ	+/-0.3
Uranium-235	pCi/g	0.4	54%	19	35	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.7		+/-0.2	0.6	U	+/-0.2	0.6	U	+/-0.2	0.7		+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-4			MW12-4			MW12-4			MW12-5		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12505			12501			12502			12504		
DEPTH TO TOP OF SAMPLE						0			4			6			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			5.4			8			0.2		
SAMPLE DATE						05-Nov-97			04-Nov-97			04-Nov-97			05-Nov-97		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.9	J	+/-0.4	1	J	+/-0.3	1	J	+/-0.3	1.5	J	+/-0.2
Cesium-137	pCi/g	0.7	34%	12	35	0.7		+/-0.2	0.1	U		0.3	U		0.9	U	
Cobalt-57	pCi/g	0.1	14%	5	35	0.2	U		0.1	U		0.1	U		0.2	U	
Cobalt-60	pCi/g	0.4	17%	6	35	0.3	U		0.1	U		0.2	U		0.1	U	
Lead-210	pCi/g	4.3	14%	5	35	1.3	U		17	U		1.2	U		3.9	U	
Lead-211	pCi/g	10	11%	4	35	9.7	U		0.8	U		2.2	U		10.7	U	
Lead-214	pCi/g	2.5	94%	33	35	1.1		+/-0.3	1		+/-0.2	1.3		+/-0.3	1.4		+/-0.4
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	17.6			10.9			9.2			18.7		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.2		+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1	0.3	UJ	+/-0.1
Promethium-147	pCi/g	17.8	34%	10	29	7.9	U	+/-5	3.2		+/-3.7	2.1		+/-3.7	8.9	U	+/-5
Radium-223	pCi/g	0.7	3%	1	35	0.6	U		0.3	U		0.3	U		0.6	U	
Radium-226	pCi/g	2.6	77%	27	35	1.9	J	+/-0.4	1	J	+/-0.3	1	J	+/-0.3	1.5	J	+/-0.2
Radium-228	pCi/g	3.5	97%	34	35	1.5	J	+/-0.4	1.5	J	+/-0.4	1	J	+/-0.4	1.6	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29	0.3	J	+/-0.3	0.5	UJ	+/-0.2	0.1		+/-0.3	0.3	U	+/-0.1
Thorium-230	pCi/g	2.7	26%	9	35	2.7	J	+/-1.3	1.8	UJ	+/-0.9	0.9	U	+/-0.5	1.5	U	+/-0.7
Thorium-232	pCi/g	2	97%	34	35	0.9	UJ	+/-0.6	2	J	+/-0.9	0.9		+/-0.5	1.2		+/-0.6
Tritium	pCi/g	60.4	17%	6	35	0.5	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.5	J	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.9	UJ	+/-0.3	0.9	UJ	+/-0.3	1	UJ	+/-0.4	0.6	UJ	+/-0.2
Uranium-235	pCi/g	0.4	54%	19	35	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.8		+/-0.3	0.6		+/-0.2	0.5	U	+/-0.2	0.9		+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-5			MW12-5			MW12-6			MW12-6		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12500			12503			123190			123191		
DEPTH TO TOP OF SAMPLE						2			8			0			4		
DEPTH TO BOTTOM OF SAMPLE						3.5			9.7			0.2			6		
SAMPLE DATE						04-Nov-97			04-Nov-97			30-Oct-98			30-Oct-98		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.2	J	+/-0.3	1.1	J	+/-0.4	1.7		+/-0.4	1.2		+/-0.4
Cesium-137	pCi/g	0.7	34%	12	35	0.1	U		0.1	U		0.6		+/-0.2	0.3		+/-0.2
Cobalt-57	pCi/g	0.1	14%	5	35	0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.4	17%	6	35	0.2	U		0.1	U		0.1		+/-0.1	0.2		+/-0.1
Lead-210	pCi/g	4.3	14%	5	35	3.7	U		15.6	U		4.3	J	+/-2.4	1.5	UJ	
Lead-211	pCi/g	10	11%	4	35	1.5	U		1.3	U		1.8	U		10		+/-8.6
Lead-214	pCi/g	2.5	94%	33	35	1.5		+/-0.4	1		+/-0.2	1.3		+/-0.3	1.5		+/-0.4
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	9.1			8.9			24.7			10.5		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.2	U	+/-0.1	0.3	U	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	17.8	34%	10	29	10		+/-3.9	2.1		+/-3.7						
Radium-223	pCi/g	0.7	3%	1	35	0.4	U		0.3	U		0.4	U		0.4	U	
Radium-226	pCi/g	2.6	77%	27	35	1.2	J	+/-0.3	1.1	J	+/-0.4	1.7		+/-0.4	1.2		+/-0.4
Radium-228	pCi/g	3.5	97%	34	35	1.8	J	+/-0.4	1.1	J	+/-0.2	1.2	J	+/-0.4	1.5	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29	0.4	J	+/-0.4	0.3	J	+/-0.5						
Thorium-230	pCi/g	2.7	26%	9	35	1.9	UJ	+/-0.9	1.7	UJ	+/-1.1	1	J	+/-0.5	0.5	J	+/-0.3
Thorium-232	pCi/g	2	97%	34	35	1.4	J	+/-0.7	0.8	J	+/-0.7	1.1		+/-0.5	0.5		+/-0.3
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	14.2	J	+/-0.2	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.7	UJ	+/-0.3	1	UJ	+/-0.3	1		+/-0.3	0.6		+/-0.2
Uranium-235	pCi/g	0.4	54%	19	35	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.7		+/-0.3	0.9		+/-0.3	1.2		+/-0.4	0.8		+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-6			SB12-7			SB12-8			SB12-9		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123192			123194			123193			123189		
DEPTH TO TOP OF SAMPLE						6			4			4			4		
DEPTH TO BOTTOM OF SAMPLE						8			5			6			6		
SAMPLE DATE						30-Oct-98			30-Oct-98			30-Oct-98			29-Oct-98		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.4		+/-0.4	1.6		+/-0.5	2.3		+/-0.3	2.2		+/-0.6
Cesium-137	pCi/g	0.7	34%	12	35	0.4		+/-0.2	0.2		+/-0.1	0.5		+/-0.1	0.1		+/-0.1
Cobalt-57	pCi/g	0.1	14%	5	35	0.1		+/-0.1	0.1	U		0.1		+/-0.1	0.1		+/-0.1
Cobalt-60	pCi/g	0.4	17%	6	35	0.1		+/-0.1	0.4		+/-0.1	0.3		+/-0.1	0.1		+/-0.1
Lead-210	pCi/g	4.3	14%	5	35	2.6	J	+/-1.7	2.9	J	+/-1.7	4	J	+/-3.4	1.8	UJ	
Lead-211	pCi/g	10	11%	4	35	1.5	U		1.9	U		1.4	U		1.3	U	
Lead-214	pCi/g	2.5	94%	33	35	1.2		+/-0.3	1.5		+/-0.3	1.7		+/-0.4	1.9		+/-0.4
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	10.4			9.3			11.7			10.5		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	17.8	34%	10	29												
Radium-223	pCi/g	0.7	3%	1	35	0.3	U		0.4	U		0.4	U		0.5	U	
Radium-226	pCi/g	2.6	77%	27	35	1.4		+/-0.4	1.6		+/-0.5	2.3		+/-0.3	2.2		+/-0.6
Radium-228	pCi/g	3.5	97%	34	35	1.5	J	+/-0.4	1.8	J	+/-0.4	2.6	J	+/-0.5	1.3	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29												
Thorium-230	pCi/g	2.7	26%	9	35	0.2	J	+/-0.4	0.8	J	+/-0.6	0.9	J	+/-0.5	0.8	J	+/-0.5
Thorium-232	pCi/g	2	97%	34	35	0.7	J	+/-0.5	1	J	+/-0.6	0.7		+/-0.4	0.7		+/-0.4
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.5		+/-0.2	0.8		+/-0.3	0.7		+/-0.3	0.9		+/-0.3
Uranium-235	pCi/g	0.4	54%	19	35	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.4		+/-0.2	1.1		+/-0.3	0.7		+/-0.2	0.9		+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-1			SS12-10			SS12-11			SS12-12		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12536			12545			12542			12544		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						17-Nov-97			18-Nov-97			18-Nov-97			18-Nov-97		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	1.6	J	+/-0.3	1.4	UJ		1.2	UJ		1.4	J	+/-0.4
Cesium-137	pCi/g	0.7	34%	12	35	0.4	U		0.7		+/-0.2	0.6		+/-0.1	0.9	U	
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	17%	6	35	0.1	U		0.2	U		0.5	U		0.3	U	
Lead-210	pCi/g	4.3	14%	5	35	33.6	U		23.6	U		42.2	U		4.8	U	
Lead-211	pCi/g	10	11%	4	35	9.7		+/-3.3	1.3	U		3.9		+/-1.6	0.9	U	
Lead-214	pCi/g	2.5	94%	33	35	1.5		+/-0.3	2		+/-0.3	1.2		+/-0.2	2.2		+/-0.5
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	25.6			38.2			30.3			35.8		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.1	UJ	+/-0.3	0.2	U	+/-0.1	0.3	UJ	+/-0.2	0.4	UJ	+/-0.2
Promethium-147	pCi/g	17.8	34%	10	29	13.4		+/-5.2	7.8	U	+/-5.1	15.2	U	+/-5.2	17.8		+/-5.3
Radium-223	pCi/g	0.7	3%	1	35	1.4	U		0.4	U		0.3	U		0.4	U	
Radium-226	pCi/g	2.6	77%	27	35	1.6	J	+/-0.3	1.4	UJ		1.2	UJ		1.4	J	+/-0.4
Radium-228	pCi/g	3.5	97%	34	35	1.5	J	+/-0.5	1.6	J	+/-0.6	1.7	J	+/-0.5	1.9	J	+/-0.7
Thorium-227	pCi/g	0.4	28%	8	29	0.1	UJ	+/-0.3	0.3	UJ	+/-0.4	0.5	U	+/-0.5	0.5	U	+/-0.5
Thorium-230	pCi/g	2.7	26%	9	35	0.5	UJ	+/-1	1.7	J	+/-0.8	1.1	UJ	+/-0.7	1.3	UJ	+/-0.9
Thorium-232	pCi/g	2	97%	34	35	0.9	J	+/-0.8	1.5		+/-0.8	0.8		+/-0.6	0.9		+/-0.7
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.5	U	+/-0.2	1.1		+/-0.4	0.8	UJ	+/-0.3	1.1		+/-0.3
Uranium-235	pCi/g	0.4	54%	19	35	0.1		+/-0.1	0.2		+/-0.1	0.4	UJ	+/-0.2	0.2		+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.6	U	+/-0.2	1		+/-0.4	0.8	J	+/-0.3	0.7	U	+/-0.3

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			
LOCATION ID						SS12-13			SS12-13			SS12-14			SS12-2			
MATRIX						SOIL			SOIL			SOIL			SOIL			
SAMPLE ID						12212			12543			12541			12535			
DEPTH TO TOP OF SAMPLE						0			0			0			0			
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			
SAMPLE DATE						18-Nov-97			18-Nov-97			18-Nov-97			17-Nov-97			
QC CODE						DU			SA			SA			SA			
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			
Bismuth-214	pCi/g	2.6	77%	27	35	1.3	J	+/-0.3	1.6	UJ		1.5	UJ		1.7	J	+/-0.5	
Cesium-137	pCi/g	0.7	34%	12	35	0.5	J	+/-0.1	0.6	UJ		0.3	U		0.2	U		
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.1	U		0.1	U		0.1	U		
Cobalt-60	pCi/g	0.4	17%	6	35	0.3	U		0.4	U		0.3	U		0.3	U		
Lead-210	pCi/g	4.3	14%	5	35	21.7	U		4.3	U		3.7		+/-1.3	5	U		
Lead-211	pCi/g	10	11%	4	35	1.2	U		10	U		3.5	U		8.3	U		
Lead-214	pCi/g	2.5	94%	33	35	1.9		+/-0.5	2		+/-0.4	1.5		+/-0.5	2.5		+/-0.5	
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	29.8			27.2			28.2			22.4			
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.3	UJ	+/-0.1	0.2	U	+/-0.1	0.3	UJ	+/-0.1	0.2	UJ	+/-0.2	
Promethium-147	pCi/g	17.8	34%	10	29	10.5	U	+/-5.2	7.7	U	+/-5.1	9.5	U	+/-5.1	12.8		+/-5.2	
Radium-223	pCi/g	0.7	3%	1	35	0.4	U		0.5	U		0.5	U		0.5	U		
Radium-226	pCi/g	2.6	77%	27	35	1.3	J	+/-0.3	1.6	UJ		1.5	UJ		1.7	J	+/-0.5	
Radium-228	pCi/g	3.5	97%	34	35	1.4	J	+/-0.4	1.7	J	+/-0.6	2.3	J	+/-0.5	2.1	J	+/-0.7	
Thorium-227	pCi/g	0.4	28%	8	29	0.3	U	+/-0.4	0.1	U	+/-0.2	0.6	UJ	+/-0.1	0.2	U	+/-0.2	
Thorium-230	pCi/g	2.7	26%	9	35	1	UJ	+/-0.9	1.4	UJ	+/-0.9	0.8	UJ	+/-0.9	1.6	J	+/-0.8	
Thorium-232	pCi/g	2	97%	34	35	0.9	J	+/-0.7	1.7	J	+/-0.8	0.5	J	+/-0.6	0.5		+/-0.4	
Tritium	pCi/g	60.4	17%	6	35	60.4	J	+/-0.8	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.8	J	+/-0.1	
Uranium-233/234	pCi/g	1.9	49%	17	35	0.7		+/-0.3	0.9		+/-0.3	0.7	J	+/-0.4	1.9	J	+/-0.8	
Uranium-235	pCi/g	0.4	54%	19	35	0.1		+/-0.1	0.1		+/-0.1	0.4	J	+/-0.3	0.3	J	+/-0.3	
Uranium-238	pCi/g	1.4	77%	27	35	0.7		+/-0.3	0.7		+/-0.3	1.2	J	+/-0.5	1.4	J	+/-0.6	

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-3			SS12-4			SS12-5			SS12-6		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12537			12547			12538			12539		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						17-Nov-97			18-Nov-97			17-Nov-97			17-Nov-97		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	2.6	77%	27	35	2.6	J	+/-0.4	1.3	J	+/-0.3	1.5	UJ		1.8	J	+/-0.5
Cesium-137	pCi/g	0.7	34%	12	35	1.1	U		1	U		0.6	U		0.8	U	
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.2	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	17%	6	35	0.1	U		0.2	U		0.1	U		0.1	U	
Lead-210	pCi/g	4.3	14%	5	35	3.9	U		23	U		25.9	U		3.7	U	
Lead-211	pCi/g	10	11%	4	35	12.1	U		1.3	U		4.8	U		2.5	U	
Lead-214	pCi/g	2.5	94%	33	35	2.4		+/-0.6	1.3		+/-0.3	1.2	U		1.4	U	
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	29.7			28.3			22.3			30.1		
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.3	UJ	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.2	0.2	U	+/-0.1
Promethium-147	pCi/g	17.8	34%	10	29	10.1	U	+/-5.1	15.5		+/-5.2	12		+/-5.2	9.5	U	+/-5.1
Radium-223	pCi/g	0.7	3%	1	35	0.7		+/-0.3	0.4	U		0.3	U		0.5	U	
Radium-226	pCi/g	2.6	77%	27	35	2.6	J	+/-0.4	1.3	J	+/-0.3	1.5	UJ		1.8	J	+/-0.5
Radium-228	pCi/g	3.5	97%	34	35	2.2	J	+/-0.6	2	J	+/-0.5	1.2	J	+/-0.4	1.4	J	+/-0.4
Thorium-227	pCi/g	0.4	28%	8	29	0.6	U	+/-0.5	0.5	U	+/-0.1	0.1	U	+/-0.2	0.1	U	+/-0.1
Thorium-230	pCi/g	2.7	26%	9	35	0.5	UJ	+/-0.7	0.6	UJ	+/-0.6	0.5	UJ	+/-0.6	1	UJ	+/-0.6
Thorium-232	pCi/g	2	97%	34	35	0.8		+/-0.6	1.2		+/-0.7	0.7		+/-0.5	0.9		+/-0.5
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.9	49%	17	35	0.7	U	+/-0.3	0.7		+/-0.3	0.5	U	+/-0.2	0.8		+/-0.3
Uranium-235	pCi/g	0.4	54%	19	35	0.1		+/-0.1	0.2	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.4	77%	27	35	0.7	U	+/-0.3	1		+/-0.4	0.6	U	+/-0.2	0.5	U	+/-0.2

TABLE G-19
BACKGROUND RADIOLOGICAL DATA-SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			
LOCATION ID						SS12-7			SS12-8			SS12-9			
MATRIX						SOIL			SOIL			SOIL			
SAMPLE ID						12540			12548			12546			
DEPTH TO TOP OF SAMPLE						0			0			0			
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			
SAMPLE DATE						17-Nov-97			18-Nov-97			18-Nov-97			
QC CODE						SA			SA			SA			
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			
Bismuth-214	pCi/g	2.6	77%	27	35	1.4	J	+/-0.5	1.6	J	+/-0.5	2.5	UJ		
Cesium-137	pCi/g	0.7	34%	12	35	0.2	U		0.4	U		1.1	U		
Cobalt-57	pCi/g	0.1	14%	5	35	0.1	U		0.2	U		0.1	U		
Cobalt-60	pCi/g	0.4	17%	6	35	0.1	U		0.1	U		0.4	U		
Lead-210	pCi/g	4.3	14%	5	35	23.1	U		17.9	U		6.3	U		
Lead-211	pCi/g	10	11%	4	35	5.8	U		9.9		+/-3.8	21.5	U		
Lead-214	pCi/g	2.5	94%	33	35	1.6		+/-0.3	1.7		+/-0.4	2.2		+/-0.4	
Moisture (@ 104 deg. C)	%	38.2	100%	35	35	28.2			36			32.7			
Plutonium-239/240	pCi/g	0.2	23%	8	35	0.2	U	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1	
Promethium-147	pCi/g	17.8	34%	10	29	16.8		+/-5.3	12.4	U	+/-5.2	11.5	U	+/-5.2	
Radium-223	pCi/g	0.7	3%	1	35	0.5	U		0.5	U		0.4	U		
Radium-226	pCi/g	2.6	77%	27	35	1.4	J	+/-0.5	1.6	J	+/-0.5	2.5	UJ		
Radium-228	pCi/g	3.5	97%	34	35	1	J	+/-0.4	2.5	J	+/-0.6	2.3	UJ		
Thorium-227	pCi/g	0.4	28%	8	29	0.5	U	+/-0.5	1.1	UJ	+/-0.1	0.7	U	+/-0.1	
Thorium-230	pCi/g	2.7	26%	9	35	1.4	UJ	+/-0.9	1.2	UJ	+/-1.3	1.5	UJ	+/-1	
Thorium-232	pCi/g	2	97%	34	35	0.8		+/-0.6	1.8	J	+/-1.4	1		+/-0.7	
Tritium	pCi/g	60.4	17%	6	35	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	9.6	J	+/-0.2	
Uranium-233/234	pCi/g	1.9	49%	17	35	0.7	J	+/-0.4	0.9		+/-0.4	0.9		+/-0.3	
Uranium-235	pCi/g	0.4	54%	19	35	0.3	J	+/-0.3	0.1		+/-0.1	0.2		+/-0.1	
Uranium-238	pCi/g	1.4	77%	27	35	1	J	+/-0.5	0.9		+/-0.3	1		+/-0.4	

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-19			MW12-20			SS12-122			SS12-123			SS12-123		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123040			123046			123315			123320			123316		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						10/2/1998			10/3/1998			11/13/1998			11/13/1998			11/13/1998		
QC CODE						SA			SA			SA			DU			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	2.8	100%	30	30	2.3	J	+/-0.6	1.8	J	+/-0.3	1.7		+/-0.4	1.2	J	+/-0.4	2.1	J	
Cesium-137	pCi/g	1.5	83%	25	30	0.2	J	+/-0.2	0.8		+/-0.3	0.5		+/-0.1	0.1	U		0.1	U	
Cobalt-57	pCi/g	0.1	40%	12	30	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	47%	14	30	0.2	J	+/-0.1	0.3		+/-0.1	0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	39.9	73%	22	30	39.9	J	+/-28.4	6.2	J	+/-3.9	5.4		+/-2.3	8.3	U		3.4	J	
Lead-211	pCi/g	17.6	33%	10	30	2.7	UJ		17.6	J	+/-4.5	2.5	U		1.3	UJ		3.1	UJ	
Lead-214	pCi/g	3.3	100%	30	30	1.8		+/-0.4	2.7		+/-0.5	1.9		+/-0.4	1.3		+/-0.2	1.7		
Plutonium-239/240	pCi/g	0.1	3%	1	30	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	
Radium-223	pCi/g	0.8	7%	2	30	0.4	U		0.6	U		0.4	U		0.4	U		0.5	U	
Radium-226	pCi/g	2.8	100%	30	30	2.3	J	+/-0.6	1.8	J	+/-0.3	1.7		+/-0.4	1.2	J	+/-0.4	2.1	J	
Radium-228	pCi/g	3.2	100%	30	30	2.1		+/-0.5	2.8		+/-0.6	1.6		+/-0.3	1.6	J	+/-0.5	3.2	J	
Thorium-230	pCi/g	2.3	13%	4	30	2		+/-0.9	2.3		+/-1	1	UJ	+/-0.5	1.5	UJ	+/-0.7	1	UJ	
Thorium-232	pCi/g	1.7	100%	30	30	0.8		+/-0.5	1.2		+/-0.7	1.2	J	+/-0.5	1.1	J	+/-0.5	0.9	J	
Tritium	pCi/g	23.9	80%	24	30	0.1	U	+/-179	0.1	U	+/-180	3.5		+/-0.1	9.4		+/-0.1	8.4		
Uranium-234	pCi/g	1.2	93%	28	30	0.7		+/-0.5	1		+/-0.6	0.8		+/-0.3	0.7		+/-0.3	0.9		
Uranium-235	pCi/g	0.2	43%	13	30	0.4	UJ	+/-0.1	0.2		+/-0.2	0.1	U	+/-0.1	0.1		+/-0.1	0.1		
Uranium-238	pCi/g	1.1	100%	30	30	1.1	J	+/-0.6	0.6	J	+/-0.4	0.9	J	+/-0.3	1	J	+/-0.3	0.9	J	

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID							SS12-124			SS12-125			SS12-126			SS12-69		
MATRIX							SOIL			SOIL			SOIL			SOIL		
SAMPLE ID							123317			123318			123319			123261		
DEPTH TO TOP OF SAMPLE							0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE							0.2			0.2			0.2			0.2		
SAMPLE DATE							11/13/1998			11/13/1998			11/13/1998			11/11/1998		
QC CODE							SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES		N			N			N			N		
Bismuth-214	pCi/g	2.8	100%	30	30	+/-0.5	1		+/-0.3	1.3		+/-0.3	2.2		+/-0.5	1.3	J	+/-0.3
Cesium-137	pCi/g	1.5	83%	25	30		0.1	U		0.6		+/-0.1	0.8		+/-0.2	0.2		+/-0.1
Cobalt-57	pCi/g	0.1	40%	12	30		0.1	U		0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.6	47%	14	30		0.1	U		0.1	U		0.1	U		0.1		+/-0.1
Lead-210	pCi/g	39.9	73%	22	30	+/-2.8	25.6	U		3		+/-1.2	7.2		+/-3.4	17.2	UJ	
Lead-211	pCi/g	17.6	33%	10	30		1.8	U		3.4	U		3.1	U		0.5	UJ	
Lead-214	pCi/g	3.3	100%	30	30	+/-0.3	1.3		+/-0.3	1.7		+/-0.4	2		+/-0.4	1.1		+/-0.3
Plutonium-239/240	pCi/g	0.1	3%	1	30	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.2
Radium-223	pCi/g	0.8	7%	2	30		0.3	U		0.4	U		0.5	U		0.3	UJ	
Radium-226	pCi/g	2.8	100%	30	30	+/-0.5	1		+/-0.3	1.3		+/-0.3	2.2		+/-0.5	1.3	J	+/-0.3
Radium-228	pCi/g	3.2	100%	30	30	+/-0.6	1.7		+/-0.5	1.7		+/-0.5	2.3		+/-0.6	0.7	J	+/-0.2
Thorium-230	pCi/g	2.3	13%	4	30	+/-0.5	0.8	U	+/-0.4	1.5	UJ	+/-0.7	1.1	UJ	+/-0.5	1.4	J	+/-0.5
Thorium-232	pCi/g	1.7	100%	30	30	+/-0.4	0.9		+/-0.4	1.2	J	+/-0.6	1.7	J	+/-0.7	0.6		+/-0.3
Tritium	pCi/g	23.9	80%	24	30	+/-0.1	2.8		+/-0.1	0.1		+/-0.1	0.8		+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.2	93%	28	30	+/-0.3	0.5	U	+/-0.2	1		+/-0.4	1		+/-0.3	0.8	J	+/-0.3
Uranium-235	pCi/g	0.2	43%	13	30	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	100%	30	30	+/-0.3	0.7	J	+/-0.3	1	J	+/-0.3	0.7	J	+/-0.3	0.7	J	+/-0.2

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID						SS12-70			SS12-71			SS12-72			SS12-73			SS12-74
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID						123262			123263			123264			123265			123266
DEPTH TO TOP OF SAMPLE						0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2
SAMPLE DATE						11/16/1998			11/11/1998			11/11/1998			11/11/1998			11/11/1998
QC CODE						SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N			N			N
Bismuth-214	pCi/g	2.8	100%	30	30	1.2	J	+/-0.3	2.1	J	+/-0.5	1.6	J	+/-0.4	1.2	J	+/-0.2	1.3
Cesium-137	pCi/g	1.5	83%	25	30	0.2		+/-0.1	1.4		+/-0.3	0.6		+/-0.1	0.5		+/-0.1	0.6
Cobalt-57	pCi/g	0.1	40%	12	30	0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1
Cobalt-60	pCi/g	0.6	47%	14	30	0.1	U		0.3		+/-0.2	0.2		+/-0.1	0.1		+/-0.1	0.1
Lead-210	pCi/g	39.9	73%	22	30	1.2	U		5.2	J	+/-2.5	4.2	J	+/-1.7	17.6	J	+/-15.6	7.2
Lead-211	pCi/g	17.6	33%	10	30	1.8	U		2	UJ		2.3	UJ		1.2	UJ		2.5
Lead-214	pCi/g	3.3	100%	30	30	1.6	J	+/-0.3	1.9		+/-0.5	1.6		+/-0.5	1.1		+/-0.2	1.6
Plutonium-239/240	pCi/g	0.1	3%	1	30	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.2	U	+/-0.2	0.1	U	+/-0.1	0.2
Radium-223	pCi/g	0.8	7%	2	30	0.3	U		0.5	UJ		0.4	UJ		0.3	UJ		0.5
Radium-226	pCi/g	2.8	100%	30	30	1.2	J	+/-0.3	2.1	J	+/-0.5	1.6	J	+/-0.4	1.2	J	+/-0.2	1.3
Radium-228	pCi/g	3.2	100%	30	30	1.3		+/-0.4	1.1	J	+/-0.3	2	J	+/-0.5	2.2	J	+/-0.5	1.7
Thorium-230	pCi/g	2.3	13%	4	30	1.1	U	+/-0.4	1	UJ	+/-0.5	1.1	UJ	+/-0.4	1.2	UJ	+/-0.5	1.2
Thorium-232	pCi/g	1.7	100%	30	30	0.4		+/-0.2	1.1	J	+/-0.5	1		+/-0.4	1	J	+/-0.4	0.7
Tritium	pCi/g	23.9	80%	24	30	0.1	U	+/-0.1	0.3	J	+/-0.1	8.8	J	+/-0.2	0.4	J	+/-0.1	23.9
Uranium-234	pCi/g	1.2	93%	28	30	1.2	J	+/-0.4	0.8	J	+/-0.3	0.6	J	+/-0.2	0.7	J	+/-0.3	0.8
Uranium-235	pCi/g	0.2	43%	13	30	0.2		+/-0.2	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1
Uranium-238	pCi/g	1.1	100%	30	30	0.8		+/-0.3	0.7		+/-0.3	0.5		+/-0.2	0.9		+/-0.3	0.9

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID								SS12-75			SS12-76			SS12-77			SS12-78		
MATRIX								SOIL			SOIL			SOIL			SOIL		
SAMPLE ID								123267			123268			123269			123270		
DEPTH TO TOP OF SAMPLE								0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE								0.2			0.2			0.2			0.2		
SAMPLE DATE								11/11/1998			11/11/1998			11/11/1998			11/16/1998		
QC CODE								SA			SA			SA			SA		
STUDY ID						tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES			N			N			N			N		
Bismuth-214	pCi/g	2.8	100%	30	30	J	+/-0.4	1.4	J	+/-0.5	1.8	J	+/-0.6	1.1	J	+/-0.3	1.2	J	+/-0.3
Cesium-137	pCi/g	1.5	83%	25	30		+/-0.2	0.6		+/-0.1	0.3		+/-0.1	0.4		+/-0.2	0.1	U	
Cobalt-57	pCi/g	0.1	40%	12	30		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.6	47%	14	30	U		0.3		+/-0.1	0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	39.9	73%	22	30	J	+/-4.1	20.5	UJ		3.8	J	+/-2.2	20.9	UJ		3		+/-1.7
Lead-211	pCi/g	17.6	33%	10	30	UJ		10.3	J	+/-2.4	10.9	J	+/-8.5	12.6	J	+/-4.1	3.6		+/-2.2
Lead-214	pCi/g	3.3	100%	30	30		+/-0.4	1.1		+/-0.2	1.6		+/-0.4	1.2		+/-0.3	1.7	J	+/-0.3
Plutonium-239/240	pCi/g	0.1	3%	1	30	U	+/-0.1	0.1	U	+/-0.1	0.4	UJ	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1
Radium-223	pCi/g	0.8	7%	2	30	UJ		0.4	UJ		0.4	UJ		0.5	UJ		0.4	U	
Radium-226	pCi/g	2.8	100%	30	30	J	+/-0.4	1.4	J	+/-0.5	1.8	J	+/-0.6	1.1	J	+/-0.3	1.2	J	+/-0.3
Radium-228	pCi/g	3.2	100%	30	30	J	+/-0.6	1.3	J	+/-0.4	2.1	J	+/-0.7	1.2	J	+/-0.4	1.8		+/-0.6
Thorium-230	pCi/g	2.3	13%	4	30	UJ	+/-0.5	0.9	UJ	+/-0.4	0.8	UJ	+/-0.5	0.9	UJ	+/-0.4	1.2	U	+/-0.4
Thorium-232	pCi/g	1.7	100%	30	30		+/-0.3	0.8	J	+/-0.4	1.3	J	+/-0.6	1	J	+/-0.5	0.9		+/-0.3
Tritium	pCi/g	23.9	80%	24	30	J	+/-0.1	0.1	UJ	+/-0.1	0.1	J	+/-0.1	0.9	J	+/-0.1	1.8		+/-0.1
Uranium-234	pCi/g	1.2	93%	28	30	J	+/-0.3	0.8	J	+/-0.3	0.6	J	+/-0.2	0.6	J	+/-0.2	0.4	UJ	+/-0.2
Uranium-235	pCi/g	0.2	43%	13	30	U	+/-0.1	0.2		+/-0.2	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	100%	30	30		+/-0.3	0.6		+/-0.2	0.6		+/-0.2	0.6		+/-0.2	0.3		+/-0.2

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-79			SS12-80			SS12-81			SS12-82			SS12-83		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123271			123272			123273			123274			123275		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						11/11/1998			11/11/1998			11/11/1998			11/11/1998			11/11/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	2.8	100%	30	30	1.5	J	+/-0.5	0.9	J	+/-0.3	1.7	J	+/-0.4	0.7	J	+/-0.2	1		
Cesium-137	pCi/g	1.5	83%	25	30	1		+/-0.2	0.9		+/-0.1	1.5		+/-0.3	0.3		+/-0.1	0.5		
Cobalt-57	pCi/g	0.1	40%	12	30	0.1	U		0.1		+/-0.1	0.1		+/-0.1	0.1	U		0.1		
Cobalt-60	pCi/g	0.6	47%	14	30	0.2		+/-0.1	0.1		+/-0.1	0.5		+/-0.2	0.1	U		0.1		
Lead-210	pCi/g	39.9	73%	22	30	5	J	+/-2.9	4.5	J	+/-1.9	5.7	J	+/-3.3	27.2	J	+/-21.8	2.2		
Lead-211	pCi/g	17.6	33%	10	30	0.5	UJ		2.4	UJ		3.7	UJ		3.7	J	+/-2.1	6.6		
Lead-214	pCi/g	3.3	100%	30	30	1.3		+/-0.4	1.1		+/-0.3	2.2		+/-0.6	1.1		+/-0.3	1		
Plutonium-239/240	pCi/g	0.1	3%	1	30	0.1	U	+/-0.2	0.3	UJ	+/-0.2	0.4	UJ	+/-0.4	0.1	U	+/-0.1	0.1		
Radium-223	pCi/g	0.8	7%	2	30	0.4	UJ		0.3	UJ		0.5	UJ		0.8	J	+/-0.3	0.3		
Radium-226	pCi/g	2.8	100%	30	30	1.5	J	+/-0.5	0.9	J	+/-0.3	1.7	J	+/-0.4	0.7	J	+/-0.2	1		
Radium-228	pCi/g	3.2	100%	30	30	1.3	J	+/-0.4	1.2	J	+/-0.4	2.8	J	+/-0.6	0.9	J	+/-0.3	1.3		
Thorium-230	pCi/g	2.3	13%	4	30	1.4	J	+/-0.6	0.8	UJ	+/-0.3	1.1	UJ	+/-0.5	0.3	UJ	+/-0.3	0.8		
Thorium-232	pCi/g	1.7	100%	30	30	0.7	J	+/-0.4	0.2		+/-0.2	1	J	+/-0.4	0.4	J	+/-0.3	0.3		
Tritium	pCi/g	23.9	80%	24	30	1	J	+/-0.1	0.4	J	+/-0.1	22.5	J	+/-0.2	0.1	J	+/-0.1	0.1		
Uranium-234	pCi/g	1.2	93%	28	30	0.7	J	+/-0.3	0.6	J	+/-0.2	1.1	J	+/-0.3	0.4	J	+/-0.2	0.7		
Uranium-235	pCi/g	0.2	43%	13	30	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2		
Uranium-238	pCi/g	1.1	100%	30	30	0.7		+/-0.3	0.6		+/-0.2	1.1		+/-0.3	0.6		+/-0.2	0.8		

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12			
LOCATION ID								SS12-84			SS12-85			SS12-86			SS12-87			
MATRIX								SOIL			SOIL			SOIL			SOIL			
SAMPLE ID								123276			123277			123278			123282			
DEPTH TO TOP OF SAMPLE								0			0			0			0			
DEPTH TO BOTTOM OF SAMPLE								0.2			0.2			0.2			0.2			
SAMPLE DATE								11/11/1998			11/11/1998			11/11/1998			11/12/1998			
QC CODE								SA			SA			SA			DU			
STUDY ID						tep 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES			N			N			N			N			
Bismuth-214	pCi/g	2.8	100%	30	30	J	+/-0.3	2.5	J	+/-0.6	1.2	J	+/-0.5	1.3	J	+/-0.5	2.3	J	+/-0.5
Cesium-137	pCi/g	1.5	83%	25	30		+/-0.1	1.5		+/-0.2	0.5		+/-0.2	1		+/-0.2	0.6		+/-0.3
Cobalt-57	pCi/g	0.1	40%	12	30	U		0.1	U		0.1		+/-0.1	0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.6	47%	14	30		+/-0.1	0.6		+/-0.2	0.1		+/-0.1	0.2		+/-0.1	0.1	U	
Lead-210	pCi/g	39.9	73%	22	30	J	+/-2	3.8	J	+/-2.3	4.1	J	+/-2.3	3.7	J	+/-1.8	2.8	J	+/-2.6
Lead-211	pCi/g	17.6	33%	10	30	J	+/-4.3	9.3	J	+/-5.7	9	J	+/-2.9	4.2	J	+/-3.2	2.2	U	
Lead-214	pCi/g	3.3	100%	30	30		+/-0.4	1.6		+/-0.4	1.2		+/-0.3	1.3		+/-0.3	2.2	J	+/-0.3
Plutonium-239/240	pCi/g	0.1	3%	1	30	U	+/-0.1	0.1	UJ	+/-0.2	0.1	U	+/-0.2	0.2	UJ	+/-0.2	0.1	UJ	+/-0.1
Radium-223	pCi/g	0.8	7%	2	30	UJ		0.5	UJ		0.4	UJ		0.4	UJ		0.4	UJ	
Radium-226	pCi/g	2.8	100%	30	30	J	+/-0.3	2.5	J	+/-0.6	1.2	J	+/-0.5	1.3	J	+/-0.5	2.3	J	+/-0.5
Radium-228	pCi/g	3.2	100%	30	30	J	+/-0.3	1.7	J	+/-0.5	1.7	J	+/-0.4	1	J	+/-0.3	2	J	+/-0.5
Thorium-230	pCi/g	2.3	13%	4	30	UJ	+/-0.3	0.9	UJ	+/-0.4	0.7	UJ	+/-0.3	0.8	UJ	+/-0.3	0.9	U	+/-0.4
Thorium-232	pCi/g	1.7	100%	30	30		+/-0.2	1.1	J	+/-0.5	0.3		+/-0.2	0.5		+/-0.2	1.5	J	+/-0.6
Tritium	pCi/g	23.9	80%	24	30	UJ	+/-0.1	2.1	J	+/-0.1	0.2	J	+/-0.1	0.1	J	+/-0.1	19.2	J	+/-0.1
Uranium-234	pCi/g	1.2	93%	28	30	J	+/-0.3	0.8	J	+/-0.3	0.5	J	+/-0.2	0.5	J	+/-0.2	0.7		+/-0.3
Uranium-235	pCi/g	0.2	43%	13	30		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1
Uranium-238	pCi/g	1.1	100%	30	30		+/-0.3	1		+/-0.3	0.7		+/-0.3	0.5		+/-0.2	0.7	J	+/-0.3

TABLE G-20
BLDG 819/EM-27 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-87			SS12-88			SS12-89		
MATRIX						SOIL			SOIL			SOIL		
SAMPLE ID						123279			123280			123281		
DEPTH TO TOP OF SAMPLE						0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2		
SAMPLE DATE						11/12/1998			11/17/1998			11/17/1998		
QC CODE						SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N		
Bismuth-214	pCi/g	2.8	100%	30	30	1.6	J	+/-0.3	0.9	J	+/-0.2	2.8		+/-0.3
Cesium-137	pCi/g	1.5	83%	25	30	0.7		+/-0.2	0.1	U		0.7		+/-0.2
Cobalt-57	pCi/g	0.1	40%	12	30	0.1	U		0.1		+/-0.1	0.1		+/-0.1
Cobalt-60	pCi/g	0.6	47%	14	30	0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	39.9	73%	22	30	10.6	UJ		18	U		3.3	J	+/-2.2
Lead-211	pCi/g	17.6	33%	10	30	1.5	U		1	UJ		2.6	UJ	
Lead-214	pCi/g	3.3	100%	30	30	1.4	J	+/-0.3	0.7	J	+/-0.2	3.3		+/-0.3
Plutonium-239/240	pCi/g	0.1	3%	1	30	0.1	J	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Radium-223	pCi/g	0.8	7%	2	30	0.4	J	+/-0.3	0.3	U		0.3	U	
Radium-226	pCi/g	2.8	100%	30	30	1.6	J	+/-0.3	0.9	J	+/-0.2	2.8		+/-0.3
Radium-228	pCi/g	3.2	100%	30	30	1	J	+/-0.4	1.3	J	+/-0.4	0.8		+/-0.2
Thorium-230	pCi/g	2.3	13%	4	30	0.8	U	+/-0.4	0.6	U	+/-0.3	0.9	U	+/-0.3
Thorium-232	pCi/g	1.7	100%	30	30	0.8	J	+/-0.4	0.5		+/-0.2	0.6		+/-0.2
Tritium	pCi/g	23.9	80%	24	30	10.4	J	+/-0.1	0.2		+/-0.1	6.7		+/-0.1
Uranium-234	pCi/g	1.2	93%	28	30	0.9		+/-0.3	0.4		+/-0.2	0.8	J	+/-0.3
Uranium-235	pCi/g	0.2	43%	13	30	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	100%	30	30	0.8	J	+/-0.3	0.4		+/-0.2	0.8	J	+/-0.2

TABLE G-21
BLDG 819/EM-27 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12		SEAD-12		SEAD-12		SEAD-12		SEAD-12	
LOCATION ID						MW12-19		MW12-19		MW12-20		MW12-20		MW12-21	
MATRIX						SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE ID						123041		123042		123047		123048		123049	
DEPTH TO TOP OF SAMPLE						6		8		4		6		0	
DEPTH TO BOTTOM OF SAMPLE						8		10		6		8		0.8	
SAMPLE DATE						10/2/1998		10/2/1998		10/3/1998		10/3/1998		10/3/1998	
QC CODE						SA		SA		SA		SA		SA	
STUDY ID						RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1		RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	N		N		N		N		N	
Bismuth-214	pCi/g	2.8	100%	10	10	1.6 J	+/-0.5	2.3 J	+/-0.6	2.1	+/-0.4	2.8	+/-0.7	1.9	
Cesium-137	pCi/g	0.8	90%	9	10	0.1 U		0.2	+/-0.1	0.1 J	+/-0.1	0.8 J	+/-0.2	0.8 J	
Cobalt-57	pCi/g	0.3	20%	2	10	0.1 U		0.1	+/-0.1	0.1 U		0.3	+/-0.1	0.1 U	
Cobalt-60	pCi/g	0.5	90%	9	10	0.4	+/-0.1	0.2	+/-0.1	0.3 J	+/-0.1	0.3 J	+/-0.1	0.5 J	
Lead-210	pCi/g	43.3	60%	6	10	3.8 J	+/-3.5	35.3 UJ		29.2 J	+/-24.4	2.2 UJ		9.9 J	
Lead-211	pCi/g	20.6	60%	6	10	1 UJ		6.3 J	+/-3.5	10.9 J	+/-3.2	3 UJ		1.1 UJ	
Lead-214	pCi/g	2.2	100%	10	10	1.9	+/-0.6	1.6	+/-0.4	1.4	+/-0.4	2.2	+/-0.5	2	
Plutonium-239/240	pCi/g	0	0%	0	10	0.1 U	+/-0.1	0.1 U	+/-0.1	0.2 U	+/-0.1	0.2 U	+/-0.2	0.2 U	
Radium-223	pCi/g	1.1	40%	4	10	0.9	+/-0.5	1.1	+/-0.6	1 J	+/-0.7	0.6 UJ		0.6 UJ	
Radium-226	pCi/g	2.8	70%	7	10	1.6 J	+/-0.5	2.3 J	+/-0.6	2.1	+/-0.4	2.8	+/-0.7	1.9	
Radium-228	pCi/g	2.7	100%	10	10	2.6	+/-0.8	1.7	+/-0.7	1.8	+/-0.6	1.9	+/-0.5	2.7	
Thorium-230	pCi/g	2.1	60%	6	10	1.2 U	+/-0.7	2.1	+/-0.9	1.4 J	+/-0.6	1.3	+/-0.5	1.1	
Thorium-232	pCi/g	1.3	90%	9	10	0.5 U	+/-0.1	1	+/-0.6	1 J	+/-0.5	0.8	+/-0.3	1	
Tritium	pCi/g	1.1	10%	1	10	0.1 U	+/-176	0.1 U	+/-177	0.1 UJ	+/-0.1	0.1 UJ	+/-0.1	0.1 UJ	
Uranium-234	pCi/g	1.4	40%	4	10	0.7	+/-0.4	1	+/-0.5	1.4	+/-0.4	1 U	+/-0.3	1 UJ	
Uranium-235	pCi/g	0.3	60%	6	10	0.1	+/-0.2	0.4 U	+/-0.1	0.1	+/-0.1	0.1 U	+/-0.1	0.1 J	
Uranium-238	pCi/g	1.5	100%	10	10	1 J	+/-0.5	1 J	+/-0.5	1.1 J	+/-0.4	0.8 J	+/-0.3	1.4 J	

TABLE G-21
BLDG 819/EM-27 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							MW12-21			MW12-21			TP12-17A			TP12-17B			TP12-17C
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID							123050			123051			123036			123034			123035
DEPTH TO TOP OF SAMPLE							4			6			2			0.5			3
DEPTH TO BOTTOM OF SAMPLE							6			8			2			0.5			3
SAMPLE DATE							10/3/1998			10/3/1998			10/6/1998			10/6/1998			10/6/1998
QC CODE							SA			SA			SA			SA			SA
STUDY ID							RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES		N			N			N			N			N
Bismuth-214	pCi/g	2.8	100%	10	10	+/-0.7	1.6		+/-0.4	1.5		+/-0.3	2.1		+/-0.4	2.3		+/-0.4	1.8
Cesium-137	pCi/g	0.8	90%	9	10	+/-0.3	0.1	J	+/-0.1	0.1	J	+/-0.1	0.4	J	+/-0.1	0.5	J	+/-0.2	0.4
Cobalt-57	pCi/g	0.3	20%	2	10		0.1	U		0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.5	90%	9	10	+/-0.2	0.1	UJ		0.3	J	+/-0.1	0.4	J	+/-0.2	0.2	J	+/-0.1	0.2
Lead-210	pCi/g	43.3	60%	6	10	+/-4.5	43.3	J	+/-27.7	5.3	J	+/-3.1	29.3	UJ		3	J	+/-2.2	31.5
Lead-211	pCi/g	20.6	60%	6	10		11.6	J	+/-3.1	16.2	J	+/-6.3	1.2	UJ		20.6	J	+/-4.9	8.9
Lead-214	pCi/g	2.2	100%	10	10	+/-0.5	1.3		+/-0.3	1.7		+/-0.4	1.6		+/-0.4	2.1		+/-0.5	1.4
Plutonium-239/240	pCi/g	0	0%	0	10	+/-0.2	0.2	U	+/-0.1	0.1	UJ	+/-0.2	0.2	U	+/-0.1	0.4	U	+/-0.2	0.1
Radium-223	pCi/g	1.1	40%	4	10		0.4	UJ		0.7	J	+/-0.5	0.5	UJ		0.5	UJ		0.6
Radium-226	pCi/g	2.8	70%	7	10	+/-0.7	1.6		+/-0.4	1.5		+/-0.3	2.1	U	+/-0.4	2.3	U	+/-0.4	1.8
Radium-228	pCi/g	2.7	100%	10	10	+/-0.6	1.5		+/-0.4	2.5		+/-0.5	1.6		+/-0.5	2.2		+/-0.5	2.6
Thorium-230	pCi/g	2.1	60%	6	10	+/-0.4	1		+/-0.3	1		+/-0.3	1.4	U	+/-0.5	1.4	U	+/-0.5	1
Thorium-232	pCi/g	1.3	90%	9	10	+/-0.4	0.6		+/-0.3	0.6		+/-0.3	1.2		+/-0.5	1.3		+/-0.5	0.6
Tritium	pCi/g	1.1	10%	1	10	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	1.1		+/-0.1	0.1
Uranium-234	pCi/g	1.4	40%	4	10	+/-0.4	1.2		+/-0.5	1.1	UJ	+/-0.4	0.8	U	+/-0.3	0.7	U	+/-0.3	0.6
Uranium-235	pCi/g	0.3	60%	6	10	+/-0.1	0.3		+/-0.2	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1
Uranium-238	pCi/g	1.5	100%	10	10	+/-0.6	1.3	J	+/-0.5	1.5	J	+/-0.5	0.7	J	+/-0.3	0.9	J	+/-0.3	0.7

TABLE G-21
BLDG 819/EM-27 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY LOCATION ID MATRIX SAMPLE ID DEPTH TO TOP OF SAMPLE DEPTH TO BOTTOM OF SAMPLE SAMPLE DATE QC CODE STUDY ID PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	Step 1	
Bismuth-214	pCi/g	2.8	100%	10	10		+/-0.4
Cesium-137	pCi/g	0.8	90%	9	10	J	+/-0.1
Cobalt-57	pCi/g	0.3	20%	2	10	U	
Cobalt-60	pCi/g	0.5	90%	9	10	J	+/-0.1
Lead-210	pCi/g	43.3	60%	6	10	UJ	
Lead-211	pCi/g	20.6	60%	6	10	J	+/-3.1
Lead-214	pCi/g	2.2	100%	10	10		+/-0.4
Plutonium-239/240	pCi/g	0	0%	0	10	U	+/-0.1
Radium-223	pCi/g	1.1	40%	4	10	UJ	
Radium-226	pCi/g	2.8	70%	7	10	U	+/-0.4
Radium-228	pCi/g	2.7	100%	10	10		+/-0.7
Thorium-230	pCi/g	2.1	60%	6	10	U	+/-0.3
Thorium-232	pCi/g	1.3	90%	9	10		+/-0.2
Tritium	pCi/g	1.1	10%	1	10	U	+/-0.1
Uranium-234	pCi/g	1.4	40%	4	10	U	+/-0.2
Uranium-235	pCi/g	0.3	60%	6	10	U	+/-0.1
Uranium-238	pCi/g	1.5	100%	10	10	J	+/-0.2

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12				SEAD-12				SEAD-12				SEAD-12		
LOCATION ID						MW12-29				MW12-30				MW12-30				SS12-234		
MATRIX						SOIL				SOIL				SOIL				SOIL		
SAMPLE ID						123133				123148				123136				123404		
DEPTH TO TOP OF SAMPLE						0				0				0				0		
DEPTH TO BOTTOM OF SAMPLE						0.2				0.2				0.2				0.2		
SAMPLE DATE						15-Oct-98				16-Oct-98				16-Oct-98				17-Nov-98		
QC CODE						SA				DU				SA				SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1				RI Phase 1 Step 1				RI Phase 1 Step 1				RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	OF DETECTION	OF DETECTS	OF ANALYSES	N				N				N				N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.8		1.5	J	+/-0.5		1.4	J	+/-0.5		1.5	+/-0.3		1.4	J
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2		1		+/-0.3		1.1		+/-0.3		0.6	+/-0.2		0.1	U
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U			0.1	U			0.1	U			0.1	U		0.1	U
Cobalt-60	pCi/g	0.2	4%	2	48	0.2		+/-0.1		0.1	UJ			0.1	J			0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-2.6		7.1	J	+/-3.9		4.9	J	+/-2.3		4.9	J	+/-3.5	35.9	UJ
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ			2.3	UJ			7.7	J	+/-4.6		1.3	UJ		0.8	UJ
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.3		2.3		+/-0.3		2		+/-0.6		1.7	+/-0.3		1.3	
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1		0.1	U	+/-0.1		0.2	U	+/-0.2		0.1	U	+/-0.1	0.1	
Promethium-147	pCi/g	1.4	17%	4	24																	
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ			0.5	UJ			1	J	+/-0.6		1.3	+/-0.6		0.5	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.8		1.5	J	+/-0.5		1.4	J	+/-0.5		1.5	+/-0.3		1.4	J
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.8		2.4		+/-0.6		2.7		+/-0.6		2.4	+/-0.8		2.2	J
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.6		1.2	J	+/-0.4		1.1	J	+/-0.4		1.3	U	+/-0.5	1.5	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.4		1	J	+/-0.3		0.8	J	+/-0.3		1.1		+/-0.5	0.9	
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1		0.1	J	+/-0.1		0.5	J	+/-0.1		203		+/-0.8	78.5	J
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.3		1	J	+/-0.3		1		+/-0.3		0.7		+/-0.2	0.9	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1		0.1	U	+/-0.1		0.1	U	+/-0.1		0.1	U	+/-0.1	0.1	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3		0.9	J	+/-0.3		1.1	J	+/-0.3		0.9		+/-0.3	1.1	J

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-240			SS12-241			SS12-241			SS12-242	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123436			123438			123437			123439	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98	
QC CODE						SA			SA			DU			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.5		+/-0.5	1		+/-0.3	1.5		+/-0.3	1.2	
Cesium-137	pCi/g	1.4	69%	33	48	1	J		0.1	UJ		0.1	UJ		0.1	UJ		0.6	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J		32.4	UJ		28.6	U		41.4		+/-37	23.1	UJ
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		2.5	UJ		1.7	U		1.3	U		6.9	
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.3	1.8		+/-0.4	1.4	J	+/-0.3	1.2	J	+/-0.3	1.6	
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U
Promethium-147	pCi/g	1.4	17%	4	24							6.5	U	+/-3.7	6.5	U	+/-3.8		
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4	U		0.7		+/-0.3	0.4	U		0.5	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.5		+/-0.5	1		+/-0.3	1.5		+/-0.3	1.2	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.6	1.6		+/-0.5	2.7		+/-0.6	2		+/-0.4	2.2	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.5	1.3		+/-0.4	0.8	UJ	+/-0.5	0.6	UJ	+/-0.4	1.3	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.4	1.1		+/-0.4	1.1	J	+/-0.5	1	J	+/-0.4	0.8	
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.5	0.1	UJ	+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.1	0.1	U
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.3	0.6	J	+/-0.3	0.7		+/-0.3	0.6		+/-0.2	1	J
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	0.8	J	+/-0.3	0.6		+/-0.2	0.9		+/-0.3	1	

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-29			SS12-243			SS12-244			SS12-245			SS12-246		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123133			123440			123441			123442			123443		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Oct-98			15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.4	2		+/-0.5	2		+/-0.6	2.2		+/-0.4	1.6		
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2	0.4		+/-0.3	0.1	U		0.6		+/-0.2	1	J	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	88.5	63%	30	48	2.8	J		6	J	+/-2.4	3.9	J	+/-2.8	33.7	UJ		44.4	UJ	
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ	+/-3.5	3.1	U		3.4	U		1.7	U		2.5	U	
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	1.9		+/-0.6	2.3		+/-0.6	1.8		+/-0.4	1.8		
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	U	+/-0.2	0.2	U	+/-0.2	0.1	U	+/-0.1	0.2	U	
Promethium-147	pCi/g	1.4	17%	4	24															
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		1		+/-0.6	0.7	U		0.5	U		0.5	U	
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.4	2		+/-0.5	2		+/-0.6	2.2		+/-0.4	1.6		
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.6	2.1		+/-0.6	2.4		+/-0.7	2.2		+/-0.6	2.3		
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.4	0.9	U	+/-0.3	1.3		+/-0.5	1.2	UJ	+/-0.5	1.1	U	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.3	0.9		+/-0.3	1		+/-0.4	1.5	J	+/-0.6	1.5		
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	5.7		+/-0.1	1.2		+/-0.1	6.5		+/-0.1	42.8		
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.3	0.7	J	+/-0.3	0.6	J	+/-0.2	0.7	J	+/-0.3	0.7	J	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.3		+/-0.2	0.1	J	+/-0.1	0.1		+/-0.1	0.1		
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	1.2		+/-0.4	0.7	J	+/-0.2	0.6		+/-0.2	0.8		

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-29			SS12-247			SS12-248			SS12-249			SS12-250		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123133			123444			123445			123446			123447		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Oct-98			15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.7		+/-0.5	1.7		+/-0.4	2.5		+/-0.5	3.8		
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2	0.1	U		0.1	UJ		1.4		+/-0.3	1.2	J	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.1		
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.2	U		0.1	U	
Lead-210	pCi/g	88.5	63%	30	48	2.8	J		7.7	J	+/-3.3	47.7	U		42.1	J	+/-34.1	6.5	J	
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		7		+/-3.6	1.8	U		2.9	U		15.2		
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	2.2		+/-0.6	2		+/-0.5	1.4		+/-0.4	3.6		
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.2	U	+/-0.1	0.3	UJ	+/-0.1	0.2	U	+/-0.2	0.3	U	
Promethium-147	pCi/g	1.4	17%	4	24															
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.7	U		1.1		+/-0.5	0.6		+/-0.5	1.5		
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.7		+/-0.5	1.7		+/-0.4	2.5		+/-0.5	3.8		
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.6	2.4		+/-0.6	1.9		+/-0.6	2.9		+/-0.8	1.6		
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.4	1.1	U	+/-0.4	1.2		+/-0.4	1.1	U	+/-0.4	1.1	U	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.5	1		+/-0.4	1		+/-0.4	1.4		+/-0.5	1.6		
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.3	198		+/-0.7	0.3		+/-0.1	118		+/-0.6	27.5		
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	0.8	J	+/-0.3	1.1		+/-0.4	0.8	J	+/-0.3	0.6	J	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	0.9		+/-0.3	1.2		+/-0.4	0.5		+/-0.2	0.9		

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-29			SS12-251			SS12-252			SS12-253			SS12-254		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123133			123448			123449			123450			123451		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Oct-98			15-Nov-98			15-Nov-98			15-Nov-98			16-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-1	1.7	J	+/-0.4	1.7	J	+/-0.5	1.7	J	+/-0.4	1.4	J	
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.4	0.1	U		0.1	U		0.8		+/-0.2	0.5		
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U	+/-0.1	0.1	U		0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-5.4	34.9	U		67.5		+/-39.9	4.4		+/-2.4	23.1		
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ	+/-6.6	3.1	U		0.7	U		1.4	U		1.1	U	
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.6	1.8	J	+/-0.4	1.5	J	+/-0.2	1.4	J	+/-0.4	1	J	
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.2	0.4	U	+/-0.2	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.2	U	
Promethium-147	pCi/g	1.4	17%	4	24															
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ	+/-0.7	0.5	U		0.4	U		0.4	U		0.4	U	
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-1	1.7	J	+/-0.4	1.7	J	+/-0.5	1.7	J	+/-0.4	1.4	J	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.5	2.2		+/-0.6	1.8		+/-0.5	1.6		+/-0.5	1.5		
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.4	1.5	U	+/-0.5	1.1	U	+/-0.3	1.2	U	+/-0.5	1.4	U	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.5	1.7		+/-0.6	1		+/-0.3	1.5		+/-0.5	0.8		
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.3	0.1		+/-0.1	0.3		+/-0.1	10.3		+/-0.1	0.1		
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	1.1	J	+/-0.3	0.7	J	+/-0.2	0.9	J	+/-0.3	0.4	UJ	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	1		+/-0.3	0.7		+/-0.2	0.8	J	+/-0.3	0.5		

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-255			SS12-256			SS12-257			SS12-258	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123452			123453			123454			123455	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			16-Nov-98			17-Nov-98			16-Nov-98			16-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.1	J	+/-0.3	2.4		+/-0.5	1.7	J	+/-0.5	1.5	J
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2	0.1	U		0.9		+/-0.3	0.6		+/-0.2	1	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.1	
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-16.4	20.4	U		5.4	J	+/-2.1	4.8		+/-2.1	4.5	
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		0.7	U		2.6	UJ		8.5		+/-4.5	2.6	U
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.3	1.2	J	+/-0.2	2.2		+/-0.4	1.9	J	+/-0.4	1.4	J
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U
Promethium-147	pCi/g	1.4	17%	4	24							7.7	UJ	+/-4.5					
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4	U		0.5	U		1.2		+/-0.5	0.5	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.1	J	+/-0.3	2.4		+/-0.5	1.7	J	+/-0.5	1.5	J
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.4	2		+/-0.5	2		+/-0.5	1.7		+/-0.8	2.5	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.5	1.5	U	+/-0.5	1.3	U	+/-0.5	1.6	U	+/-0.5	1.3	U
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.3	1.3		+/-0.4	1.5		+/-0.6	1.3		+/-0.5	1	
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	1		+/-0.1	30.4		+/-0.3	0.3		+/-0.1	1.1	
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	1.2	J	+/-0.5	0.8		+/-0.3	1	J	+/-0.4	0.6	UJ
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.3	J	+/-0.3	0.1	UJ	+/-0.1	0.2		+/-0.1	0.1	U
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.2	0.9	J	+/-0.4	1		+/-0.3	0.9		+/-0.3	0.7	

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-259			SS12-260			SS12-260			SS12-261	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123456			123458			123457			123459	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			16-Nov-98			18-Nov-98			18-Nov-98			18-Nov-98	
QC CODE						SA			SA			DU			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.5	J	+/-0.3	1.1	J	+/-0.4	2.4	J	+/-0.5	1.6	
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2	0.8		+/-0.2	0.5	J	+/-0.2	0.5	J	+/-0.3	0.1	UJ
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U	+/-0.1	0.1	U		0.1	UJ		0.1	J	+/-0.1	0.1	U
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-2.2	35.3		+/-26.3	24.4	UJ		4.2	J	+/-2.2	4.2	
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		0.7	U		2.1	U		1.3	U		2.3	U
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	1	J	+/-0.3	1.3	J	+/-0.3	2	J	+/-0.4	1.8	J
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.2	U	+/-0.2	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ
Promethium-147	pCi/g	1.4	17%	4	24							1.2		+/-3.9	1.2		+/-3.9	6.5	U
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4	U		0.9	J	+/-0.6	2	J	+/-0.7	0.4	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.5	J	+/-0.3	1.1	J	+/-0.4	2.4	J	+/-0.5	1.6	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.5	2		+/-0.5	2.6		+/-0.6	3		+/-0.6	1.7	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.4	1.2	U	+/-0.4	1.4	UJ	+/-0.6	1.8	UJ	+/-0.9	0.9	UJ
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.4	0.8		+/-0.3	1	J	+/-0.5	1.9	J	+/-0.9	0.5	J
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	0.1	U	+/-0.1	0.4	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	0.8	J	+/-0.3	1.4	J	+/-0.4	0.7	J	+/-0.2	0.5	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.1	0.1	U
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.2	0.8		+/-0.3	1		+/-0.3	0.7		+/-0.2	0.9	

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-262			SS12-263			SS12-264			SS12-265	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123460			123461			123462			123463	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			18-Nov-98			18-Nov-98			18-Nov-98			18-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.6		+/-0.4	1.8		+/-0.6	1.7		+/-0.5	1.8	
Cesium-137	pCi/g	1.4	69%	33	48	1	J		0.4	J	+/-0.1	0.3	J	+/-0.2	0.1	UJ		0.1	UJ
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1		+/-0.1	0.3		+/-0.1	0.1	U		0.1	U
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-2.9	21.5	U		4.4		+/-2.1	33.8	U		5.3	
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		2	U		0.3	U		3	U		2.3	U
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	1.5	J	+/-0.4	1.8	J	+/-0.4	1.6	J	+/-0.3	2.1	J
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ
Promethium-147	pCi/g	1.4	17%	4	24			+/-3.8	6.5	U	+/-3.7	6.5	U	+/-3.8	1.3	U	+/-3.9	6.5	U
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4	U		0.8		+/-0.5	0.4	U		0.5	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.4	1.6		+/-0.4	1.8		+/-0.6	1.7		+/-0.5	1.8	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.6	2.3		+/-0.5	2.1		+/-0.7	1.9		+/-0.6	2.4	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.4	1.4	U	+/-0.6	1.2	U	+/-0.5	1.2	UJ	+/-0.6	0.9	UJ
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.3	1.5		+/-0.6	1.2		+/-0.5	1.4	J	+/-0.7	1.7	J
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	1.2	J	+/-0.1	0.1	UJ
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	0.8		+/-0.3	0.9	J	+/-0.3	0.8		+/-0.3	0.7	J
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	1.1		+/-0.4	0.9	J	+/-0.3	1		+/-0.3	0.8	J

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-266			SS12-267			SS12-268			SS12-269	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123464			123465			123466			123467	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			18-Nov-98			18-Nov-98			18-Nov-98			18-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.5	1.7		+/-0.4	2.8		+/-0.5	2.2		+/-0.6	1.8	
Cesium-137	pCi/g	1.4	69%	33	48	1	J		0.5	J	+/-0.1	0.9	J	+/-0.2	0.4		+/-0.1	0.8	J
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.2	
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-2.9	26.9	U		4.4		+/-2.9	26.9	UJ		26.2	U
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		2.1	U		10.1		+/-2.7	1.4	UJ		0.7	U
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.3	1.6	J	+/-0.3	2.7	J	+/-0.5	1.4		+/-0.5	1.5	J
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	UJ
Promethium-147	pCi/g	1.4	17%	4	24			+/-3.8	1.4		+/-4	6.5	U	+/-2.8	7.7	UJ	+/-4.5	1	U
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4		+/-0.3	2.3		+/-1	0.5	U		0.4	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.5	1.7		+/-0.4	2.8		+/-0.5	2.2		+/-0.6	1.8	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.7	2		+/-0.6	3.3		+/-1	2.4		+/-0.7	1.9	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.5	1.4	UJ	+/-0.6	1.6	UJ	+/-0.8	1.3	UJ	+/-0.5	1.1	UJ
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.8	1.2	J	+/-0.5	1.5	J	+/-0.8	1.6	J	+/-0.6	1	J
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	0.5	J	+/-0.1	0.1	UJ	+/-0.1	51.2		+/-0.4	5.8	J
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	0.8		+/-0.3	0.8		+/-0.3	0.6	UJ	+/-0.2	0.8	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.2	0.7		+/-0.2	0.8		+/-0.3	0.6	UJ	+/-0.2	0.7	

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-29			SS12-270			SS12-271			SS12-272			SS12-273	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123133			123468			123469			123470			123471	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						15-Oct-98			16-Nov-98			18-Nov-98			18-Nov-98			18-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.6	J	+/-0.3	1.8		+/-0 5	1.9		+/-0.4	2.2	
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.2	0.7		+/-0.2	1		+/-0.2	0.7		+/-0.2	1	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U	+/-0.1	0.1	U		0.1	U		0.1	U		0.1	U
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	88.5	63%	30	48	2.8	J		32.1	U		7	J	+/-3.5	78.1	J	+/-50.6	3.4	J
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		1	U		0.7	UJ		8.7	J	+/-2.6	2.5	UJ
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	1.1	J	+/-0.3	1.7		+/-0.4	1.4		+/-0.2	1.7	
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.2	UJ	+/-0.2	0.1	U	+/-0.1	0.2	U	+/-0.1	0.2	U
Promethium-147	pCi/g	1.4	17%	4	24			+/-3.9				7.7	UJ	+/-4.5	7.7	UJ	+/-4.5	0.4	J
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.4	U		0.9		+/-0.5	0.4	U		0.4	U
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.3	1.6	J	+/-0.3	1.8		+/-0.5	1.9		+/-0.4	2.2	
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.5	1.7		+/-0.4	1.9		+/-0.5	1.3		+/-0.4	2.3	
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.6	1.3	U	+/-0.5	1.2	U	+/-0.5	1.3	UJ	+/-0.8	1.3	U
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.5	1		+/-0.4	0.8		+/-0.4	1.8	J	+/-0.9	1.1	
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.2	27.1		+/-0.3	0.3		+/-0.1	45.6		+/-0.3	95.8	
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	1.1	J	+/-0.3	0.7		+/-0.2	0.5	UJ	+/-0.2	1.1	
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.2	1		+/-0.3	0.9		+/-0.3	0.8	J	+/-0.3	1	

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-29			SS12-274			SS12-274			SS12-275			SS12-276		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123133			123473			123472			123474			123475		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Oct-98			18-Nov-98			18-Nov-98			18-Nov-98			18-Nov-98		
QC CODE						SA			DU			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.6	1.3		+/-0.3	2.5		+/-0.3	0.8		+/-0.2	2.2		
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.3	0.9	J	+/-0.2	0.6	J	+/-0.2	0.3		+/-0.2	0.6	J	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U		0.1	U		0.1	U		0.1	U		0.1		
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-2.7	40.1	U		4.5		+/-1.9	9.6	UJ		7.9		
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		1.8	U		2.6	U		1.7	UJ		1.9	U	
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.4	1.5	J	+/-0.3	1.6	J	+/-0.4	0.7		+/-0.1	2.5	J	
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	UJ	
Promethium-147	pCi/g	1.4	17%	4	24			+/-4.6	6.5	U	+/-3.8	6.5	U	+/-3.8	7.7	UJ	+/-4.5	6.5	U	
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ		0.3	U		0.8		+/-0.4	0.3	U		1.6		
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.6	1.3		+/-0.3	2.5		+/-0.3	0.8		+/-0.2	2.2		
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.5	2.2		+/-0.5	1.5		+/-0.4	0.9		+/-0.2	1.8		
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.5	1.4	UJ	+/-0.6	1.3	UJ	+/-0.6	0.4	U	+/-0.2	1.2	UJ	
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.4	1.4	J	+/-0.6	0.8	J	+/-0.4	0.4		+/-0.2	1.1	J	
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.5	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	22.6		+/-0.2	0.2	J	
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.4	1		+/-0.3	0.7		+/-0.3	0.4	U	+/-0.2	0.7		
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.4	0.5		+/-0.2	1.2		+/-0.4	0.3	U	+/-0.2	0.8		

TABLE G-22
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-29			SS12-277			SS12-278			SS12-279		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123133			123476			123477			123478		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Oct-98			18-Nov-98			18-Nov-98			18-Nov-98		
QC CODE						SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	3.8	100%	48	48	1.9		+/-0.5	2.1		+/-0.6	3		+/-0.6	1.6		+/-0.5
Cesium-137	pCi/g	1.4	69%	33	48	1	J	+/-0.4	0.5		+/-0.3	0.1	U		0.1	UJ	
Cobalt-57	pCi/g	0.3	19%	9	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.2	4%	2	48	0.2			0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	88.5	63%	30	48	2.8	J	+/-4	8.7	J	+/-3.9	88.5	J	+/-62	34.1		+/-26.8
Lead-211	pCi/g	15.2	17%	8	48	2.8	UJ		2.2	UJ		3.7	UJ		5.3		+/-3.8
Lead-214	pCi/g	3.6	100%	48	48	1.5	J	+/-0.5	1.5		+/-0.4	3.1		+/-0.5	1.2	J	+/-0.3
Plutonium-239/240	pCi/g	0.1	2%	1	48	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0 1
Promethium-147	pCi/g	1.4	17%	4	24			+/-3.8	7.7	UJ	+/-4.5	7.7	UJ	+/-4.5	6.5	U	+/-3.8
Radium-223	pCi/g	2.3	40%	19	48	0.6	UJ	+/-0.7	0.5		+/-0.4	1.2		+/-0.7	0.4		+/-0 3
Radium-226	pCi/g	3.8	100%	48	48	1.9		+/-0.5	2.1		+/-0.6	3		+/-0.6	1.6		+/-0.5
Radium-228	pCi/g	3.3	100%	48	48	2.3		+/-0.5	1.6		+/-0.4	2.5		+/-0.8	2		+/-0.5
Thorium-230	pCi/g	1.6	17%	8	48	1.6	J	+/-0.6	1.2	UJ	+/-0.5	1.1	U	+/-0.4	1	U	+/-0.4
Thorium-232	pCi/g	1.9	100%	48	48	1	J	+/-0.6	1.1	J	+/-0.5	1.2		+/-0.5	1		+/-0.4
Tritium	pCi/g	203	71%	34	48	0.1	U	+/-0.1	151		+/-0.6	132		+/-0.3	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.4	85%	41	48	0.8	U	+/-0.2	0.6	U	+/-0.2	0.9		+/-0.3	0.7		+/-0.2
Uranium-235	pCi/g	0.3	44%	21	48	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.2	94%	45	48	1.1	U	+/-0.3	0.8		+/-0.3	0.9		+/-0.3	0.9		+/-0.3

TABLE G-23
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA AMRY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-30			TP12-18A			TP12-18B			TP12-18C			TP12-19A		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123138			123022			123023			123024			123025		
DEPTH TO TOP OF SAMPLE						2			0.5			4			4.5			0.5		
DEPTH TO BOTTOM OF SAMPLE						3.5			0.5			4			4.5			0.5		
SAMPLE DATE						16-Oct-98			01-Oct-98			01-Oct-98			01-Oct-98			01-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID						RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	3.3	100%	7	7	3.3	J	+/-0.5	1.4		+/-0.4	1.6		+/-0.3	1.4		+/-0.4	1.4		
Cesium-137	pCi/g	0.7	86%	6	7	0.7		+/-0.3	0.3	J	+/-0.1	0.1	UJ		0.5	J	+/-0.2	0.1	J	
Cobalt-57	pCi/g	0.1	29%	2	7	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	57%	4	7	0.2	J	+/-0.1	0.1	U		0.1		+/-0.1	0.1	U		0.1	U	
Lead-210	pCi/g	56.2	71%	5	7	5.7		+/-2.7	5.6	J	+/-2.8	28.5	J	+/-19.1	2	UJ		56.2	J	
Lead-211	pCi/g	10.9	43%	3	7	10.9	J	+/-4.1	1.8	UJ		10	J	+/-3.8	2.3	UJ		4.7	J	
Lead-214	pCi/g	2.3	100%	7	7	2.3		+/-0.6	2.1		+/-0.5	1.5		+/-0.3	1.6		+/-0.4	1.5		
Plutonium-239/240	pCi/g	0	0%	0	7	0.1	U	+/-0.1	0.4	UJ	+/-0.2	0.1	UJ	+/-0.2	0.3	UJ	+/-0.1	0.2	UJ	
Radium-223	pCi/g	1.4	14%	1	7	0.6	U		0.5	U		0.5	U		0.6	U		0.4	U	
Radium-226	pCi/g	3.3	100%	7	7	3.3	J	+/-0.5	1.4		+/-0.4	1.6		+/-0.3	1.4		+/-0.4	1.4		
Radium-228	pCi/g	3.4	100%	7	7	2.4		+/-0.7	0.9		+/-0.4	2.2		+/-0.6	2.3		+/-0.7	1.6		
Thorium-230	pCi/g	2	100%	7	7	1.2	J	+/-0.4	0.8	J	+/-0.6	2	J	+/-0.7	1.8	J	+/-0.9	1.2		
Thorium-232	pCi/g	2.5	100%	7	7	1.2	J	+/-0.4	2.5	J	+/-1.3	1.7	J	+/-0.6	1.2	J	+/-0.7	1.3		
Tritium	pCi/g	0	0%	0	7	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Uranium-234	pCi/g	1.1	100%	7	7	1		+/-0.3	1		+/-0.3	1		+/-0.3	1.1		+/-0.3	0.7		
Uranium-235	pCi/g	0.1	43%	3	7	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		
Uranium-238	pCi/g	1.1	100%	7	7	0.7	J	+/-0.3	0.7		+/-0.2	1		+/-0.3	1		+/-0.3	0.8		

TABLE G-23
BLDG 815/816/EM-28 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA AMRY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-30			TP12-19B			TP12-19C		
MATRIX						SOIL			SOIL			SOIL		
SAMPLE ID						123138			123026			123027		
DEPTH TO TOP OF SAMPLE						2			2			5.5		
DEPTH TO BOTTOM OF SAMPLE						3.5			2			5.5		
SAMPLE DATE						16-Oct-98			01-Oct-98			01-Oct-98		
QC CODE						SA			SA			SA		
STUDY ID						RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	N			N			N		
Bismuth-214	pCi/g	3.3	100%	7	7	3.3	J	+/-0.3	1.4		+/-0.5	1.5		+/-0.3
Cesium-137	pCi/g	0.7	86%	6	7	0.7		+/-0.1	0.3	J	+/-0.2	0.2	J	+/-0.1
Cobalt-57	pCi/g	0.1	29%	2	7	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.4	57%	4	7	0.2	J		0.4		+/-0.1	0.3		+/-0.1
Lead-210	pCi/g	56.2	71%	5	7	5.7		+/-29.7	3.7	J	+/-2.3	33.6	UJ	
Lead-211	pCi/g	10.9	43%	3	7	10.9	J	+/-2.2	1.8	UJ		3.5	UJ	
Lead-214	pCi/g	2.3	100%	7	7	2.3		+/-0.4	1.3		+/-0.5	1.4		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	7	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.3	UJ	+/-0.3
Radium-223	pCi/g	1.4	14%	1	7	0.6	U		0.5	U		1.4		+/-0.7
Radium-226	pCi/g	3.3	100%	7	7	3.3	J	+/-0.3	1.4		+/-0.5	1.5		+/-0.3
Radium-228	pCi/g	3.4	100%	7	7	2.4		+/-0.5	2.8		+/-0.7	3.4		+/-0.7
Thorium-230	pCi/g	2	100%	7	7	1.2	J	+/-0.4	1.3	J	+/-0.5	2	J	+/-1
Thorium-232	pCi/g	2.5	100%	7	7	1.2	J	+/-0.4	1.3	J	+/-0.5	1.9	J	+/-1
Tritium	pCi/g	0	0%	0	7	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-234	pCi/g	1.1	100%	7	7	1		+/-0.2	0.8	J	+/-0.2	0.7		+/-0.2
Uranium-235	pCi/g	0.1	43%	3	7	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	100%	7	7	0.7	J	+/-0.3	1.1	J	+/-0.3	1		+/-0.3

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10			MW12-11			MW12-12			MW12-13			MW12-8		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123007			123010			123013			123016			123183		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						9/29/1998			9/29/1998			9/30/1998			10/1/1998			10/28/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.6		+/-0.4	1.7		+/-0.4	1.6		+/-0.4	2		
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	+/-0.1	0.6	J	+/-0.4	0.5	J	+/-0.1	1	J	+/-0.3	0.9		
Cobalt-57	pCi/g	0.2	18%	9	49	0.1		+/-0.1	0.1	U		0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.2		+/-0.1	0.1	U		0.4		+/-0.1	0.1		
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		3.3		+/-3.2	32.7	U		5.4		+/-3	4.4	J	
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		10.7		+/-5.1	8.1		+/-3	7.5		+/-4.5	1	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.3	1.7		+/-0.5	1.7		+/-0.4	2.1		+/-0.5	1.5		
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.1	0.3	UJ	+/-0.3	0.1	UJ	+/-0.1	0.2	UJ	+/-0.2	0.1	U	
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		1	J	+/-0.6	0.4	UJ		0.6	UJ		1.3		
Radium-226	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.6		+/-0.4	1.7		+/-0.4	1.6		+/-0.4	2		
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.4	2.7		+/-0.9	2.3		+/-0.6	1.2		+/-0.4	1.8	J	
Thorium-227	pCi/g	0.4	40%	2	5															
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.4	1.2	U	+/-0.5	2.3	UJ	+/-0.9	1.7	U	+/-0.6	0.5	J	
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.4	0.9	U	+/-0.4	1.2	UJ	+/-0.5	1.2	U	+/-0.5	0.9		
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	29.3	J	
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.2	0.8		+/-0.3	0.8		+/-0.3	0.6	U	+/-0.2	0.6		
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.2	0.8		+/-0.3	0.9		+/-0.3	0.9		+/-0.3	0.9		

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10			SB12-1			SB12-1			SB12-2		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123007			12209			12534			12531		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						9/29/1998			11/11/1997 12:45			11/11/1997 13:00			11/10/1997 10:15		
QC CODE						SA			DU			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.9		+/-0.4	1.7		+/-0.4	39.8		+/-1.9
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	+/-0.2	0.3	U		0.7	U		0.2	U	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	+/-0.1	0.1	U		0.1	U		0.8	UJ	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	+/-2.2	3.3	U		3.9	U		19.8	UJ	
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		1.9	U		10.8	U		6.5	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.4	1.7		+/-0.4	1.4		+/-0.3	44.4		+/-1.7
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	UJ	+/-0.2
Promethium-147	pCi/g	0	0%	0	1												
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	+/-0.6	1.5	J	+/-0.7	0.4	UJ		0.8	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.9		+/-0.4	1.7		+/-0.4	39.8		+/-1.9
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.5	1.7		+/-0.4	1.2		+/-0.3	4.5	UJ	
Thorium-227	pCi/g	0.4	40%	2	5				0.2	UJ	+/-0.1	0.3	UJ	+/-0.1	0.4	J	+/-0.6
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.4	1.1	J	+/-0.6	0.8	J	+/-0.4	2.3	J	+/-1.3
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.5	1.1	J	+/-0.5	0.8	J	+/-0.4	2.1	J	+/-1.2
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.3	0.1	UJ	+/-0.1	0.3	UJ	+/-0.1	0.2	UJ	+/-0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.2	1	J	+/-0.3	0.7	J	+/-0.3	1.4	J	+/-0.6
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.2
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.3	0.7		+/-0.3	0.7		+/-0.3	0.9	J	+/-0.4

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-10			SB12-2			SB12-2B			SB12-3			SB12-4	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123007			123112			123064			12524			12530	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						9/29/1998			10/14/1998			10/4/1998			11/9/1997 10:55			11/10/1997 9:50	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			2.1		+/-0.5	2.1		+/-0.4	2.3		+/-0.5	1.3	U
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		0.1	U		0.8	J	+/-0.3	0.3	U		0.5	U
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1		+/-0.1	0.1	J	+/-0.1	0.1	U		0.1	U
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.3	J	+/-0.1	0.5	J	+/-0.2	0.1	U		0.1	U
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		4.6	J	+/-2.7	32.7	U		6.1	U		18.4	U
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		9.9	J	+/-6.6	3	U		11.6	U		5.6	U
Lead-214	pCi/g	44.4	100%	49	49	1.3			2.1		+/-0.4	1.4		+/-0.4	1.8		+/-0.4	1.5	
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ		0.1	U	+/-0.1	0.3	UJ	+/-0.3	0.2	J	+/-0.2	0.2	J
Promethium-147	pCi/g	0	0%	0	1				3.7	UJ	+/-5.1								
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.5	U		0.5	U		0.4	U		0.4	U
Radium-226	pCi/g	39.8	98%	48	49	1.4			2.1		+/-0.5	2.1		+/-0.4	2.3		+/-0.5	1.3	U
Radium-228	pCi/g	3.6	96%	47	49	1.6			1.4	J	+/-0.4	2.4		+/-0.7	2		+/-0.6	1.1	
Thorium-227	pCi/g	0.4	40%	2	5										0.3		+/-0.4	0.5	U
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U		0.9	UJ	+/-0.4	1.3	J	+/-0.5	1.2	UJ	+/-0.7	1.3	UJ
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		0.6		+/-0.3	0.8	J	+/-0.4	0.4	UJ	+/-0.4	0.5	UJ
Tritium	pCi/g	53.3	53%	26	49	0.1	U		0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U		0.5	U	+/-0.2	1	J	+/-0.5	0.8	U	+/-0.3	0.8	U
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U		0.1		+/-0.1	0.4	UJ	+/-0.3	0.2	U	+/-0.1	0.1	U
Uranium-238	pCi/g	1	96%	47	49	0.5			0.7		+/-0.3	0.8	J	+/-0.4	0.5	U	+/-0.2	0.7	U

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID						MW12-10			SS12-15			SS12-16			SS12-167			SS12-168
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID						123007			123211			123102			123431			123363
DEPTH TO TOP OF SAMPLE						0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2
SAMPLE DATE						9/29/1998			11/3/1998			10/13/1998			11/16/1998			11/14/1998
QC CODE						SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			2	J	+/-0.3	1.9	J	+/-0.4	2.6	J	+/-0.6	1.3
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		0.3		+/-0.2	0.4	J	+/-0.2	0.3		+/-0.1	0.1
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1		+/-0.1	0.2
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.2	J	+/-0.1	0.2	J	+/-0.1	0.1	U		0.1
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		2.6	J	+/-1.5	3.3	J	+/-1.7	2	UJ		5.1
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		1.8	UJ		9.7	J	+/-7	12.7	J	+/-3	3.3
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.3	2.1		+/-0.4	1.7		+/-0.4	1.5		+/-0.4	1.8
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.2	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.5	U		0.5	U		0.5	U		0.5
Radium-226	pCi/g	39.8	98%	48	49	1.4			2	J	+/-0.3	1.9	J	+/-0.4	2.6	J	+/-0.6	1.3
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.4	1.7	J	+/-0.5	1.7		+/-0.5	3.6	J	+/-0.6	1.5
Thorium-227	pCi/g	0.4	40%	2	5			+/-0.1										
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.8	0.8	UJ	+/-0.5	1	U	+/-0.4	1		+/-0.4	1.2
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.5	0.7	J	+/-0.4	1.1	J	+/-0.4	1.2		+/-0.4	1.2
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.1	0.4		+/-0.1	0.2	J	+/-0.1	22.5	J	+/-0.2	21.9
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.3	0.6	U	+/-0.2	0.7	UJ	+/-0.3	0.7		+/-0.2	0.6
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0 2
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.3	0.8		+/-0.3	0.8	J	+/-0.3	0.7	J	+/-0.2	0.6

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12				SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10				SS12-169			SS12-169			SS12-17		
MATRIX						SOIL				SOIL			SOIL			SOIL		
SAMPLE ID						123007				123396			123364			123212		
DEPTH TO TOP OF SAMPLE						0				0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2				0.2			0.2			0.2		
SAMPLE DATE						9/29/1998				11/14/1998			11/14/1998			11/3/1998		
QC CODE						SA				DU			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N				N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			+/-0.5	1.2		+/-0.3	1.7		+/-0.4	2.2	J	+/-0.5
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	U		1		+/-0.2	1.2		+/-0.3	0.5		+/-0.2
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	U		0.1	U		0.1	U		0.3	J	+/-0.1
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		+/-2.5	29.5	UJ		5.1	J	+/-2.7	2.8	J	+/-1.3
Lead-211	pCi/g	12.7	24%	12	49	1.4	U	U		1.9	U		2	UJ		9.1	J	+/-4.9
Lead-214	pCi/g	44.4	100%	49	49	1.3			+/-0.4	1.5		+/-0.4	1.5		+/-0.4	2		+/-0.3
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	UJ	+/-0.1	0.2	UJ	+/-0.1	0.1	UJ	+/-0.2	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	U		0.4	U		0.4	U		0.4	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			+/-0.5	1.2	J	+/-0.3	1.7	J	+/-0.4	2.2	J	+/-0.5
Radium-228	pCi/g	3.6	96%	47	49	1.6			+/-0.5	1.7		+/-0.5	1.5		+/-0.5	2.1	J	+/-0.5
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	U	+/-0.5	0.9	U	+/-0.4	0.7	UJ	+/-0.4	1	UJ	+/-0.5
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		+/-0.5	0.8		+/-0.3	0.8	J	+/-0.4	0.7	J	+/-0.4
Tritium	pCi/g	53.3	53%	26	49	0.1	U	J	+/-0.3	5.6	J	+/-0.2	11.1		+/-0.2	0.1	U	+/-0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	J	+/-0.3	0.4	J	+/-0.3	0.6	J	+/-0.3	0.5	U	+/-0.2
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	U	+/-0.1	0.2	UJ	+/-0.1	0.1	J	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1	96%	47	49	0.5			+/-0.3	0.6		+/-0.3	0.5	J	+/-0.3	0.9		+/-0.3

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12		SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-10		SS12-170			SS12-172			SS12-173			SS12-174	
MATRIX						SOIL		SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123007		123365			123366			123367			123368	
DEPTH TO TOP OF SAMPLE						0		0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2		0.2			0.2			0.2			0.2	
SAMPLE DATE						9/29/1998		11/14/1998			11/16/1998			11/14/1998			11/14/1998	
QC CODE						SA		SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N		N			N			N			N	
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		1.8		+/-0.6	1	J	+/-0.3	2.5		+/-0.4	1.4	
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	0.1	UJ		0.8		+/-0.2	1.3		+/-0.3	0.8	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1		0.1	U		0.1	U		0.1	U		0.1	U
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	23.8	UJ		36	U		6.3		+/-3.3	33.2	U
Lead-211	pCi/g	12.7	24%	12	49	1.4	U	0.9	U		7.4	J	+/-2.8	2.7	U		2	U
Lead-214	pCi/g	44.4	100%	49	49	1.3		1.6		+/-0.3	1.3	J	+/-0.4	1.7		+/-0.5	1.2	
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	0.1		+/-0.1	0.1		+/-0.1	0.2	UJ	+/-0.2	0.2	UJ
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	0.5	U		0.4		+/-0.4	0.6	U		0.4	U
Radium-226	pCi/g	39.8	98%	48	49	1.4		1.8		+/-0.6	1	J	+/-0.3	2.5		+/-0.4	1.4	
Radium-228	pCi/g	3.6	96%	47	49	1.6		1.5		+/-0.5	1.7	J	+/-0.5	2.5		+/-0.5	1.4	
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	1.1	J	+/-0.6	1.4	U	+/-0.5	1	U	+/-0.4	0.9	U
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	0.9	J	+/-0.4	0.7		+/-0.3	0.7		+/-0.3	0.9	
Tritium	pCi/g	53.3	53%	26	49	0.1	U	2	J	+/-0.1	53.3		+/-0.4	3.1	J	+/-0.1	3.9	J
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	0.6		+/-0.2	0.5		+/-0.2	0.6	J	+/-0.4	0.5	J
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	J
Uranium-238	pCi/g	1	96%	47	49	0.5		0.6	J	+/-0.2	0.6		+/-0.2	0.8		+/-0.4	0.7	J

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID						MW12-10			SS12-175			SS12-176			SS12-177			SS12-178
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID						123007			123369			123370			123371			123372
DEPTH TO TOP OF SAMPLE						0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2
SAMPLE DATE						9/29/1998			11/14/1998			11/14/1998			11/14/1998			11/14/1998
QC CODE						SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		+/-0.3	1.7		+/-0.5	1.3		+/-0.5	2		+/-0.5	1.8
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	+/-0.2	1.2	J	+/-0.3	0.7	J	+/-0.2	0.9	J	+/-0.3	0.7
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.1	U		0.1	U		0.1	U		0.1
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		4.1	J	+/-1.6	3.7	J	+/-1.8	5.9		+/-3.4	24.1
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		3.1	U		3.7	U		2	U		1.6
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.3	1.6		+/-0.4	1.9		+/-0.5	2.6		+/-0.5	1.8
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.3
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.4	U		0.4	U		0.5	U		0.5
Radium-226	pCi/g	39.8	98%	48	49	1.4		+/-0.3	1.7		+/-0.5	1.3		+/-0.5	2		+/-0.5	1.8
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.3	1.9		+/-0.4	1		+/-0.4	1.5		+/-0.4	1.4
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.4	1.2	J	+/-0.6	0.5	U	+/-0.3	1.1		+/-0.4	1.2
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.4	0.8	J	+/-0.4	0.8		+/-0.3	1		+/-0.3	0.8
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.2	0.1	UJ	+/-0.1	1	J	+/-0.1	0.8		+/-0.1	4.7
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.3	0.4		+/-0.2	0.5	J	+/-0.2	0.5	U	+/-0.2	1
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.3	0.6	J	+/-0.2	0.5	J	+/-0.2	1		+/-0.3	1

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12				SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10				SS12-179			SS12-180			SS12-181		
MATRIX						SOIL				SOIL			SOIL			SOIL		
SAMPLE ID						123007				123373			123374			123375		
DEPTH TO TOP OF SAMPLE						0				0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2				0.2			0.2			0.2		
SAMPLE DATE						9/29/1998				11/14/1998			11/14/1998			11/14/1998		
QC CODE						SA				SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1	tep 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N				N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			+/-0.5	1.4		+/-0.4	1.3		+/-0.4	2.1		+/-0.5
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		+/-0.2	0.3	J	+/-0.1	0.4	J	+/-0.1	0.1	U	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1		U		0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	U		38.6	J	+/-32.4	3.5	J	+/-2.1	2.9		+/-1.6
Lead-211	pCi/g	12.7	24%	12	49	1.4	U	U		0.8	U		1.6	U		3.1	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3			+/-0.3	1.2		+/-0.3	1.6		+/-0.3	1.5		+/-0.4
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	UJ	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.2	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	U		0.4	U		0.3	U		0.5	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			+/-0.5	1.4		+/-0.4	1.3		+/-0.4	2.1		+/-0.5
Radium-228	pCi/g	3.6	96%	47	49	1.6			+/-0.3	1.6		+/-0.5	1.4		+/-0.3	2.2		+/-0.5
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	U	+/-0.4	1.4	J	+/-0.6	0.9		+/-0.3	0.7	U	+/-0.3
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		+/-0.3	1.5	J	+/-0.6	0.7		+/-0.3	0.7		+/-0.3
Tritium	pCi/g	53.3	53%	26	49	0.1	U	J	+/-0.1	0.2	J	+/-0.1	19.4	J	+/-0.2	5.5	J	+/-0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	J	+/-0.5	1		+/-0.3	0.8		+/-0.2	0.5	J	+/-0.3
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U		+/-0.2	0.1	U	+/-0.1	0.1	U	+/-0.1	0.3		+/-0.2
Uranium-238	pCi/g	1	96%	47	49	0.5			+/-0.5	0.9	J	+/-0.3	0.7	J	+/-0.2	0.6		+/-0.3

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12					
LOCATION ID						MW12-10			SS12-182			SS12-183			SS12-184			SS12-185					
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL					
SAMPLE ID						123007			123376			123377			123378			123379					
DEPTH TO TOP OF SAMPLE						0			0			0			0			0					
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2					
SAMPLE DATE						9/29/1998			11/14/1998			11/17/1998			11/14/1998			11/14/1998					
QC CODE						SA			SA			SA			SA			SA					
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1					
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N					
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			1.8		+/-0.4	2.9	J	+/-0.5	1.2		+/-0.2	2.3		
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		0.1	UJ		0.6		+/-0.4	0.4	J	+/-0.1	0.1	U	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		25.7	U		2.9	U		15.4	UJ		4.6		
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		1.4	U		2.5	UJ		1.1	U		3.1	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3			1.6		+/-0.3	1.8	J	+/-0.4	1.4		+/-0.3	1.7		
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ		0.1	U	+/-0.2	0.1		+/-0.1	0.2	U	+/-0.1	0.4	UJ	
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.3	U		0.6	U		0.3	U		0.4	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			1.8		+/-0.4	2.9	J	+/-0.5	1.2		+/-0.2	2.3		
Radium-228	pCi/g	3.6	96%	47	49	1.6			0.4	U		2.4	J	+/-0.6	1.6		+/-0.4	2		
Thorium-227	pCi/g	0.4	40%	2	5															
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U		1		+/-0.4	1.3	U	+/-0.4	1		+/-0.4	1.1	U	
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		0.7		+/-0.3	1.2		+/-0.4	0.7		+/-0.3	0.9		
Tritium	pCi/g	53.3	53%	26	49	0.1	U		0.1	U	+/-0.1	0.1	U	+/-0.1	1.5	J	+/-0.1	11.4	J	
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U		0.5	U	+/-0.2	0.5	J	+/-0.2	0.6		+/-0.2	0.3	J	
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U		0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	
Uranium-238	pCi/g	1	96%	47	49	0.5			0.7		+/-0.2	0.7	J	+/-0.2	0.5	J	+/-0.2	0.5		

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID						MW12-10			SS12-186			SS12-187			SS12-188			SS12-189
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID						123007			123380			123381			123382			123383
DEPTH TO TOP OF SAMPLE						0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2
SAMPLE DATE						9/29/1998			11/14/1998			11/14/1998			11/14/1998			11/14/1998
QC CODE						SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.2		+/-0.3	2.1		+/-0.4	1.7		+/-0.3	1.5
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		0.1	U		0.4	J	+/-0.3	0.1	UJ		0.1
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.1	U		0.1	U		0.1	U		0.1
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	+/-2.4	26.7	U		5.5	J	+/-2.7	41.4	J	+/-33.8	5
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		0.7	U		2.8	U		1.3	U		9.6
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.4	1.4		+/-0.2	2.5		+/-0.5	1.3		+/-0.2	2.1
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.1	0.4	UJ	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.2
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.4	U		0.5	U		0.4	U		0.4
Radium-226	pCi/g	39.8	98%	48	49	1.4		+/-0.5	1.2		+/-0.3	2.1		+/-0.4	1.7		+/-0.3	1.5
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.5	1.6		+/-0.5	1.7		+/-0.4	1.8		+/-0.5	2
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.4	0.5	U	+/-0.3	1		+/-0.4	0.9		+/-0.3	1.4
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.3	0.8		+/-0.3	0.9		+/-0.3	0.9		+/-0.3	1.1
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.2	0.1	U	+/-0.1	10	J	+/-0.2	0.2	J	+/-0.1	0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.2	0.8	J	+/-0.4	0.7		+/-0.2	0.7		+/-0.3	0.7
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.3	0.5		+/-0.3	0.9	J	+/-0.3	1	J	+/-0.3	0.7

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12				SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10				SS12-190			SS12-191			SS12-192		
MATRIX						SOIL				SOIL			SOIL			SOIL		
SAMPLE ID						123007				123384			123385			123386		
DEPTH TO TOP OF SAMPLE						0				0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2				0.2			0.2			0.2		
SAMPLE DATE						9/29/1998				11/14/1998			11/14/1998			11/14/1998		
QC CODE						SA				SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1		tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N				N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			+/-0.4	2.3		+/-0.4	2		+/-0.4	1.1		+/-0.2
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	UJ		0.6		+/-0.2	0.1	UJ		0.1	UJ	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1	U	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		+/-2.3	78.6		+/-54.1	5.9	J	+/-2.9	29.8	UJ	
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		+/-4	0.9	U		8		+/-4.7	1.6	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3			+/-0.5	1.4		+/-0.3	2.3		+/-0.4	1.1		+/-0.2
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	U	+/-0.1	0.2	UJ	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1													
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	U		0.5	U		0.4	U		0.3	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			+/-0.4	2.3		+/-0.4	2		+/-0.4	1.1		+/-0.2
Radium-228	pCi/g	3.6	96%	47	49	1.6			+/-0.7	1.8		+/-0.6	2.1		+/-0.3	2		+/-0.5
Thorium-227	pCi/g	0.4	40%	2	5													
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U		+/-0.5	1.4		+/-0.5	1.9	J	+/-0.7	1.1	J	+/-0.5
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		+/-0.5	0.8		+/-0.3	1.1	J	+/-0.5	0.9	J	+/-0.4
Tritium	pCi/g	53.3	53%	26	49	0.1	U	U	+/-0.1	4.7	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U		+/-0.3	1	J	+/-0.5	0.7		+/-0.2	0.6		+/-0.3
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1	96%	47	49	0.5			+/-0.3	0.4		+/-0.3	0.9	J	+/-0.3	0.7	J	+/-0.3

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10			SS12-193			SS12-194			SS12-195			SS12-196		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123007			123387			123388			123389			123390		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						9/29/1998			11/14/1998			11/14/1998			11/16/1998			11/14/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			3.1		+/-0.7	1.3		+/-0.3	1.5	J	+/-0.3	1.5		
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J		0.6	J	+/-0.2	0.1	UJ		0.1	U		0.5	J	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.2		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U		2.5	U		21.8	U		39.1	U		3.4	J	
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		4.7		+/-4.7	0.8	U		2.7	UJ		2.2	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3			2.8		+/-0.6	1.5		+/-0.3	1.2	J	+/-0.3	1.6		
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ		0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.2	U	
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.5	U		0.4	U		0.5	U		0.4	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			3.1		+/-0.7	1.3		+/-0.3	1.5	J	+/-0.3	1.5		
Radium-228	pCi/g	3.6	96%	47	49	1.6			1.9		+/-0.6	3.2		+/-0.7	1.6	J	+/-0.4	1.6		
Thorium-227	pCi/g	0.4	40%	2	5															
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U		0.9		+/-0.3	0.9		+/-0.3	1	U	+/-0.4	1.3		
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U		1		+/-0.4	0.6		+/-0.2	0.7		+/-0.3	0.7		
Tritium	pCi/g	53.3	53%	26	49	0.1	U		0.1	U	+/-0.1	0.1	U	+/-0.1	20.5		+/-0.2	0.1	UJ	
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U		0.5	U	+/-0.2	0.6	UJ	+/-0.2	0.5		+/-0.2	0.4	J	
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U		0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	J	
Uranium-238	pCi/g	1	96%	47	49	0.5			0.3		+/-0.1	0.6	J	+/-0.2	0.7		+/-0.2	0.6	J	

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						MW12-10			SS12-197			SS12-198			SS12-199			SS12-200	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE ID						123007			123391			123392			123393			123394	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						9/29/1998			11/14/1998			11/14/1998			11/14/1998			11/14/1998	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N	
Bismuth-214	pCi/g	39.8	98%	48	49	1.4		+/-0.3	1.2		+/-0.3	1.1		+/-0.3	1.6		+/-0.3	1.9	
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	+/-0.2	0.5	J	+/-0.1	0.5	J	+/-0.1	0.5	J	+/-0.1	1	
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			0.1	U		0.1	U		0.1	U		0.1	
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U		0.1	U		0.1	U		0.1	U		0.1	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	+/-1.6	24.2	UJ		3.7	J	+/-2.1	26.2	UJ		3.3	
Lead-211	pCi/g	12.7	24%	12	49	1.4	U		0.6	U		2.7	U		4.3		+/-2.1	0.8	
Lead-214	pCi/g	44.4	100%	49	49	1.3		+/-0.3	1.3		+/-0.3	1.3		+/-0.3	1.2		+/-0.2	1.5	
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.2	
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ		0.4	U		0.4	U		0.3	U		0.4	
Radium-226	pCi/g	39.8	98%	48	49	1.4		+/-0.3	1.2		+/-0.3	1.1		+/-0.3	1.6		+/-0.3	1.9	
Radium-228	pCi/g	3.6	96%	47	49	1.6		+/-0.5	1.6		+/-0.4	1.3		+/-0.3	1.4		+/-0.4	1.4	
Thorium-227	pCi/g	0.4	40%	2	5														
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	+/-0.4	0.9	J	+/-0.4	1.2		+/-0.5	1.3	J	+/-0.5	1.2	
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	+/-0.3	0.9	J	+/-0.4	0.6		+/-0.3	1.4	J	+/-0.6	1.3	
Tritium	pCi/g	53.3	53%	26	49	0.1	U	+/-0.1	0.1	UJ	+/-0.1	24.1	J	+/-0.2	1.9	J	+/-0.1	0.5	
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U	+/-0.2	0.9		+/-0.3	0.6		+/-0.2	0.6		+/-0.2	0.6	
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	
Uranium-238	pCi/g	1	96%	47	49	0.5		+/-0.2	0.6	J	+/-0.2	0.6	J	+/-0.2	0.6	J	+/-0.2	0.8	

TABLE G-24
DISPOSAL PIT A/B RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			
LOCATION ID						MW12-10			
MATRIX						SOIL			
SAMPLE ID						123007			
DEPTH TO TOP OF SAMPLE						0			
DEPTH TO BOTTOM OF SAMPLE						0.2			
SAMPLE DATE						9/29/1998			
QC CODE						SA			
STUDY ID						RI Phase 1	Step 1	tep 1	
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	N			
Bismuth-214	pCi/g	39.8	98%	48	49	1.4			+/-0.4
Cesium-137	pCi/g	1.3	63%	31	49	0.2	J	J	+/-0.1
Cobalt-57	pCi/g	0.2	18%	9	49	0.1			+/-0.1
Cobalt-60	pCi/g	0.5	16%	8	49	0.1	U	U	
Lead-210	pCi/g	78.6	51%	25	49	19.4	U	J	+/-1.4
Lead-211	pCi/g	12.7	24%	12	49	1.4	U	U	
Lead-214	pCi/g	44.4	100%	49	49	1.3			+/-0.4
Plutonium-239/240	pCi/g	0.2	27%	13	49	0.2	UJ	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1				
Radium-223	pCi/g	1.5	8%	4	49	0.5	UJ	U	
Radium-226	pCi/g	39.8	98%	48	49	1.4			+/-0.4
Radium-228	pCi/g	3.6	96%	47	49	1.6			+/-0.4
Thorium-227	pCi/g	0.4	40%	2	5				
Thorium-230	pCi/g	2.3	53%	26	49	1.2	U	J	+/-0.5
Thorium-232	pCi/g	2.1	88%	43	49	1.1	U	J	+/-0.5
Tritium	pCi/g	53.3	53%	26	49	0.1	U	J	+/-0.1
Uranium-233/234	pCi/g	1.4	76%	37	49	0.4	U		+/-0.3
Uranium-235	pCi/g	0.3	24%	12	49	0.1	U		+/-0.1
Uranium-238	pCi/g	1	96%	47	49	0.5		J	+/-0.3

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-10			MW12-10			MW12-11			MW12-11			MW12-12		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123008			123009			123011			123012			123014		
DEPTH TO TOP OF SAMPLE						4			8			4			8			4		
DEPTH TO BOTTOM OF SAMPLE						5.7			9.8			5.6			10			6		
SAMPLE DATE						9/29/1998			9/29/1998			9/29/1998			9/29/1998			9/30/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID						RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES	N			N			N			N			N		
Actinium-228	pCi/g	0.91	100%	4	4															
Bismuth-214	pCi/g	25	96%	27	28	2.8		+/-0.6	1.5		+/-0.4	1.3		+/-0.3	2		+/-0.5	1.7		
Cesium-137	pCi/g	0.4	58%	14	24	0.1	UJ		0.1	J	+/-0.1	0.1	J	+/-0.1	0.4	J	+/-0.3	0.1	UJ	
Cobalt-57	pCi/g	0.3	38%	9	24	0.1		+/-0.1	0.1		+/-0.1	0.1	U		0.1	U		0.3		
Cobalt-60	pCi/g	0.6	50%	12	24	0.5		+/-0.1	0.1	U		0.1	U		0.3		+/-0.1	0.3		
Gross Alpha	pCi/g	74	100%	4	4															
Gross Beta	pCi/g	52	100%	4	4															
Lead-210	pCi/g	20.4	63%	15	24	5.6		+/-3.4	16	U		19.5		+/-18.2	5.3		+/-3	2	U	
Lead-211	pCi/g	13.4	38%	9	24	6.6		+/-2.7	3.7		+/-2.9	5.9		+/-2.2	2.6	U		2.3	U	
Lead-214	pCi/g	25	100%	28	28	2		+/-0.5	1		+/-0.3	1.4		+/-0.3	1.8		+/-0.4	2.2		
Plutonium-239/240	pCi/g	0.2	8%	2	24	0.1	UJ	+/-0.1	0.3	UJ	+/-0.1	0.3	UJ	+/-0.2	0.1	UJ	+/-0.2	0.3	UJ	
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	2.1	17%	4	24	0.5	UJ		0.4	UJ		0.4	J	+/-0.3	0.5	UJ		0.6	UJ	
Radium-226	pCi/g	2.8	96%	23	24	2.8		+/-0.6	1.5		+/-0.4	1.3		+/-0.3	2		+/-0.5	1.7		
Radium-228	pCi/g	2.5	100%	24	24	1.8		+/-0.6	1.4		+/-0.4	1.3		+/-0.5	1.9		+/-0.5	2.5		
Thallium-208	pCi/g	0.88	100%	4	4															
Thorium-227	pCi/g	0.3	50%	3	6															
Thorium-230	pCi/g	1.7	38%	9	24	1.4	U	+/-0.5	1.3	UJ	+/-0.7	1.9	U	+/-0.6	1.4	UJ	+/-0.6	1.4	UJ	
Thorium-232	pCi/g	1.2	63%	15	24	1	U	+/-0.4	0.4	UJ	+/-0.3	1	U	+/-0.4	1.6	UJ	+/-0.6	1.2	UJ	
Thorium-234	pCi/g	1.6	100%	4	4															
Tritium	pCi/g	0	0%	0	24	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	
Uranium-233/234	pCi/g	1	67%	16	24	0.5	U	+/-0.2	0.6		+/-0.2	0.8		+/-0.3	0.9		+/-0.3	0.6	U	
Uranium-235	pCi/g	0.1	25%	6	24	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Uranium-238	pCi/g	1.2	83%	20	24	0.4		+/-0.2	0.7		+/-0.2	0.7		+/-0.2	1.2		+/-0.3	0.7		

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							MW12-12			MW12-13			MW12-13			MW12-8			MW12-8
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID							123015			123017			123018			123184			123185
DEPTH TO TOP OF SAMPLE							9			4			8			4			8
DEPTH TO BOTTOM OF SAMPLE							11			6			9 6			6			10
SAMPLE DATE							9/30/1998			10/1/1998			10/1/1998			10/28/1998			10/28/1998
QC CODE							SA			SA			SA			SA			SA
STUDY ID							RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES		N			N			N			N			N
Actinium-228	pCi/g	0.91	100%	4	4														
Bismuth-214	pCi/g	25	96%	27	28	+/-0.5	1.7		+/-0.4	1.2		+/-0.2	2.8		+/-0.4	2.1		+/-0.5	1.5
Cesium-137	pCi/g	0.4	58%	14	24		0.3	J	+/-0.1	0.1	J	+/-0.1	0.1	UJ		0.4		+/-0.2	0.1
Cobalt-57	pCi/g	0.3	38%	9	24	+/-0.2	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U		0.1
Cobalt-60	pCi/g	0.6	50%	12	24	+/-0.1	0.2		+/-0.1	0.1	U		0.6		+/-0.2	0.3		+/-0.1	0.1
Gross Alpha	pCi/g	74	100%	4	4														
Gross Beta	pCi/g	52	100%	4	4														
Lead-210	pCi/g	20.4	63%	15	24		32.2	U		20.4		+/-18	3.6		+/-1.6	3.2	J	+/-2.8	4.5
Lead-211	pCi/g	13.4	38%	9	24		13.4		+/-7.6	6.8		+/-2.1	12.5		+/-5.3	1.7		+/-1	2.1
Lead-214	pCi/g	25	100%	28	28	+/-0.5	1.5		+/-0.4	1		+/-0.2	2		+/-0.5	1.7		+/-0 4	1.7
Plutonium-239/240	pCi/g	0.2	8%	2	24	+/-0.1	0.2	U	+/-0.1	0.2	UJ	+/-0.2	0.2	UJ	+/-0.2	0.1	U	+/-0.1	0.1
Promethium-147	pCi/g	0	0%	0	2														
Radium-223	pCi/g	2.1	17%	4	24		0.6	UJ		0.3	UJ		1.3	J	+/-0.6	0.4	U		0.4
Radium-226	pCi/g	2.8	96%	23	24	+/-0.5	1.7		+/-0.4	1.2		+/-0.2	2.8		+/-0.4	2.1		+/-0.5	1.5
Radium-228	pCi/g	2.5	100%	24	24	+/-0.7	2.1		+/-0.6	0.7		+/-0.3	2.5		+/-0.5	1.3	J	+/-0.4	1.9
Thallium-208	pCi/g	0.88	100%	4	4														
Thorium-227	pCi/g	0.3	50%	3	6														
Thorium-230	pCi/g	1.7	38%	9	24	+/-0.6	1.1	U	+/-0.4	0.6	UJ	+/-0.3	1.3	UJ	+/-0.5	0.9	J	+/-0.6	0.7
Thorium-232	pCi/g	1.2	63%	15	24	+/-0.5	1.2	U	+/-0.4	0.7	UJ	+/-0.3	1.1	UJ	+/-0.5	0.5		+/-0.4	0.8
Thorium-234	pCi/g	1.6	100%	4	4														
Tritium	pCi/g	0	0%	0	24	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1
Uranium-233/234	pCi/g	1	67%	16	24	+/-0.2	0.6		+/-0.2	0.4	U	+/-0.2	1		+/-0.3	0.5		+/-0.2	0 7
Uranium-235	pCi/g	0.1	25%	6	24	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1
Uranium-238	pCi/g	1.2	83%	20	24	+/-0.2	1		+/-0.3	0.3		+/-0.2	0.9		+/-0.3	0.5		+/-0.2	0.7

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID								SB12-2			SB12-2			SB12-2			SB12-2
MATRIX								SOIL			SOIL			SOIL			SOIL
SAMPLE ID								12532			123113			12533			123114
DEPTH TO TOP OF SAMPLE								0 2			6			8			10
DEPTH TO BOTTOM OF SAMPLE								2			8			10			12
SAMPLE DATE								11/10/1997 10:55			10/14/1998			11/10/1997 12:15			10/14/1998
QC CODE								SA			SA			SA			SA
STUDY ID						tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES			N			N			N			N
Actinium-228	pCi/g	0.91	100%	4	4												
Bismuth-214	pCi/g	25	96%	27	28		+/-0 4	2 4		+/-0 3	1.3		+/-0.4	1.5	U		1 5
Cesium-137	pCi/g	0.4	58%	14	24	U		0.2	U		0.2		+/-0.1	0 2	U		0 2
Cobalt-57	pCi/g	0.3	38%	9	24	U		0 1	U		0.1		+/-0.1	0.1	U		0 1
Cobalt-60	pCi/g	0.6	50%	12	24	U		0.1	U		0.6	J	+/-0.2	0.3	U		0.4
Gross Alpha	pCi/g	74	100%	4	4												
Gross Beta	pCi/g	52	100%	4	4												
Lead-210	pCi/g	20.4	63%	15	24	J	+/-2 1	2.9	U		4 5	J	+/-3.5	40.8	U		5
Lead-211	pCi/g	13.4	38%	9	24	U		2	U		0.8	UJ		5.4	U		1.6
Lead-214	pCi/g	25	100%	28	28		+/-0.4	3		+/-0.5	1.2		+/-0.3	1.1		+/-0.3	1 4
Plutonium-239/240	pCi/g	0.2	8%	2	24	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0 1	0.2		+/-0 1	0.1
Promethium-147	pCi/g	0	0%	0	2						3.9	UJ	+/-5.1				3
Radium-223	pCi/g	2 1	17%	4	24	U		0 4	U		0.7		+/-0.4	0.3	U		2 1
Radium-226	pCi/g	2.8	96%	23	24		+/-0.4	2.4		+/-0.3	1.3		+/-0.4	1.5	U		1 5
Radium-228	pCi/g	2.5	100%	24	24	J	+/-0.4	1.6		+/-0.5	1.6	J	+/-0.4	1.6		+/-0 5	2 1
Thallium-208	pCi/g	0.88	100%	4	4												
Thorium-227	pCi/g	0.3	50%	3	6			0 1	J	+/-0 2				0.3	UJ	+/-0 1	
Thorium-230	pCi/g	1.7	38%	9	24	J	+/-0 5	1 7	J	+/-0 9	1	U	+/-0.4	0.6	J	+/-0 6	0.8
Thorium-232	pCi/g	1.2	63%	15	24		+/-0.5	0.5	J	+/-0.4	0.9		+/-0.4	1.1	J	+/-0 7	0.7
Thorium-234	pCi/g	1.6	100%	4	4												
Tritium	pCi/g	0	0%	0	24	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0 1	0.1	UJ	+/-0 1	0 1
Uranium-233/234	pCi/g	1	67%	16	24		+/-0.2	0.7		+/-0 3	0.7		+/-0.3	0 7		+/-0 3	0.5
Uranium-235	pCi/g	0.1	25%	6	24	U	+/-0.1	0.1		+/-0 1	0.1	U	+/-0.1	0.1		+/-0 1	0.1
Uranium-238	pCi/g	1.2	83%	20	24		+/-0.2	0.8		+/-0 3	0.8		+/-0.3	0.6		+/-0 2	0 7

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID								SB12-3			SB12-3			SB12-4			SB12-4
MATRIX								SOIL			SOIL			SOIL			SOIL
SAMPLE ID								12525			12526			12528			12529
DEPTH TO TOP OF SAMPLE								1			10			2			4
DEPTH TO BOTTOM OF SAMPLE								4			11.9			4			6
SAMPLE DATE								11/9/1997 11:10			11/9/1997 12:55			11/9/1997 14:40			11/9/1997 15:50
QC CODE								SA			SA			SA			SA
STUDY ID						tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES			N			N			N			N
Actinium-228	pCi/g	0.91	100%	4	4												
Bismuth-214	pCi/g	25	96%	27	28		+/-0.4	1.3		+/-0.3	2.2		+/-0.5	1.1		+/-0.3	1.7
Cesium-137	pCi/g	0.4	58%	14	24		+/-0.1	0.4	U		0.2	U		0.1	U		0.1
Cobalt-57	pCi/g	0.3	38%	9	24		+/-0.1	0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.6	50%	12	24	J	+/-0.1	0.2	U		0.2	U		0.3	U		0.2
Gross Alpha	pCi/g	74	100%	4	4												
Gross Beta	pCi/g	52	100%	4	4												
Lead-210	pCi/g	20.4	63%	15	24	J	+/-3	18.3	U		4	U		20.7	U		3.7
Lead-211	pCi/g	13.4	38%	9	24	UJ		2.4	U		10	U		4.4	U		9.1
Lead-214	pCi/g	25	100%	28	28		+/-0.4	1.5		+/-0.2	2		+/-0.4	1.6		+/-0.3	1.5
Plutonium-239/240	pCi/g	0.2	8%	2	24	U	+/-0.1	0.1	J	+/-0.1	0.3	UJ	+/-0.1	0.2	UJ	+/-0.1	0.2
Promethium-147	pCi/g	0	0%	0	2	UJ	+/-5.1										
Radium-223	pCi/g	2.1	17%	4	24		+/-1.2	0.4	U		0.5	U		0.4	U		0.4
Radium-226	pCi/g	2.8	96%	23	24		+/-0.4	1.3		+/-0.3	2.2		+/-0.5	1.1		+/-0.3	1.7
Radium-228	pCi/g	2.5	100%	24	24	J	+/-0.6	1.2		+/-0.4	2		+/-0.6	1.5		+/-0.4	1.8
Thallium-208	pCi/g	0.88	100%	4	4												
Thorium-227	pCi/g	0.3	50%	3	6			0.3		+/-0.4	0.1		+/-0.3	0.4	U	+/-0 1	0.1
Thorium-230	pCi/g	1.7	38%	9	24	U	+/-0.3	1.5	UJ	+/-0.8	1.4	UJ	+/-0.9	0.8	UJ	+/-0.6	1
Thorium-232	pCi/g	1.2	63%	15	24		+/-0.3	1.1	J	+/-0.7	1.2	J	+/-0.7	0.7	J	+/-0.5	0.5
Thorium-234	pCi/g	1.6	100%	4	4												
Tritium	pCi/g	0	0%	0	24	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1
Uranium-233/234	pCi/g	1	67%	16	24	U	+/-0.2	0.4	U	+/-0.2	1.3	U	+/-0.5	1	UJ	+/-0.5	0.6
Uranium-235	pCi/g	0.1	25%	6	24	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.2	0.2	UJ	+/-0.1	0.1
Uranium-238	pCi/g	1.2	83%	20	24		+/-0.3	0.7	U	+/-0.3	1	U	+/-0.4	0.6	UJ	+/-0.3	0.4

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID							TP12-1A			TP12-1B			TP12-1C			TP12-2A		
MATRIX							SOIL			SOIL			SOIL			SOIL		
SAMPLE ID							123142			123143			123144			123145		
DEPTH TO TOP OF SAMPLE							0.5			3			6			3		
DEPTH TO BOTTOM OF SAMPLE							0.5			3			6			3		
SAMPLE DATE							10/16/1998			10/16/1998			10/16/1998			10/16/1998		
QC CODE							SA			SA			SA			SA		
STUDY ID							RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES													
							N			N			N			N		
Actinium-228	pCi/g	0.91	100%	4	4													
Bismuth-214	pCi/g	25	96%	27	28		+/-0.4	2.4	J	+/-0.5	1.8	J	+/-0.4	1.9	J	+/-0.5	1.7	J
Cesium-137	pCi/g	0.4	58%	14	24	U		0.3		+/-0.1	0.4		+/-0.1	0.3		+/-0.2	0.2	J
Cobalt-57	pCi/g	0.3	38%	9	24	U		0.1	U		0.1	U	+/-0.1	0.1		+/-0.1	0.1	U
Cobalt-60	pCi/g	0.6	50%	12	24	U		0.1	UJ		0.1	UJ		0.6	J	+/-0.2	0.2	J
Gross Alpha	pCi/g	74	100%	4	4													
Gross Beta	pCi/g	52	100%	4	4													
Lead-210	pCi/g	20.4	63%	15	24	U		3.3		+/-2.2	4.9		+/-3	4.2		+/-4	6.2		
Lead-211	pCi/g	13.4	38%	9	24	U		2.1	UJ		0.7	UJ		1.8	UJ		6	J
Lead-214	pCi/g	25	100%	28	28		+/-0.3	1.7		+/-0.5	1.9		+/-0.4	1.9		+/-0.5	1.2		
Plutonium-239/240	pCi/g	0.2	8%	2	24	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U
Promethium-147	pCi/g	0	0%	0	2													
Radium-223	pCi/g	2.1	17%	4	24	U		0.5	U		0.5	U		0.5	U		0.5	U	
Radium-226	pCi/g	2.8	96%	23	24		+/-0.4	2.4	J	+/-0.5	1.8	J	+/-0.4	1.9	J	+/-0.5	1.7	J
Radium-228	pCi/g	2.5	100%	24	24		+/-0.4	1.2		+/-0.4	1.8		+/-0.5	2.3		+/-0.7	2.1		
Thallium-208	pCi/g	0.88	100%	4	4													
Thorium-227	pCi/g	0.3	50%	3	6	UJ	+/-0.3												
Thorium-230	pCi/g	1.7	38%	9	24	UJ	+/-0.8	1.1	J	+/-0.4	0.8	J	+/-0.3	0.8	J	+/-0.3	1	J
Thorium-232	pCi/g	1.2	63%	15	24	UJ	+/-0.5	0.6	J	+/-0.2	0.7	J	+/-0.3	0.8	J	+/-0.3	0.9	J
Thorium-234	pCi/g	1.6	100%	4	4													
Tritium	pCi/g	0	0%	0	24	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U
Uranium-233/234	pCi/g	1	67%	16	24	UJ	+/-0.3	0.7	J	+/-0.2	0.5		+/-0.2	0.8		+/-0.3	0.6	J
Uranium-235	pCi/g	0.1	25%	6	24	UJ	+/-0.1	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U
Uranium-238	pCi/g	1.2	83%	20	24	UJ	+/-0.2	0.4	J	+/-0.2	0.8	J	+/-0.2	0.6	J	+/-0.2	0.5	J

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							TP12-2B			TP12-2C			TP12A-1			TP12A-1			TP12A-2
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID							123146			123147			TP12A-1-1			TP12A-1-2			TP12A-2-
DEPTH TO TOP OF SAMPLE							3.5			6			2.5			3			5
DEPTH TO BOTTOM OF SAMPLE							3.5			6			2.5			3			5
SAMPLE DATE							10/16/1998			10/16/1998			6/24/1994			6/24/1994			6/22/1994
QC CODE							SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF		RI Phase 1 Step 1			RI Phase 1 Step 1			ESI			ESI			ESI
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES		N			N			N			N			N
Actinium-228	pCi/g	0.91	100%	4	4								0.74		+/-0.33	0.91		+/-0.34	0.81
Bismuth-214	pCi/g	25	96%	27	28	+/-0.4	1.9	J	+/-0.5	2.2	J	+/-0.5	7		+/-0.8	25		+/-2	1.8
Cesium-137	pCi/g	0.4	58%	14	24	+/-0.1	0.2		+/-0.2	0.3		+/-0.2							
Cobalt-57	pCi/g	0.3	38%	9	24		0.1	U		0.1	U								
Cobalt-60	pCi/g	0.6	50%	12	24	+/-0.1	0.2	J	+/-0.1	0.2	J	+/-0.1							
Gross Alpha	pCi/g	74	100%	4	4								17		+/-8	74		+/-14	15
Gross Beta	pCi/g	52	100%	4	4								33		+/-6	52		+/-7	27
Lead-210	pCi/g	20.4	63%	15	24	+/-3.2	5.5		+/-2.8	5.9		+/-2.7							
Lead-211	pCi/g	13.4	38%	9	24	+/-2.4	5.3	J	+/-4.3	1.9	UJ								
Lead-214	pCi/g	25	100%	28	28	+/-0.5	1.5		+/-0.6	1.5		+/-0.4	6.9		+/-0.8	25		+/-2	1.9
Plutonium-239/240	pCi/g	0.2	8%	2	24	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1							
Promethium-147	pCi/g	0	0%	0	2														
Radium-223	pCi/g	2.1	17%	4	24		0.5	U		0.5	U								
Radium-226	pCi/g	2.8	96%	23	24	+/-0.4	1.9	J	+/-0.5	2.2	J	+/-0.5							
Radium-228	pCi/g	2.5	100%	24	24	+/-0.5	1.9		+/-0.6	1.4		+/-0.6							
Thallium-208	pCi/g	0.88	100%	4	4								0.43		+/-0.27	0.88		+/-1.4	0.49
Thorium-227	pCi/g	0.3	50%	3	6														
Thorium-230	pCi/g	1.7	38%	9	24	+/-0.3	0.9	J	+/-0.3	0.6	UJ	+/-0.2							
Thorium-232	pCi/g	1.2	63%	15	24	+/-0.3	0.7	J	+/-0.3	0.9	J	+/-0.3							
Thorium-234	pCi/g	1.6	100%	4	4								0.91		+/-0.48	1.6		+/-0.6	0.56
Tritium	pCi/g	0	0%	0	24	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1							
Uranium-233/234	pCi/g	1	67%	16	24	+/-0.2	0.6		+/-0.2	0.6	J	+/-0.2							
Uranium-235	pCi/g	0.1	25%	6	24	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1							
Uranium-238	pCi/g	1.2	83%	20	24	+/-0.2	0.8	J	+/-0.2	0.6	J	+/-0.2							

TABLE G-25
DISPOSAL PIT A/B RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12		
LOCATION ID							TP12A-2		
MATRIX							SOIL		
SAMPLE ID							TP12A-2-1		
DEPTH TO TOP OF SAMPLE							6		
DEPTH TO BOTTOM OF SAMPLE							6		
SAMPLE DATE							6/22/1994		
QC CODE							SA		
STUDY ID							ESI		
PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES		N		
Actinium-228	pCi/g	0.91	100%	4	4	+/-0.27	0.84		+/-0.23
Bismuth-214	pCi/g	25	96%	27	28	+/-0.2	1.7		+/-0.3
Cesium-137	pCi/g	0.4	58%	14	24				
Cobalt-57	pCi/g	0.3	38%	9	24				
Cobalt-60	pCi/g	0.6	50%	12	24				
Gross Alpha	pCi/g	74	100%	4	4	+/-7	21		+/-7
Gross Beta	pCi/g	52	100%	4	4	+/-6	28		+/-6
Lead-210	pCi/g	20.4	63%	15	24				
Lead-211	pCi/g	13.4	38%	9	24				
Lead-214	pCi/g	25	100%	28	28	+/-0.2	1.6		+/-0.2
Plutonium-239/240	pCi/g	0.2	8%	2	24				
Promethium-147	pCi/g	0	0%	0	2				
Radium-223	pCi/g	2.1	17%	4	24				
Radium-226	pCi/g	2.8	96%	23	24				
Radium-228	pCi/g	2.5	100%	24	24				
Thallium-208	pCi/g	0.88	100%	4	4	+/-0.74	0.35		+/-0.21
Thorium-227	pCi/g	0.3	50%	3	6				
Thorium-230	pCi/g	1.7	38%	9	24				
Thorium-232	pCi/g	1.2	63%	15	24				
Thorium-234	pCi/g	1.6	100%	4	4	+/-0.43	0.31		+/-0.29
Tritium	pCi/g	0	0%	0	24				
Uranium-233/234	pCi/g	1	67%	16	24				
Uranium-235	pCi/g	0.1	25%	6	24				
Uranium-238	pCi/g	1.2	83%	20	24				

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-14			MW12-15			MW12-33			MW12-34			MW12-7		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123099			123028			123195			123198			123180		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						14-Oct-98			01-Oct-98			31-Oct-98			31-Oct-98			28-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	1.9		+/-0.6	1.6		+/-0.4	2.1		+/-0.6	1.7		+/-0.4	1.8		+/-0.4
Cesium-137	pCi/g	1.3	59%	33	56	1.3		+/-0.3	0.6	J	+/-0.1	0.4	J	+/-0.1	0.3	J	+/-0.1	0.6		+/-0.2
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	UJ		0.7		+/-0.2	0.3	J	+/-0.2	0.3	J	+/-0.1	0.3		+/-0.1
Lead-210	pCi/g	68.9	52%	29	56	6.5	J	+/-4.4	3.8	J	+/-2.5	5	J	+/-2.9	3.9	J	+/-2.6	3.6	J	+/-2.2
Lead-211	pCi/g	20.3	13%	7	56	12.8	J	+/-5.9	13.5	J	+/-6.4	0.9	UJ		0.3	UJ		1.4	U	
Lead-214	pCi/g	3.4	100%	56	56	1.5		+/-0.5	1.8		+/-0.5	1.6	J	+/-0.5	1.9	J	+/-0.5	1.4		+/-0.5
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.1	U	+/-0.1	0.1	UJ	+/-0.2	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1	6.9	UJ	+/-5.2												
Radium-223	pCi/g	1.7	13%	7	56	0.5	U		0.9		+/-0.6	0.9	J	+/-0.5	0.4	UJ		0.4	U	
Radium-226	pCi/g	5.8	100%	56	56	1.9		+/-0.6	1.6		+/-0.4	2.1		+/-0.6	1.7		+/-0.4	1.8		+/-0.4
Radium-228	pCi/g	3.5	95%	53	56	1.5	J	+/-0.7	1.9		+/-0.6	1.8		+/-0.5	2.2		+/-0.5	1.3	J	+/-0.4
Thorium-230	pCi/g	1.4	50%	28	56	1	U	+/-0.4	1		+/-0.4	1	J	+/-0.5	0.8	J	+/-0.4	0.4	J	+/-0.4
Thorium-232	pCi/g	1.3	98%	55	56	0.1		+/-0.1	0.8		+/-0.4	1.1	J	+/-0.5	1	J	+/-0.5	0.5		+/-0.3
Tritium	pCi/g	130	64%	36	56	5.1	J	+/-0.1	0.1	U	+/-0.1	101		+/-0.4	0.2		+/-0.1	0.5	UJ	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	0.7		+/-0.2	0.5		+/-0.2	0.9	J	+/-0.4	1.2	J	+/-0.3	0.7		+/-0.3
Uranium-235	pCi/g	0.4	39%	22	56	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	0.7		+/-0.3	0.3		+/-0.2	0.9		+/-0.4	0.7	J	+/-0.2	0.8		+/-0.3

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-147			SS12-148			SS12-149			SS12-150			SS12-151		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123342			123343			123344			123345			123346		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						13-Nov-98			16-Nov-98			13-Nov-98			17-Nov-98			13-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	1.8		+/-0.5	1.8	J	+/-0.5	1.5		+/-0.2	2.3	J	+/-0.4	1.8		+/-0.5
Cesium-137	pCi/g	1.3	59%	33	56	0.1	UJ		0.8		+/-0.2	0.1	U		0.1	U		1		+/-0.2
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1		+/-0.1
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	20.8	U		19	U		1.2	U		4.1		+/-3.6	5		+/-2.1
Lead-211	pCi/g	20.3	13%	7	56	0.9	U		1.3	UJ		2.6	U		20.3	J	+/-4.7	1.5	U	
Lead-214	pCi/g	3.4	100%	56	56	1.2		+/-0.3	1.1	J	+/-0.3	1.7		+/-0.4	2	J	+/-0.4	1.4		+/-0.5
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.2	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.7	13%	7	56	0.4	U		0.5	U		0.5	U		0.6	U		0.4	U	
Radium-226	pCi/g	5.8	100%	56	56	1.8		+/-0.5	1.8	J	+/-0.5	1.5		+/-0.2	2.3	J	+/-0.4	1.8		+/-0.5
Radium-228	pCi/g	3.5	95%	53	56	1.5		+/-0.4	2.5	J	+/-0.6	2.4		+/-0.5	0.1	UJ		2		+/-0.4
Thorium-230	pCi/g	1.4	50%	28	56	0.7	U	+/-0.3	1	U	+/-0.3	1.1	UJ	+/-0.6	1.1	U	+/-0.4	0.5	UJ	+/-0.3
Thorium-232	pCi/g	1.3	98%	55	56	0.8		+/-0.3	0.7		+/-0.3	1.3	J	+/-0.6	1		+/-0.3	1.2	J	+/-0.5
Tritium	pCi/g	130	64%	36	56	0.2		+/-0.1	87.4		+/-0.5	1.6		+/-0.1	11.1		+/-0.2	4.5		+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	0.8	U	+/-0.3	0.9		+/-0.3	0.6	U	+/-0.2	0.8		+/-0.3	0.7	J	+/-0.2
Uranium-235	pCi/g	0.4	39%	22	56	0.2		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	0.6		+/-0.3	0.8		+/-0.3	0.8	J	+/-0.3	1		+/-0.3	0.7	J	+/-0.2

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						SS12-152			SS12-153			SS12-154			SS12-155			SS12-155	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE DATE						123347			123348			123349			123350			123479	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						13-Nov-98			13-Nov-98			13-Nov-98			17-Nov-98			17-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1	
			OF	OF	OF														
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)
Bismuth-214	pCi/g	5.8	100%	56	56	1		+/-0.2	1.7		+/-0.4	1.3		+/-0.3	1.9	J	+/-0.4	1.2	J
Cesium-137	pCi/g	1.3	59%	33	56	0.7		+/-0.1	0.1	U		0.5		+/-0.3	0.1	U		0.1	U
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1	U
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	68.9	52%	29	56	27.8	U		2.2		+/-1.5	4.1		+/-2	31.7	U		25.5	J
Lead-211	pCi/g	20.3	13%	7	56	0.6	U		2	U		3.1	U		3	UJ		1.7	UJ
Lead-214	pCi/g	3.4	100%	56	56	1		+/-0.3	1.3		+/-0.3	1.5		+/-0.3	1.9	J	+/-0.4	1.3	
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.2	UJ	+/-0.1	0.1		+/-0.1	0.2	U
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.7	13%	7	56	1.5		+/-0.3	0.4	U		0.4	U		0.6	U		0.4	U
Radium-226	pCi/g	5.8	100%	56	56	1		+/-0.2	1.7		+/-0.4	1.3		+/-0.3	1.9	J	+/-0.4	1.2	J
Radium-228	pCi/g	3.5	95%	53	56	1.7		+/-0.4	1.4		+/-0.4	1.7		+/-0.6	1.6	J	+/-0.6	1.8	J
Thorium-230	pCi/g	1.4	50%	28	56	1.5	UJ	+/-0.6	0.8	U	+/-0.4	1.1	U	+/-0.4	1.3	U	+/-0.4	0.8	
Thorium-232	pCi/g	1.3	98%	55	56	1.1	J	+/-0.5	0.6	U	+/-0.3	0.8		+/-0.3	1.1		+/-0.4	0.8	
Tritium	pCi/g	130	64%	36	56	4.7		+/-0.2	0.1		+/-0.1	11.9	J	+/-0.2	6.4		+/-0.1	6.8	J
Uranium-234	pCi/g	1.2	79%	44	56	0.6	U	+/-0.2	0.6		+/-0.2	0.9	J	+/-0.4	1		+/-0.3	0.9	
Uranium-235	pCi/g	0.4	39%	22	56	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U
Uranium-238	pCi/g	1.3	98%	55	56	0.8	J	+/-0.2	0.6	J	+/-0.2	1		+/-0.4	1		+/-0.3	1	J

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							SS12-156			SS12-157			SS12-158			SS12-159			SS12-160
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE DATE							123351			123352			123353			123354			123355
DEPTH TO TOP OF SAMPLE							0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE							0.2			0.2			0.2			0.2			0.2
SAMPLE DATE							13-Nov-98			13-Nov-98			16-Nov-98			13-Nov-98			13-Nov-98
QC CODE							SA			SA			SA			SA			SA
STUDY ID			FREQUENCY	NUMBER	NUMBER		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1
			OF	OF	OF														
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE
Bismuth-214	pCi/g	5.8	100%	56	56	+/-0.3	1.1		+/-0.2	1.4		+/-0.4	5.8	J	+/-0.8	1.8		+/-0.4	2.5
Cesium-137	pCi/g	1.3	59%	33	56		0.1	U		0.3		+/-0.1	1		+/-0.3	0.1	UJ		0.6
Cobalt-57	pCi/g	0.2	18%	10	56		0.1		+/-0.1	0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.7	11%	6	56		0.1	U		0.1	U		0.1	U		0.1	U		0.1
Lead-210	pCi/g	68.9	52%	29	56	+/-25.2	24.2	U		4.4		+/-2.7	4.7		+/-4.5	33.5	U		2.2
Lead-211	pCi/g	20.3	13%	7	56		0.7	U		2.8	U		5.7	J	+/-5.3	2.5	U		2.4
Lead-214	pCi/g	3.4	100%	56	56	+/-0.2	0.9		+/-0.2	2		+/-0.4	3.4	J	+/-0.6	1.3		+/-0.2	2.6
Plutonium-239/240	pCi/g	0.2	13%	7	56	+/-0.1	0.3	UJ	+/-0.1	0.2	UJ	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.2
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.7	13%	7	56		0.3	U		0.5	U		0.6	U		0.5	U		0.5
Radium-226	pCi/g	5.8	100%	56	56	+/-0.3	1.1		+/-0.2	1.4		+/-0.4	5.8	J	+/-0.8	1.8		+/-0.4	2.5
Radium-228	pCi/g	3.5	95%	53	56	+/-0.5	1.6		+/-0.4	2.4		+/-0.5	2.7	J	+/-0.6	2		+/-0.5	2.5
Thorium-230	pCi/g	1.4	50%	28	56	+/-0.3	0.9	U	+/-0.4	1.3	U	+/-0.4	1	U	+/-0.3	1.4	U	+/-0.5	1
Thorium-232	pCi/g	1.3	98%	55	56	+/-0.3	1		+/-0.4	1		+/-0.3	0.9		+/-0.3	1.2		+/-0.4	1
Tritium	pCi/g	130	64%	36	56	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1	0.3		+/-0.1	1.1		+/-0.1	1.3
Uranium-234	pCi/g	1.2	79%	44	56	+/-0.3	0.3	J	+/-0.3	0.6	J	+/-0.3	0.8		+/-0.3	1	U	+/-0.3	0.9
Uranium-235	pCi/g	0.4	39%	22	56	+/-0.1	0.2		+/-0.2	0.2	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1
Uranium-238	pCi/g	1.3	98%	55	56	+/-0.3	0.8		+/-0.4	0.6		+/-0.3	1		+/-0.3	0.5		+/-0.2	0.7

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID								SS12-161			SS12-162			SS12-163			SS12-164		
MATRIX								SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE								123356			123357			123358			123359		
DEPTH TO TOP OF SAMPLE								0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE								0.2			0.2			0.2			0.2		
SAMPLE DATE								13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98		
QC CODE								SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF														
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56		+/-0.5	1.1		+/-0.3	1.3		+/-0.4	1.2		+/-0.3	1.7		+/-0.3
Cesium-137	pCi/g	1.3	59%	33	56	J	+/-0.3	0.9		+/-0.2	0.7		+/-0.3	0.7		+/-0.2	0.1	U	
Cobalt-57	pCi/g	0.2	18%	10	56	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	U		43.3		+/-27.1	2.9		+/-1.8	19.9	U		16.4	U	
Lead-211	pCi/g	20.3	13%	7	56	U		1.5	U		2.4	U		1.3	U		2.2	U	
Lead-214	pCi/g	3.4	100%	56	56		+/-0.5	1.2		+/-0.3	1.4		+/-0.3	1.1		+/-0.2	1.3		+/-0.4
Plutonium-239/240	pCi/g	0.2	13%	7	56	U	+/-0.1	0.1	UJ	+/-0.1	0.2	UJ	+/-0.1	0.1	UJ	+/-0.1	0.2	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.7	13%	7	56	U		0.5	U		0.4	U		0.3	U		0.4	U	
Radium-226	pCi/g	5.8	100%	56	56		+/-0.5	1.1		+/-0.3	1.3		+/-0.4	1.2		+/-0.3	1.7		+/-0.3
Radium-228	pCi/g	3.5	95%	53	56		+/-0.6	2		+/-0.6	2.1		+/-0.4	2.1		+/-0.4	0.1	U	
Thorium-230	pCi/g	1.4	50%	28	56	U	+/-0.3	0.9	U	+/-0.4	1.3	UJ	+/-0.6	1.2	UJ	+/-0.6	1.3		+/-0.5
Thorium-232	pCi/g	1.3	98%	55	56		+/-0.3	0.9		+/-0.4	0.8	J	+/-0.4	1	J	+/-0.5	0.9		+/-0.4
Tritium	pCi/g	130	64%	36	56		+/-0.1	1.3		+/-0.1	0.1	U	+/-0.1	0.4		+/-0.1	3.7	J	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	U	+/-0.3	0.8	J	+/-0.3	0.7		+/-0.2	0.7	J	+/-0.2	1	J	+/-0.5
Uranium-235	pCi/g	0.4	39%	22	56		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56		+/-0.3	0.9	J	+/-0.3	0.6	UJ	+/-0.2	0.7	J	+/-0.2	0.8		+/-0.4

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-165			SS12-166			SS12-18			SS12-201			SS12-201		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123360			123361			123103			123430			123395		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						13-Nov-98			13-Nov-98			13-Oct-98			16-Nov-98			14-Nov-98		
QC CODE						SA			SA			SA			DU			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	2		+/-0.5	1.5		+/-0.4	1.3	J	+/-0.4	1.4		+/-0.3	1.5		+/-0.4
Cesium-137	pCi/g	1.3	59%	33	56	0.1	UJ		0.9		+/-0.2	0.2	J	+/-0.2	0.7	J	+/-0.2	0.8	J	+/-0.2
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.4	J	+/-0.1	0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	1.6	U		2.8		+/-2	3.3	J	+/-2	17.8	UJ		2.4	J	+/-2.3
Lead-211	pCi/g	20.3	13%	7	56	1.4	U		2	U		1.3	UJ		0.9	U		3.1	U	
Lead-214	pCi/g	3.4	100%	56	56	2		+/-0.4	1.2		+/-0.3	1.9		+/-0.4	1.1		+/-0.3	1.6		+/-0.5
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.2	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.7	13%	7	56	0.5	U		0.4	U		0.7	U	+/-0.4	0.4	U		0.5	U	
Radium-226	pCi/g	5.8	100%	56	56	2		+/-0.5	1.5		+/-0.4	1.3	J	+/-0.4	1.4		+/-0.3	1.5		+/-0.4
Radium-228	pCi/g	3.5	95%	53	56	2.4		+/-0.5	1.2		+/-0.3	1.3		+/-0.5	1.9		+/-0.6	2.3		+/-0.5
Thorium-230	pCi/g	1.4	50%	28	56	0.9	U	+/-0.3	1.1	U	+/-0.4	0.9	U	+/-0.4	1.3	J	+/-0.5	0.6	J	+/-0.3
Thorium-232	pCi/g	1.3	98%	55	56	0.7		+/-0.3	0.9		+/-0.4	0.7	J	+/-0.3	0.8		+/-0.3	1		+/-0.4
Tritium	pCi/g	130	64%	36	56	4.9		+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.2	J	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	0.8	U	+/-0.3	0.7	U	+/-0.3	1	UJ	+/-0.3	0.6	U	+/-0.2	0.8	J	+/-0.2
Uranium-235	pCi/g	0.4	39%	22	56	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	1		+/-0.4	0.6	J	+/-0.2	0.8	J	+/-0.2	0.7		+/-0.2	0.7	J	+/-0.2

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-202			SS12-203			SS12-204			SS12-205			SS12-206		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123397			123398			123399			123400			123401		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						14-Nov-98			14-Nov-98			14-Nov-98			14-Nov-98			14-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	1.6		+/-0.5	1		+/-0.6	2		+/-0.5	1.4		+/-0.4	1.7		+/-0.5
Cesium-137	pCi/g	1.3	59%	33	56	0.3	J	+/-0.1	0.4	J	+/-0.1	0.3	J	+/-0.2	0.1	UJ		0.3	J	+/-0.2
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	20.8	U		1.6	U		1.2	U		53.9		+/-49	5.9		+/-3.6
Lead-211	pCi/g	20.3	13%	7	56	2.5	U		2.4	U		10.3		+/-3.5	3.1	U		2.9	U	
Lead-214	pCi/g	3.4	100%	56	56	1.4		+/-0.3	1.3		+/-0.3	1.2		+/-0.3	1.3		+/-0.3	1.6		+/-0.4
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.4	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.7	13%	7	56	0.4	U		0.4	U		0.4	U		0.4	U		0.5	U	
Radium-226	pCi/g	5.8	100%	56	56	1.6		+/-0.5	1		+/-0.6	2		+/-0.5	1.4		+/-0.4	1.7		+/-0.5
Radium-228	pCi/g	3.5	95%	53	56	1.7		+/-0.5	1.1		+/-0.5	1.2		+/-0.5	1.8		+/-0.4	1.5		+/-0.5
Thorium-230	pCi/g	1.4	50%	28	56	0.6		+/-0.3	0.7		+/-0.3	0.8		+/-0.3	1.1		+/-0.4	0.9		+/-0.3
Thorium-232	pCi/g	1.3	98%	55	56	1.2		+/-0.4	0.9		+/-0.3	0.7		+/-0.3	0.9		+/-0.3	0.7		+/-0.3
Tritium	pCi/g	130	64%	36	56	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	130		+/-0.4
Uranium-234	pCi/g	1.2	79%	44	56	0.8		+/-0.3	0.6	U	+/-0.2	0.6	U	+/-0.2	0.7	J	+/-0.3	0.9		+/-0.3
Uranium-235	pCi/g	0.4	39%	22	56	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	1		+/-0.3	0.6		+/-0.2	0.9		+/-0.3	0.7	J	+/-0.2	0.8		+/-0.3

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-207			SS12-208			SS12-210			SS12-211			SS12-212		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123402			123403			123405			123406			123407		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						17-Nov-98			14-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	2.6	J	+/-0.5	1.8		+/-0.4	1.9	J	+/-0.5	1.3	J	+/-0.3	1.7		+/-0.4
Cesium-137	pCi/g	1.3	59%	33	56	0.1	U		0.1	UJ		0.1	U		0.1	U		0.1	UJ	
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.2		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.3		+/-0.1	0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	4.6		+/-2.2	31.6	U		1.8	UJ		21.5	UJ		1.9	U	
Lead-211	pCi/g	20.3	13%	7	56	3.5	UJ		0.9	U		2.4	U		1.6	U		2.7	U	
Lead-214	pCi/g	3.4	100%	56	56	2.1	J	+/-0.5	1.4		+/-0.4	1.8	J	+/-0.4	1.1	J	+/-0.2	1.6		+/-0.4
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.2		+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.7	13%	7	56	0.5	U		0.6		+/-0.3	0.5	UJ		0.4	UJ		0.5	U	
Radium-226	pCi/g	5.8	100%	56	56	2.6	J	+/-0.5	1.8		+/-0.4	1.9	J	+/-0.5	1.3	J	+/-0.3	1.7		+/-0.4
Radium-228	pCi/g	3.5	95%	53	56	2.2	J	+/-0.5	1.5		+/-0.5	2		+/-0.5	1.8		+/-0.4	1.6		+/-0.4
Thorium-230	pCi/g	1.4	50%	28	56	1.4	U	+/-0.5	1		+/-0.4	0.9	J	+/-0.4	0.9	J	+/-0.4	0.7		+/-0.3
Thorium-232	pCi/g	1.3	98%	55	56	0.9		+/-0.4	0.8		+/-0.3	0.7	J	+/-0.4	0.8	J	+/-0.4	0.5		+/-0.2
Tritium	pCi/g	130	64%	36	56	0.1	U	+/-0.1	4.9		+/-0.2	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	0.8		+/-0.3	0.7		+/-0.3	0.4		+/-0.2	0.6		+/-0.3	0.5	U	+/-0.2
Uranium-235	pCi/g	0.4	39%	22	56	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	0.5		+/-0.2	0.8		+/-0.3	0.8		+/-0.3	0.5		+/-0.2	0.6		+/-0.2

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-213			SS12-214			SS12-215			SS12-216			SS12-217		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE DATE						123408			123409			123410			123411			123412		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	1.6	J	+/-0.3	1.6	J	+/-0.3	2.1	J	+/-0.6	3.3	J	+/-0.5	2.2	J	+/-0.6
Cesium-137	pCi/g	1.3	59%	33	56	0.1	U		0.1	U		0.4		+/-0.2	0.3		+/-0.2	0.3		+/-0.1
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	34.5	UJ		38.1	UJ		1.7	UJ		3.6	J	+/-2.2	4.7	J	+/-1.9
Lead-211	pCi/g	20.3	13%	7	56	4.3		+/-1.9	2.8	U		0.6	U		3.6	U		2.2	U	
Lead-214	pCi/g	3.4	100%	56	56	1	J	+/-0.3	1.3	J	+/-0.3	2.1	J	+/-0.5	2.2	J	+/-0.4	1.5	J	+/-0.4
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	1.7	13%	7	56	0.4	UJ		0.3	UJ		0.5	UJ		0.5	UJ		0.4	UJ	
Radium-226	pCi/g	5.8	100%	56	56	1.6	J	+/-0.3	1.6	J	+/-0.3	2.1	J	+/-0.6	3.3	J	+/-0.5	2.2	J	+/-0.6
Radium-228	pCi/g	3.5	95%	53	56	1.5		+/-0.5	1.5		+/-0.4	1.9		+/-0.5	2.1		+/-0.5	1.8		+/-0.4
Thorium-230	pCi/g	1.4	50%	28	56	1		+/-0.4	1.2	J	+/-0.5	0.9		+/-0.4	0.8		+/-0.3	0.9		+/-0.4
Thorium-232	pCi/g	1.3	98%	55	56	1.3		+/-0.5	1.1	J	+/-0.5	0.9		+/-0.4	0.9		+/-0.4	1		+/-0.4
Tritium	pCi/g	130	64%	36	56	0.7	J	+/-0.1	0.2	J	+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56	0.8		+/-0.3	0.7		+/-0.3	0.6		+/-0.3	0.8		+/-0.3	0.6		+/-0.2
Uranium-235	pCi/g	0.4	39%	22	56	0.1		+/-0.1	0.1		+/-0.1	0.4		+/-0.3	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56	0.6		+/-0.3	0.9		+/-0.3	0.9		+/-0.4	0.6		+/-0.2	0.9		+/-0.3

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12	
LOCATION ID						SS12-218			SS12-219			SS12-220			SS12-222			SS12-223	
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL	
SAMPLE DATE						123413			123414			123415			123417B			123418	
DEPTH TO TOP OF SAMPLE						0			0			0			0			0	
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2	
SAMPLE DATE						17-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98	
QC CODE						SA			SA			SA			SA			SA	
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1	
			OF	OF	OF														
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)
Bismuth-214	pCi/g	5.8	100%	56	56	1.7	J	+/-0.3	1.8		+/-0.3	0.9	J	+/-0.3	2.1	J	+/-0.5	4.8	
Cesium-137	pCi/g	1.3	59%	33	56	0.1	U		0.1	U		0.1	U		0.5		+/-0.1	0.9	
Cobalt-57	pCi/g	0.2	18%	10	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	
Cobalt-60	pCi/g	0.7	11%	6	56	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U
Lead-210	pCi/g	68.9	52%	29	56	68.9		+/-47.5	32.7	UJ		28.8	UJ		37	UJ		3.6	J
Lead-211	pCi/g	20.3	13%	7	56	1.1	UJ		0.8	U		2.3	U		0.8	U		2.5	U
Lead-214	pCi/g	3.4	100%	56	56	1.5	J	+/-0.3	1.2		+/-0.3	1.4	J	+/-0.3	1.6	J	+/-0.4	3.1	
Plutonium-239/240	pCi/g	0.2	13%	7	56	0.2		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.7	13%	7	56	0.4	U		0.4	U		1.7	J	+/-0.5	1.6	J	+/-0.7	0.5	U
Radium-226	pCi/g	5.8	100%	56	56	1.7	J	+/-0.3	1.8		+/-0.3	0.9	J	+/-0.3	2.1	J	+/-0.5	4.8	
Radium-228	pCi/g	3.5	95%	53	56	2.1	J	+/-0.5	0.2	U		2.5		+/-0.7	2.3		+/-0.5	2.5	
Thorium-230	pCi/g	1.4	50%	28	56	0.9	U	+/-0.3	1.1	U	+/-0.4	0.9	J	+/-0.4	1.2		+/-0.4	1.1	U
Thorium-232	pCi/g	1.3	98%	55	56	0.7		+/-0.3	1.2		+/-0.4	0.7	J	+/-0.3	0.8		+/-0.4	1	
Tritium	pCi/g	130	64%	36	56	0.1	U	+/-0.1	3.6		+/-0.1	6.6	J	+/-0.2	0.1	J	+/-0.1	20.2	
Uranium-234	pCi/g	1.2	79%	44	56	0.7		+/-0.2	0.5	J	+/-0.2	0.5		+/-0.2	1.1		+/-0.3	0.7	J
Uranium-235	pCi/g	0.4	39%	22	56	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U
Uranium-238	pCi/g	1.3	98%	55	56	0.6		+/-0.2	0.7		+/-0.3	0.6		+/-0.2	0.7		+/-0.3	0.6	

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							SS12-224			SS12-225			SS12-226			SS12-227			SS12-228
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE DATE							123419			123420			123421			123422			123423
DEPTH TO TOP OF SAMPLE							0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE							0.2			0.2			0.2			0.2			0.2
SAMPLE DATE							15-Nov-98			15-Nov-98			15-Nov-98			15-Nov-98			17-Nov-98
QC CODE							SA			SA			SA			SA			SA
STUDY ID			FREQUENCY	NUMBER	NUMBER		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1
			OF	OF	OF														
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE
Bismuth-214	pCi/g	5.8	100%	56	56	+/-0.6	1.8	J	+/-0.5	1.4		+/-0.5	1.9		+/-0.5	1.6	J	+/-0.3	2.8
Cesium-137	pCi/g	1.3	59%	33	56	+/-0.3	1		+/-0.3	1		+/-0.3	0.5		+/-0.1	0.1	U		0.1
Cobalt-57	pCi/g	0.2	18%	10	56	+/-0.1	0.2		+/-0.2	0.1	U		0.1	U		0.1	U		0.1
Cobalt-60	pCi/g	0.7	11%	6	56		0.1	U		0.1	U		0.1	U		0.1	U		0.1
Lead-210	pCi/g	68.9	52%	29	56	+/-1.4	8.1	J	+/-3.4	8.7	J	+/-4	61	J	+/-57.7	31.7	UJ		2.4
Lead-211	pCi/g	20.3	13%	7	56		1.8	U		7.2		+/-5.9	2.2	U		2	U		3.9
Lead-214	pCi/g	3.4	100%	56	56	+/-0.5	2.2	J	+/-0.4	2.3		+/-0.5	1.5		+/-0.3	1.4	J	+/-0.3	2.2
Plutonium-239/240	pCi/g	0.2	13%	7	56	+/-0.2	0.1	U	+/-0.1	0.2	UJ	+/-0.2	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1
Promethium-147	pCi/g	0	0%	0	1														
Radium-223	pCi/g	1.7	13%	7	56		1.1	J	+/-0.6	0.6	U		0.5	U		0.4	UJ		0.7
Radium-226	pCi/g	5.8	100%	56	56	+/-0.6	1.8	J	+/-0.5	1.4		+/-0.5	1.9		+/-0.5	1.6	J	+/-0.3	2.8
Radium-228	pCi/g	3.5	95%	53	56	+/-0.5	3.1		+/-0.6	3.5		+/-0.8	1.8		+/-0.4	2		+/-0.6	1.9
Thorium-230	pCi/g	1.4	50%	28	56	+/-0.4	1.3		+/-0.5	1.1	U	+/-0.4	1.4		+/-0.5	1		+/-0.4	1.1
Thorium-232	pCi/g	1.3	98%	55	56	+/-0.4	1.2		+/-0.5	1.1		+/-0.4	0.9		+/-0.3	1		+/-0.4	0.8
Tritium	pCi/g	130	64%	36	56	+/-0.2	17	J	+/-0.3	122		+/-0.6	18		+/-0.2	0.1	UJ	+/-0.1	0.1
Uranium-234	pCi/g	1.2	79%	44	56	+/-0.3	0.8		+/-0.4	0.9	J	+/-0.3	0.7	J	+/-0.3	0.7		+/-0.3	0.7
Uranium-235	pCi/g	0.4	39%	22	56	+/-0.1	0.2	U	+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1
Uranium-238	pCi/g	1.3	98%	55	56	+/-0.2	1.3		+/-0.4	1		+/-0.3	0.9	J	+/-0.3	0.8		+/-0.3	0.6

TABLE G-26
DISPOSAL PIT C RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY								SEAD-12			SEAD-12		
LOCATION ID								SS12-229			SS12-230		
MATRIX								SOIL			SOIL		
SAMPLE DATE								123424			123425		
DEPTH TO TOP OF SAMPLE								0			0		
DEPTH TO BOTTOM OF SAMPLE								0.2			0.2		
SAMPLE DATE								15-Nov-98			15-Nov-98		
QC CODE								SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF								
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	5.8	100%	56	56	J	+/-0.6	2.2		+/-0.6	1.6	J	+/-0.5
Cesium-137	pCi/g	1.3	59%	33	56	U		0.6		+/-0.2	0.8		+/-0.3
Cobalt-57	pCi/g	0.2	18%	10	56	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	11%	6	56	U		0.1	U		0.1	U	
Lead-210	pCi/g	68.9	52%	29	56	U		8.7	J	+/-4.4	5.8	J	+/-2.9
Lead-211	pCi/g	20.3	13%	7	56	UJ		3.4	UJ		3.3	U	
Lead-214	pCi/g	3.4	100%	56	56	J	+/-0.5	1.8		+/-0.5	1.5	J	+/-0.4
Plutonium-239/240	pCi/g	0.2	13%	7	56		+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.2
Promethium-147	pCi/g	0	0%	0	1								
Radium-223	pCi/g	1.7	13%	7	56	U		0.5	U		0.5	UJ	
Radium-226	pCi/g	5.8	100%	56	56	J	+/-0.6	2.2		+/-0.6	1.6	J	+/-0.5
Radium-228	pCi/g	3.5	95%	53	56	J	+/-0.5	2.5		+/-0.6	1.6		+/-0.4
Thorium-230	pCi/g	1.4	50%	28	56	U	+/-0.4	0.9	U	+/-0.4	1		+/-0.4
Thorium-232	pCi/g	1.3	98%	55	56		+/-0.3	0.8		+/-0.3	0.9		+/-0.4
Tritium	pCi/g	130	64%	36	56	U	+/-0.1	27.4		+/-0.3	1.3	J	+/-0.1
Uranium-234	pCi/g	1.2	79%	44	56		+/-0.2	0.8	J	+/-0.3	0.6		+/-0.2
Uranium-235	pCi/g	0.4	39%	22	56		+/-0.1	0.1		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.3	98%	55	56		+/-0.2	0.9		+/-0.3	0.8		+/-0.3

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12				
LOCATION ID						MW12-14			MW12-14			MW12-15			MW12-15			MW12-33				
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL				
SAMPLE ID						123100			123101			123029			123030			123196				
DEPTH TO TOP OF SAMPLE						8			10			6			8			6				
DEPTH TO BOTTOM OF SAMPLE						10			12			8			10			8				
SAMPLE DATE						14-Oct-98			14-Oct-98			01-Oct-98			01-Oct-98			31-Oct-98				
QC CODE						SA			SA			SA			SA			SA				
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1				
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error		
Actinium-228	pCi/g	1.2	100%	9	9																	
Bismuth-214	pCi/g	2.4	100%	42	42	1.7		+/-0.5	1.3		+/-0.4	1.3		+/-0.4	1.8		+/-0.4	1.9		+/-0.5		
Cesium-137	pCi/g	0.7	67%	22	33	0.1	U		0.1	U		0.3	J	+/-0.1	0.3	J	+/-0.1	0.4	J	+/-0.2		
Cobalt-57	pCi/g	0.7	30%	10	33	0.1	U		0.1	U		0.1	U		0.1	U		0.1		+/-0.1		
Cobalt-60	pCi/g	0.5	79%	26	33	0.2	J	+/-0.1	0.5	J	+/-0.1	0.1	U		0.5		+/-0.1	0.1	J	+/-0.1		
Gross Alpha	pCi/g	21	100%	9	9																	
Gross Beta	pCi/g	30	100%	9	9																	
Lead-210	pCi/g	40.5	88%	29	33	2.4	J	+/-1.8	3.9	J	+/-2.2	38.1	J	+/-34	1.7	UJ		2	J	+/-1.2		
Lead-211	pCi/g	19	55%	18	33	6.6	J	+/-2.6	8.7	J	+/-6.3	1.2	UJ		0.7	UJ		2.3	UJ			
Lead-214	pCi/g	2.3	100%	42	42	1.7		+/-0.4	1.5		+/-0.4	1.4		+/-0.4	1.9		+/-0.4	2	J	+/-0.4		
Plutonium-239/240	pCi/g	0.1	18%	6	33	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.2	0.2	U	+/-0.1		
Promethium-147	pCi/g	0	0%	0	2	3.3	UJ	+/-5.1	3	UJ	+/-5.1											
Radium-223	pCi/g	1.2	9%	3	33	0.4	U		0.4		+/-0.4	0.3	U		0.3	U		0.4	UJ			
Radium-226	pCi/g	2.2	88%	29	33	1.7		+/-0.5	1.3		+/-0.4	1.3		+/-0.4	1.8		+/-0.4	1.9		+/-0.5		
Radium-228	pCi/g	5	100%	33	33	1.5	J	+/-0.4	1.8	J	+/-0.6	1.5		+/-0.4	2.1		+/-0.6	1		+/-0.3		
Thallium-208	pCi/g	1.6	100%	9	9																	
Thorium-230	pCi/g	4.8	52%	17	33	0.8	U	+/-0.3	0.6	U	+/-0.3	0.8		+/-0.3	1.1		+/-0.4	0.4	J	+/-0.5		
Thorium-232	pCi/g	4.1	100%	33	33	0.7		+/-0.3	0.8		+/-0.3	0.7		+/-0.3	1		+/-0.4	1.4	J	+/-0.7		
Thorium-234	pCi/g	1.1	100%	9	9																	
Tritium	pCi/g	5.7	24%	8	33	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1		
Uranium-234	pCi/g	1.2	79%	26	33	1		+/-0.4	0.7		+/-0.2	0.6		+/-0.2	0.7		+/-0.3	1	J	+/-0.4		
Uranium-235	pCi/g	0.1	21%	7	33	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1		
Uranium-238	pCi/g	1.1	91%	30	33	0.5		+/-0.3	0.6		+/-0.2	0.5		+/-0.2	1.1		+/-0.3	0.6	J	+/-0.3		

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12				
LOCATION ID						MW12-33			MW12-34			MW12-34			MW12-7			MW12-7				
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL				
SAMPLE ID						123197			123199			123200			123181			123182				
DEPTH TO TOP OF SAMPLE						10			4			10			4			8				
DEPTH TO BOTTOM OF SAMPLE						0			6			12			6			10				
SAMPLE DATE						31-Oct-98			31-Oct-98			31-Oct-98			28-Oct-98			28-Oct-98				
QC CODE						SA			SA			SA			SA			SA				
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1				
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	VALUE		(Q)	error	VALUE		(Q)	error	VALUE		(Q)	error	VALUE		(Q)	error	VALUE		(Q)	error
Actinium-228	pCi/g	1.2	100%	9	9																				
Bismuth-214	pCi/g	2.4	100%	42	42	1.9			+/-0.5	1.8			+/-0.5	1.5			+/-0.3	1.4			+/-0.5	1.9			+/-0.4
Cesium-137	pCi/g	0.7	67%	22	33	0.1	J		+/-0.1	0.2	J		+/-0.1	0.1	UJ			0.1	U			0.1	U		
Cobalt-57	pCi/g	0.7	30%	10	33	0.1			+/-0.1	0.2			+/-0.1	0.2	U			0.1	U			0.1			+/-0.1
Cobalt-60	pCi/g	0.5	79%	26	33	0.1	UJ			0.3	J		+/-0.1	0.4	J		+/-0.1	0.2			+/-0.1	0.1			+/-0.1
Gross Alpha	pCi/g	21	100%	9	9																				
Gross Beta	pCi/g	30	100%	9	9																				
Lead-210	pCi/g	40.5	88%	29	33	6.2	J		+/-2.4	4.6	J		+/-2.5	3	J		+/-2.5	5.8	J		+/-2.6	4.6	J		+/-2.7
Lead-211	pCi/g	19	55%	18	33	11.3	J		+/-3.2	8.1	J		+/-3	12.8	J		+/-4.7	2.3	U			6.5			+/-2.5
Lead-214	pCi/g	2.3	100%	42	42	2	J		+/-0.3	1.9	J		+/-0.4	1.7	J		+/-0.4	1.6			+/-0.4	1.6			+/-0.3
Plutonium-239/240	pCi/g	0.1	18%	6	33	0.2	U		+/-0.1	0.1	U		+/-0.1	0.1	U		+/-0.1	0.2	U		+/-0.1	0.1	U		+/-0.1
Promethium-147	pCi/g	0	0%	0	2																				
Radium-223	pCi/g	1.2	9%	3	33	0.5	UJ			0.5	UJ			0.4	UJ			0.6	U			0.4	U		
Radium-226	pCi/g	2.2	88%	29	33	1.9			+/-0.5	1.8			+/-0.5	1.5			+/-0.3	1.4			+/-0.5	1.9			+/-0.4
Radium-228	pCi/g	5	100%	33	33	2			+/-0.5	1.5			+/-0.4	2.9			+/-0.5	2.3	J		+/-0.5	1.8	J		+/-0.4
Thallium-208	pCi/g	1.6	100%	9	9																				
Thorium-230	pCi/g	4.8	52%	17	33	0.9	J		+/-0.6	0.8			+/-0.4	1.2	J		+/-0.6	0.2	J		+/-0.5	0.2	J		+/-0.3
Thorium-232	pCi/g	4.1	100%	33	33	0.8	J		+/-0.4	0.5			+/-0.3	1	J		+/-0.5	0.3			+/-0.3	0.5			+/-0.3
Thorium-234	pCi/g	1.1	100%	9	9																				
Tritium	pCi/g	5.7	24%	8	33	0.1	U		+/-0.1	0.1	U		+/-0.1	0.1	U		+/-0.1	0.1	UJ		+/-0.1	0.1	UJ		+/-0.1
Uranium-234	pCi/g	1.2	79%	26	33	0.8	J		+/-0.3	0.6	J		+/-0.3	1.2	J		+/-0.5	0.8			+/-0.3	0.7			+/-0.3
Uranium-235	pCi/g	0.1	21%	7	33	0.1	U		+/-0.1	0.1	U		+/-0.1	0.1	UJ		+/-0.2	0.1	U		+/-0.1	0.1	U		+/-0.1
Uranium-238	pCi/g	1.1	91%	30	33	0.9			+/-0.3	0.6			+/-0.3	1	J		+/-0.5	0.7			+/-0.3	0.7			+/-0.2

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12				
LOCATION ID						TP12-3A			TP12-3A			TP12-3B			TP12-3C			TP12-4A				
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL				
SAMPLE ID						123085			123082			123083			123084			123086				
DEPTH TO TOP OF SAMPLE						0.8			0.8			5.5			4			0.5				
DEPTH TO BOTTOM OF SAMPLE						0.8			0.8			5.5			4			0.5				
SAMPLE DATE						07-Oct-98			07-Oct-98			07-Oct-98			07-Oct-98			12-Oct-98				
QC CODE						DU			SA			SA			SA			SA				
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1				
			OF	OF	OF																	
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error		
Actinium-228	pCi/g	1.2	100%	9	9																	
Bismuth-214	pCi/g	2.4	100%	42	42	1.6	J	+/-0.3	2.4	J	+/-0.4	1.6		+/-0.4	1.4		+/-0.5	2.2		+/-0.3		
Cesium-137	pCi/g	0.7	67%	22	33	0.2	J	+/-0.1	0.2	UJ		0.3	J	+/-0.1	0.2	J	+/-0.1	0.5	UJ	+/-0.2		
Cobalt-57	pCi/g	0.7	30%	10	33	0.1	U		0.1	U		0.1	U		0.2		+/-0.1	0.1	U			
Cobalt-60	pCi/g	0.5	79%	26	33	0.1	UJ		0.2	J	+/-0.1	0.1	UJ		0.2	J	+/-0.1	0.1	U			
Gross Alpha	pCi/g	21	100%	9	9																	
Gross Beta	pCi/g	30	100%	9	9																	
Lead-210	pCi/g	40.5	88%	29	33	40.5	J	+/-29.5	3.1	J	+/-1.6	38	UJ		3.5	J	+/-2.3	4.5	J	+/-2.9		
Lead-211	pCi/g	19	55%	18	33	5.1	J	+/-3	5.2	J	+/-4.1	19	J	+/-6.3	3	UJ		6.5	UJ	+/-3.9		
Lead-214	pCi/g	2.3	100%	42	42	1.3		+/-0.4	1.5		+/-0.5	1.2		+/-0.3	1.4		+/-0.4	2.3		+/-0.5		
Plutonium-239/240	pCi/g	0.1	18%	6	33	0.2	U	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1		
Promethium-147	pCi/g	0	0%	0	2																	
Radium-223	pCi/g	1.2	9%	3	33	0.5	UJ		1.5	UJ	+/-0.7	0.7	UJ	+/-0.5	0.8	UJ		0.5	U			
Radium-226	pCi/g	2.2	88%	29	33	1.6	U	+/-0.3	2.4	U	+/-0.4	1.6	U	+/-0.4	1.4	U	+/-0.5	2.2		+/-0.3		
Radium-228	pCi/g	5	100%	33	33	2.1	J	+/-0.5	1.5	J	+/-0.4	5		+/-0.8	2.2		+/-0.6	2		+/-0.5		
Thallium-208	pCi/g	1.8	100%	9	9																	
Thorium-230	pCi/g	4.8	52%	17	33	0.9	U	+/-0.3	1.3	U	+/-0.5	4.8		+/-1.2	1.3	UJ	+/-0.5	1.3	U	+/-0.4		
Thorium-232	pCi/g	4.1	100%	33	33	1.1		+/-0.4	0.9		+/-0.4	4.1		+/-1.1	0.8	J	+/-0.4	0.8		+/-0.3		
Thorium-234	pCi/g	1.1	100%	9	9																	
Tritium	pCi/g	5.7	24%	8	33	0.1	UJ	+/-0.1	0.3	J	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1		
Uranium-234	pCi/g	1.2	79%	26	33	0.8	U	+/-0.3	0.7	U	+/-0.3	0.7	U	+/-0.2	0.5	U	+/-0.2	0.8	U	+/-0.3		
Uranium-235	pCi/g	0.1	21%	7	33	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1		
Uranium-238	pCi/g	1.1	91%	30	33	0.9	J	+/-0.3	0.7	J	+/-0.3	0.7	J	+/-0.2	0.7	J	+/-0.2	1.2	U	+/-0.3		

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			
LOCATION ID							TP12-4B			TP12-4C			TP12-5A			TP12-5A			TP12-5B			
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL			
SAMPLE ID							123087			123088			123092			123089			123090			
DEPTH TO TOP OF SAMPLE							6			8			0.5			0.5			2			
DEPTH TO BOTTOM OF SAMPLE							6			8			0.5			0.5			2			
SAMPLE DATE							12-Oct-98			12-Oct-98			13-Oct-98			13-Oct-98			13-Oct-98			
QC CODE							SA			SA			DU			SA			SA			
STUDY ID			FREQUENCY	NUMBER	NUMBER		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES		VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	
Actinium-228	pCi/g	1.2	100%	9	9																	
Bismuth-214	pCi/g	2.4	100%	42	42		1.4		+/-0.3	1.8		+/-0.5	1.7		+/-0.3	1.6		+/-0.4	2		+/-0.6	
Cesium-137	pCi/g	0.7	67%	22	33		0.3	UJ	+/-0.1	0.1	UJ		0.4	J	+/-0.1	0.5	J	+/-0.1	0.6	J	+/-0.3	
Cobalt-57	pCi/g	0.7	30%	10	33		0.1	U		0.1		+/-0.1	0.1	UJ		0.7	J	+/-0.4	0.1	U		
Cobalt-60	pCi/g	0.5	79%	26	33		0.1	U		0.3		+/-0.1	0.1	J	+/-0.1	0.1	UJ		0.2		+/-0.1	
Gross Alpha	pCi/g	21	100%	9	9																	
Gross Beta	pCi/g	30	100%	9	9																	
Lead-210	pCi/g	40.5	88%	29	33		35.8	J	+/-24.5	3.8	J	+/-2	23.8	J	+/-17.8	34.5	UJ		17.6	J	+/-15.1	
Lead-211	pCi/g	19	55%	18	33		3	UJ	+/-2.4	11.6	J	+/-6.5	1.3	UJ		1.1	UJ		1.6	UJ		
Lead-214	pCi/g	2.3	100%	42	42		1.5		+/-0.4	2.1		+/-0.5	1.4		+/-0.3	1.5		+/-0.3	1.8		+/-0.4	
Plutonium-239/240	pCi/g	0.1	18%	6	33		0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	
Promethium-147	pCi/g	0	0%	0	2																	
Radium-223	pCi/g	1.2	9%	3	33		0.4	U		0.5	U		0.4	U		0.5	U		0.8		+/-0.4	
Radium-226	pCi/g	2.2	88%	29	33		1.4		+/-0.3	1.8		+/-0.5	1.7		+/-0.3	1.6		+/-0.4	2		+/-0.6	
Radium-228	pCi/g	5	100%	33	33		2		+/-0.5	2.2		+/-0.7	2		+/-0.5	1.9		+/-0.6	1.8		+/-0.5	
Thallium-208	pCi/g	1.6	100%	9	9																	
Thorium-230	pCi/g	4.8	52%	17	33		0.8	U	+/-0.3	0.7	U	+/-0.3	1.5		+/-0.5	1	UJ	+/-0.4	1	U	+/-0.4	
Thorium-232	pCi/g	4.1	100%	33	33		0.6		+/-0.3	1		+/-0.4	1.2		+/-0.5	1	J	+/-0.4	1		+/-0.4	
Thorium-234	pCi/g	1.1	100%	9	9																	
Tritium	pCi/g	5.7	24%	8	33		0.1	U	+/-0.1	0.1	U	+/-0.1	5.7	J	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	
Uranium-234	pCi/g	1.2	79%	26	33		0.7	U	+/-0.2	0.6	UJ	+/-0.2	0.9	J	+/-0.3	0.7	J	+/-0.3	0.7		+/-0.2	
Uranium-235	pCi/g	0.1	21%	7	33		0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	
Uranium-238	pCi/g	1.1	91%	30	33		0.6	U	+/-0.2	0.8	UJ	+/-0.3	0.9	J	+/-0.3	0.6	J	+/-0.2	0.7		+/-0.2	

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-5C			TP12-6A			TP12-6B			TP12-6C			TP12-7AA		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123091			123158			123159			123160			123128		
DEPTH TO TOP OF SAMPLE						8			2.5			3			3.5			1		
DEPTH TO BOTTOM OF SAMPLE						8			2.5			3			3.5			1		
SAMPLE DATE						13-Oct-98			17-Oct-98			17-Oct-98			17-Oct-98			15-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Actinium-228	pCi/g	1.2	100%	9	9															
Bismuth-214	pCi/g	2.4	100%	42	42	1.9		+/-0.5	1.7		+/-0.4	2		+/-0.3	1.7		+/-0.5	2		+/-0.5
Cesium-137	pCi/g	0.7	67%	22	33	0.1	UJ		0.6		+/-0.3	0.7		+/-0.2	0.2	U		0.7	J	+/-0.1
Cobalt-57	pCi/g	0.7	30%	10	33	0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.5	79%	26	33	0.2		+/-0.1	0.5	J	+/-0.1	0.4	J	+/-0.1	0.3	J	+/-0.1	0.3		+/-0.1
Gross Alpha	pCi/g	21	100%	9	9															
Gross Beta	pCi/g	30	100%	9	9															
Lead-210	pCi/g	40.5	88%	29	33	2.9	J	+/-2.1	1.9		+/-1.6	5.8		+/-2.7	2.3		+/-1.5	3	J	+/-2.4
Lead-211	pCi/g	19	55%	18	33	11.9	J	+/-6.6	1.3	UJ		1.7	UJ		0.9	UJ		2.6	J	+/-1.7
Lead-214	pCi/g	2.3	100%	42	42	1.6		+/-0.4	1.4		+/-0.4	1.9		+/-0.4	1.4		+/-0.4	1.7	J	+/-0.5
Plutonium-239/240	pCi/g	0.1	18%	6	33	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.2	9%	3	33	0.5	U		0.5	U		0.4	U		0.5	U		0.5	UJ	
Radium-226	pCi/g	2.2	88%	29	33	1.9		+/-0.5	1.7		+/-0.4	2		+/-0.3	1.7		+/-0.5	2		+/-0.5
Radium-228	pCi/g	5	100%	33	33	2.4		+/-0.5	2		+/-0.6	1.4		+/-0.5	2		+/-0.4	1.8		+/-0.5
Thallium-208	pCi/g	1.8	100%	9	9															
Thorium-230	pCi/g	4.8	52%	17	33	0.8	UJ	+/-0.4	0.8	J	+/-0.3	1	J	+/-0.4	0.9	J	+/-0.3	0.9	U	+/-0.3
Thorium-232	pCi/g	4.1	100%	33	33	0.9	J	+/-0.4	0.8		+/-0.3	0.8		+/-0.3	0.9		+/-0.3	0.6		+/-0.3
Thorium-234	pCi/g	1.1	100%	9	9															
Tritium	pCi/g	5.7	24%	8	33	0.1	U	+/-0.1	2.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.9		+/-0.1
Uranium-234	pCi/g	1.2	79%	26	33	0.8		+/-0.3	0.5	J	+/-0.2	0.7		+/-0.2	0.4	J	+/-0.2	0.8	J	+/-0.3
Uranium-235	pCi/g	0.1	21%	7	33	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	91%	30	33	0.6		+/-0.2	0.7	J	+/-0.2	0.8	J	+/-0.3	0.6	J	+/-0.2	0.9	J	+/-0.3

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12				
LOCATION ID						TP12-7BA			TP12-7BB			TP12-8A			TP12-8B			TP12-8C				
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL				
SAMPLE ID						123127			123129			123130			123132			123131				
DEPTH TO TOP OF SAMPLE						1			2			1			3			2				
DEPTH TO BOTTOM OF SAMPLE						1			2			1			3			2				
SAMPLE DATE						15-Oct-98			15-Oct-98			15-Oct-98			15-Oct-98			15-Oct-98				
QC CODE						SA			SA			SA			SA			SA				
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1				
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error		
Actinium-228	pCi/g	1.2	100%	9	9	0.9		+/-0.4	1.3		+/-0.4	1.1		+/-0.3	1.1		+/-0.3	1.3		+/-0.4		
Bismuth-214	pCi/g	2.4	100%	42	42	0.3	J	+/-0.1	0.7	J	+/-0.2	0.2	J	+/-0.1	0.5	J	+/-0.1	0.6	J	+/-0.1		
Cesium-137	pCi/g	0.7	87%	22	33	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U			
Cobalt-57	pCi/g	0.7	30%	10	33	0.3		+/-0.1	0.3		+/-0.1	0.5		+/-0.2	0.2		+/-0.1	0.4		+/-0.1		
Cobalt-60	pCi/g	0.5	79%	26	33																	
Gross Alpha	pCi/g	21	100%	9	9																	
Gross Beta	pCi/g	30	100%	9	9	19.2	UJ		36.8	J	+/-30.5	35	J	+/-27.1	35.2	J	+/-25.8	4	J	+/-2.7		
Lead-210	pCi/g	40.5	88%	29	33	9.8	J	+/-3.1	6.3	J	+/-2.2	1.1	UJ		1.9	J	+/-1.2	12.6	J	+/-2.8		
Lead-211	pCi/g	19	55%	18	33	1.1	J	+/-0.3	1.5	J	+/-0.4	1.1	J	+/-0.3	1	J	+/-0.3	1.5	J	+/-0.5		
Lead-214	pCi/g	2.3	100%	42	42	0.1		+/-0.1	0.1	UJ	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1		
Plutonium-239/240	pCi/g	0.1	18%	6	33																	
Promethium-147	pCi/g	0	0%	0	2	0.3	UJ		0.4	UJ		0.4	UJ		0.2	UJ		0.4	UJ			
Radium-223	pCi/g	1.2	9%	3	33	0.9		+/-0.4	1.3		+/-0.4	1.1		+/-0.3	1.1		+/-0.3	1.3		+/-0.4		
Radium-226	pCi/g	2.2	88%	29	33	1.4		+/-0.4	1.8		+/-0.5	1.6		+/-0.5	1.8		+/-0.4	1.9		+/-0.5		
Radium-228	pCi/g	5	100%	33	33																	
Thallium-208	pCi/g	1.6	100%	9	9	1	U	+/-0.4	1.5		+/-0.5	1.1	U	+/-0.4	1	U	+/-0.4	1.1	UJ	+/-0.5		
Thorium-230	pCi/g	4.8	52%	17	33	0.7		+/-0.3	1.3		+/-0.5	1		+/-0.3	0.9		+/-0.3	0.7	J	+/-0.3		
Thorium-232	pCi/g	4.1	100%	33	33																	
Thorium-234	pCi/g	1.1	100%	9	9	0.1	U	+/-0.1	0.1		+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.4	U	+/-0.1		
Tritium	pCi/g	5.7	24%	8	33	0.7		+/-0.2	1		+/-0.3	1		+/-0.3	0.7		+/-0.2	0.5		+/-0.2		
Uranium-234	pCi/g	1.2	79%	26	33	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1		
Uranium-235	pCi/g	0.1	21%	7	33																	
Uranium-238	pCi/g	1.1	91%	30	33																	

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12A-3			TP12A-3			TP12A-4			TP12A-4			TP12A-5			TP12A-6		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						TP12A-3-1			TP12A-3-2			TP12A-4-1			TP12A-4-2			TP12A-5-1			TP12A-6-1		
DEPTH TO TOP OF SAMPLE						2.5			6			4			4			3			1		
DEPTH TO BOTTOM OF SAMPLE						2.5			6			4			4			3			1		
SAMPLE DATE						22-Jun-94			22-Jun-94			21-Jun-94			21-Jun-94			23-Jun-94			23-Jun-94		
QC CODE						SA			SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	ESI			ESI			ESI			ESI			ESI			ESI		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Actinium-228	pCi/g	1.2	100%	9	9	1.2		+/-0.3	0.96		+/-0.26	0.93		+/-0.29	0.75		+/-0.21	0.72		+/-0.25	0.98		+/-0.3
Bismuth-214	pCi/g	2.4	100%	42	42	0.93		+/-0.12	0.84		+/-0.28	0.92		+/-0.31	0.73		+/-0.1	0.61		+/-0.1	0.86		+/-0.29
Cesium-137	pCi/g	0.7	67%	22	33																		
Cobalt-57	pCi/g	0.7	30%	10	33																		
Cobalt-60	pCi/g	0.5	79%	26	33																		
Gross Alpha	pCi/g	21	100%	9	9	21		+/-8	10		+/-6	12		+/-6	7		+/-5	8		+/-6	14		+/-7
Gross Beta	pCi/g	30	100%	9	9	30		+/-6	27		+/-6	17		+/-6	21		+/-6	22		+/-6	29		+/-6
Lead-210	pCi/g	40.5	88%	29	33																		
Lead-211	pCi/g	19	55%	18	33																		
Lead-214	pCi/g	2.3	100%	42	42	1		+/-0.2	0.85		+/-0.15	0.84		+/-0.15	0.77		+/-0.1	0.72		+/-0.1	0.88		+/-0.16
Plutonium-239/240	pCi/g	0.1	18%	6	33																		
Promethium-147	pCi/g	0	0%	0	2																		
Radium-223	pCi/g	1.2	9%	3	33																		
Radium-226	pCi/g	2.2	88%	29	33																		
Radium-228	pCi/g	5	100%	33	33																		
Thallium-208	pCi/g	1.6	100%	9	9	0.49		0.23	0.89		0.66	1.6		0.7	0.55		0.22	0.24		0.05	0.49		0.23
Thorium-230	pCi/g	4.8	52%	17	33																		
Thorium-232	pCi/g	4.1	100%	33	33																		
Thorium-234	pCi/g	1.1	100%	9	9	0.58		+/-0.28	0.52		+/-0.39	0.88		+/-0.41	0.24		+/-0.24	0.36		+/-0.24	1.1		+/-0.4
Tritium	pCi/g	5.7	24%	8	33																		
Uranium-234	pCi/g	1.2	79%	26	33																		
Uranium-235	pCi/g	0.1	21%	7	33																		
Uranium-238	pCi/g	1.1	91%	30	33																		

TABLE G-27
DISPOSAL PIT C RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12A-6			TP12A-7			TP12A-8			TP12-23A			TP12-23B			TP12-23C		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						TP12A-6-2			TP12A-7-1			TP12A-8-1			123139			123140			123141		
DEPTH TO TOP OF SAMPLE						7			4			7			1			2			3		
DEPTH TO BOTTOM OF SAMPLE						7			4			7			1			2			3		
SAMPLE DATE						23-Jun-94			23-Jun-94			24-Jun-94			17-Oct-98			17-Oct-98			17-Oct-98		
QC CODE						SA			SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	ESI			ESI			ESI			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Actinium-228	pCi/g	1.2	100%	9	9	0.66		+/-0.19	0.84		+/-0.24	0.74		+/-0.26									
Bismuth-214	pCi/g	2.4	100%	42	42	0.78		+/-0.25	0.98		+/-0.13	0.78		+/-0.26	1.6	J	+/-0.4	1	J	+/-0.3	1.7	J	+/-0.5
Cesium-137	pCi/g	0.7	67%	22	33										0.4		+/-0.2	0.5		+/-0.1	0.6		+/-0.3
Cobalt-57	pCi/g	0.7	30%	10	33										0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.5	79%	26	33										0.5	J	+/-0.1	0.5	J	+/-0.1	0.4	J	+/-0.1
Gross Alpha	pCi/g	21	100%	9	9	10		+/-6	20		+/-7	5		+/-6									
Gross Beta	pCi/g	30	100%	9	9	21		+/-6	30		+/-8	23		+/-6									
Lead-210	pCi/g	40.5	88%	29	33										5.4		+/-3.1	2.1		+/-1.4	3.1		+/-1.7
Lead-211	pCi/g	19	55%	18	33										8.8	J	+/-4.4	2.4	UJ		12	J	+/-3.5
Lead-214	pCi/g	2.3	100%	42	42	0.71		+/-0.15	0.94		+/-0.12	0.65		+/-0.13	1.8		+/-0.4	1.4		+/-0.4	1.5		+/-0.4
Plutonium-239/240	pCi/g	0.1	18%	6	33										0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2																		
Radium-223	pCi/g	1.2	9%	3	33										0.5	U		1.2		+/-0.5	0.5	U	
Radium-226	pCi/g	2.2	88%	29	33										1.6	J	+/-0.4	1	J	+/-0.3	1.7	J	+/-0.5
Radium-228	pCi/g	5	100%	33	33										1.9		+/-0.5	2.6		+/-0.6	2		+/-0.7
Thallium-208	pCi/g	1.8	100%	9	9	0.67		0.75	0.37		0.22	0.34		0.21									
Thorium-230	pCi/g	4.8	52%	17	33										1.1	J	+/-0.4	0.9	J	+/-0.3	1.1	J	+/-0.4
Thorium-232	pCi/g	4.1	100%	33	33										0.8	J	+/-0.3	0.7	J	+/-0.3	1.2	J	+/-0.4
Thorium-234	pCi/g	1.1	100%	9	9	0.38		+/-0.17	0.54		+/-0.43	0.44		+/-0.38									
Tritium	pCi/g	5.7	24%	8	33										0.1	U	+/-0.1	0.1	U	+/-0.1	0.2		+/-0.1
Uranium-234	pCi/g	1.2	79%	26	33										0.7		+/-0.2	0.6		+/-0.2	0.9		+/-0.3
Uranium-235	pCi/g	0.1	21%	7	33										0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	91%	30	33										0.8	J	+/-0.3	0.6	J	+/-0.2	1	J	+/-0.3

TABLE G-28
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-16			MW12-17			MW12-18			MW12-18			MW12-35		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123149			123152			123043			123037			123186		
DEPTH TO TOP OF SMAPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						17-Oct-98			16-Oct-98			02-Oct-98			02-Oct-98			29-Oct-98		
QC CODE						SA			SA			DU			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	3.5	100%	28	28	1.8	J	+/-0.6	1.2	J	+/-0.4	1.8	J	+/-0.4	1.2	J	+/-0.3	1.7		+/-0.7
Cesium-137	pCi/g	1.1	82%	23	28	0.9		+/-0.3	0.5		+/-0.2	0.5	J	+/-0.3	0.4		+/-0.2	0.2		+/-0.1
Cobalt-57	pCi/g	0.2	29%	8	28	0.2		+/-0.1	0.1	U		0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.4	21%	6	28	0.3	J	+/-0.1	0.1	UJ		0.1	J	+/-0.1	0.2		+/-0.1	0.4		+/-0.2
Lead-210	pCi/g	70.8	68%	19	28	4.8		+/-2.6	6.8		+/-2.4	5.9	J	+/-3.3	3.2	J	+/-2.3	5.6	J	+/-2.7
Lead-211	pCi/g	19.4	36%	10	28	0.9	UJ		2.7	UJ		12.4	J	+/-7.3	1.3	UJ		12.5		+/-5
Lead-214	pCi/g	2.8	100%	28	28	1.8		+/-0.3	1.6		+/-0.4	1.6		+/-0.4	1.4		+/-0.3	2.8		+/-0.3
Plutonium-239/240	pCi/g	1	36%	10	28	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	1															
Radium-223	pCi/g	0.4	11%	3	28	0.5	U		0.5	U		0.5	U		0.4	U		0.4	U	
Radium-226	pCi/g	3.5	100%	28	28	1.8	J	+/-0.6	1.2	J	+/-0.4	1.8	J	+/-0.4	1.2	J	+/-0.3	1.7		+/-0.7
Radium-228	pCi/g	3.3	100%	28	28	2.1		+/-0.5	1.3		+/-0.4	2.5		+/-0.6	2.1		+/-0.5	1.9	J	+/-0.4
Thorium-230	pCi/g	2.1	25%	7	28	1.1	J	+/-0.4	1.2	J	+/-0.4	2		+/-0.9	2.1		+/-1.1	0.9	J	+/-0.5
Thorium-232	pCi/g	1.2	100%	28	28	0.7	J	+/-0.3	1.2	J	+/-0.4	0.6		+/-0.5	0.6		+/-0.5	0.9		+/-0.4
Tritium	pCi/g	17.3	57%	16	28	0.6		+/-0.1	0.4		+/-0.1	0.1	U	+/-170	0.1	U	+/-176	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	0.9	50%	14	28	0.7		+/-0.2	0.6		+/-0.2	0.7	J	+/-0.5	0.8		+/-0.5	0.6		+/-0.2
Uranium-235	pCi/g	0.3	50%	14	28	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.2	0.1		+/-0.2	0.1		+/-0.1
Uranium-238	pCi/g	1	100%	28	28	0.8	J	+/-0.3	0.8	J	+/-0.3	0.7	J	+/-0.5	0.7	J	+/-0.5	0.7		+/-0.2

TABLE G-28
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				MW12-9			SB12-5A			SS12-127			SS12-128			SS12-129			SS12-130		
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID				123155			123096			123321			123322			123323			123324		
DEPTH TO TOP OF SMAPLE				0			0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE				17-Oct-98			14-Oct-98			13-Nov-98			13-Nov-98			16-Nov-98			13-Nov-98		
QC CODE				SA			SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	3.5	100%	1.9		+/-0.5	1.2	J	+/-0.4	1.6		+/-0.5	1.8		+/-0.3	3.5	J	+/-0.6	1.3		+/-0.3
Cesium-137	pCi/g	1.1	82%	0.4		+/-0.2	0.3	J	+/-0.2	0.7	J	+/-0.2	0.6	J	+/-0.1	0.6		+/-0.2	0.6		+/-0.1
Cobalt-57	pCi/g	0.2	29%	0.2		+/-0.1	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	21%	0.2	J	+/-0.1	0.2	J	+/-0.1	0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	70.8	68%	4.4		+/-2.6	2.6	J	+/-1.7	49.8		+/-34.5	18.2	U		4.6		+/-2.1	22.7	U	
Lead-211	pCi/g	19.4	36%	19.4	J	+/-4.1	14	J	+/-7.2	3.9		+/-2.2	0.7	U		2.9	UJ		1.6	U	
Lead-214	pCi/g	2.8	100%	1.6		+/-0.5	1.7		+/-0.4	1		+/-0.3	1.3		+/-0.3	2.8	J	+/-0.5	1.3		+/-0.4
Plutonium-239/240	pCi/g	1	36%	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.2	UJ	+/-0.2
Promethium-147	pCi/g	0	0%				1.3	UJ	+/-5												
Radium-223	pCi/g	0.4	11%	0.6	U		0.5	U		0.4	U		0.4	U		0.6	U		0.4	U	
Radium-226	pCi/g	3.5	100%	1.9		+/-0.5	1.2	J	+/-0.4	1.6		+/-0.5	1.8		+/-0.3	3.5	J	+/-0.6	1.3		+/-0.3
Radium-228	pCi/g	3.3	100%	0.9		+/-0.4	1.9		+/-0.5	1.2		+/-0.4	1.5		+/-0.5	2.6	J	+/-0.8	1.9		+/-0.4
Thorium-230	pCi/g	2.1	25%	1.6	J	+/-0.6	1	U	+/-0.4	1	U	+/-0.3	1	U	+/-0.4	1.3	U	+/-0.4	1.2	U	+/-0.4
Thorium-232	pCi/g	1.2	100%	0.5		+/-0.3	0.9	J	+/-0.4	0.9		+/-0.3	0.7		+/-0.3	1		+/-0.4	0.8		+/-0.3
Tritium	pCi/g	17.3	57%	0.1	U	+/-0.1	0.1	UJ	+/-0.1	15.4		+/-0.2	0.1	U	+/-0.1	5.5		+/-0.1	0.8	J	+/-0.1
Uranium-233/234	pCi/g	0.9	50%	0.5	J	+/-0.2	0.7	UJ	+/-0.3	0.9	U	+/-0.4	0.4	U	+/-0.2	0.8	J	+/-0.3	0.8	J	+/-0.5
Uranium-235	pCi/g	0.3	50%	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.3	U	+/-0.1
Uranium-238	pCi/g	1	100%	0.6	J	+/-0.2	0.9	J	+/-0.3	0.8		+/-0.3	0.6		+/-0.2	0.7	J	+/-0.2	1		+/-0.6

TABLE G-28
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				SS12-131			SS12-132			SS12-133			SS12-134			SS12-135			SS12-136		
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID				123325			123326			123327			123328			123329			123330		
DEPTH TO TOP OF SMAPLE				0			0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE				13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98		
QC CODE				SA			SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	3.5	100%	1.5		+/-0.5	1.8		+/-0.4	1.3		+/-0.3	2.9		+/-0.6	1.5		+/-0.3	1.5		+/-0.3
Cesium-137	pCi/g	1.1	82%	0.8	J	+/-0.2	0.7	J	+/-0.2	0.1	UJ		0.7	J	+/-0.3	0.9	J	+/-0.2	0.9	J	+/-0.2
Cobalt-57	pCi/g	0.2	29%	0.1	U		0.1	U		0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.4	21%	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	70.8	68%	23.1	U		3.1		+/-1.9	27.3	U		5.6		+/-2.3	70.8		+/-39.8	23.8	U	
Lead-211	pCi/g	19.4	36%	0.6	U		1.2	U		3.3		+/-2.1	2.2	U		5.2		+/-2.1	0.8	U	
Lead-214	pCi/g	2.8	100%	1.3		+/-0.3	1.7		+/-0.3	1.4		+/-0.3	2.2		+/-0.5	1.2		+/-0.3	1.6		+/-0.3
Plutonium-239/240	pCi/g	1	36%	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1
Promethium-147	pCi/g	0	0%																		
Radium-223	pCi/g	0.4	11%	0.4	U		0.4	U		0.4		+/-0.3	0.5	U		0.4	U		0.5	U	
Radium-226	pCi/g	3.5	100%	1.5		+/-0.5	1.8		+/-0.4	1.3		+/-0.3	2.9		+/-0.6	1.5		+/-0.3	1.5		+/-0.3
Radium-228	pCi/g	3.3	100%	1.4		+/-0.5	1.9		+/-0.4	1.7		+/-0.3	1.9		+/-0.6	1.6		+/-0.5	1.7		+/-0.6
Thorium-230	pCi/g	2.1	25%	1	U	+/-0.4	0.9	U	+/-0.4	0.9	U	+/-0.3	1.1	U	+/-0.4	1.3	U	+/-0.4	0.7	U	+/-0.3
Thorium-232	pCi/g	1.2	100%	0.7		+/-0.3	0.9		+/-0.3	0.8		+/-0.3	1		+/-0.4	1		+/-0.3	0.8		+/-0.3
Tritium	pCi/g	17.3	57%	0.5		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	6		+/-0.2	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-233/234	pCi/g	0.9	50%	0.8	U	+/-0.3	0.7	U	+/-0.3	1.1	U	+/-0.4	0.7	U	+/-0.2	0.7	U	+/-0.2	0.7	U	+/-0.3
Uranium-235	pCi/g	0.3	50%	0.2		+/-0.1	0.1		+/-0.1	0.3		+/-0.2	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1	100%	0.9		+/-0.4	0.4		+/-0.2	0.8		+/-0.3	0.7		+/-0.2	0.5		+/-0.2	0.6		+/-0.3

TABLE G-28
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				SS12-137			SS12-138			SS12-139			SS12-140			SS12-141			SS12-141		
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID				123331			123332			123333			123334			123336			123335		
DEPTH TO TOP OF SMAPLE				0			0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE				16-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98			13-Nov-98		
QC CODE				SA			SA			SA			SA			DU			SA		
STUDY ID			FREQUENCY OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	3.5	100%	1.5	J	+/-0.4	1.5		+/-0.4	1.8		+/-0.5	1.2		+/-0.4	1.6		+/-0.4	1		+/-0.3
Cesium-137	pCi/g	1.1	82%	0.2		+/-0.1	1.1		+/-0.3	0.6	J	+/-0.3	0.4	J	+/-0.2	0.6	J	+/-0.2	0.5		+/-0.2
Cobalt-57	pCi/g	0.2	29%	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	21%	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	70.8	68%	39.9	U		8.6		+/-4.5	5.4		+/-3.4	3.6		+/-1.7	5.3		+/-2.8	4.1		+/-2
Lead-211	pCi/g	19.4	36%	1.3	UJ		9.3		+/-2.9	2.4	U		1.6	U		3.8		+/-2.9	2.1	U	
Lead-214	pCi/g	2.8	100%	1.7	J	+/-0.5	1.3		+/-0.3	1.9		+/-0.4	1.5		+/-0.3	2.3		+/-0.5	1.5		+/-0.3
Plutonium-239/240	pCi/g	1	36%	0.1		+/-0.1	0.3	UJ	+/-0.1	1		+/-0.6	0.1		+/-0.1	0.2		+/-0.1	0.2	UJ	+/-0.1
Promethium-147	pCi/g	0	0%																		
Radium-223	pCi/g	0.4	11%	0.5	U		0.4	U		0.4		+/-0.3	0.3	U		0.4	U		0.4	U	
Radium-226	pCi/g	3.5	100%	1.5	J	+/-0.4	1.5		+/-0.4	1.8		+/-0.5	1.2		+/-0.4	1.6		+/-0.4	1		+/-0.3
Radium-228	pCi/g	3.3	100%	2.2	J	+/-0.5	3.3		+/-0.6	1.7		+/-0.4	1.5		+/-0.4	1.7		+/-0.4	1.3		+/-0.4
Thorium-230	pCi/g	2.1	25%	1.5	U	+/-0.5	1.2	U	+/-0.4	1	U	+/-0.4	1	U	+/-0.4	1	U	+/-0.3	1.4		+/-0.5
Thorium-232	pCi/g	1.2	100%	1		+/-0.4	0.7		+/-0.3	0.9		+/-0.3	0.7		+/-0.3	0.9		+/-0.3	0.8		+/-0.3
Tritium	pCi/g	17.3	57%	1.6		+/-0.1	10.5	J	+/-0.2	0.2		+/-0.1	0.1		+/-0.1	5		+/-0.1	17.3	J	+/-0.2
Uranium-233/234	pCi/g	0.9	50%	0.9		+/-0.3	0.9	J	+/-0.6	0.7	UJ	+/-0.3	0.7	UJ	+/-0.2	0.7	U	+/-0.3	0.9	J	+/-0.4
Uranium-235	pCi/g	0.3	50%	0.1	U	+/-0.1	0.1		+/-0.2	0.2	J	+/-0.2	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1	100%	0.7		+/-0.2	0.9		+/-0.5	1	J	+/-0.4	0.8	J	+/-0.3	0.9		+/-0.3	0.7		+/-0.4

TABLE G-28
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				SS12-142			SS12-143			SS12-144			SS12-145			SS12-146		
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID				123337			123338			123339			123340			123341		
DEPTH TO TOP OF SMAPLE				0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE				13-Nov-98			13-Nov-98			17-Nov-98			17-Nov-98			17-Nov-98		
QC CODE				SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error	VALUE	(Q)	error
Bismuth-214	pCi/g	3.5	100%	1.9		+/-0.5	1.2		+/-0.2	1		+/-0.2	2.8	J	+/-0.4	1.5		+/-0.3
Cesium-137	pCi/g	1.1	82%	0.1	UJ		0.4		+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-57	pCi/g	0.2	29%	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	21%	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	70.8	68%	2.7		+/-1.3	22.2	U		23.2	J	+/-18.8	1.9	U		14.2	UJ	
Lead-211	pCi/g	19.4	36%	0.5	U		0.6	U		0.5	UJ		3.8	UJ		.6.7	J	+/-2
Lead-214	pCi/g	2.8	100%	1.2		+/-0.2	1		+/-0.3	1.2		+/-0.3	2.2	J	+/-0.5	0.9		+/-0.2
Plutonium-239/240	pCi/g	1	36%	0.1	U	+/-0.1	0.3	UJ	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%															
Radium-223	pCi/g	0.4	11%	0.3	U		0.3	U		0.3	U		0.5	U		0.2		+/-0.2
Radium-226	pCi/g	3.5	100%	1.9		+/-0.5	1.2		+/-0.2	1		+/-0.2	2.8	J	+/-0.4	1.5		+/-0.3
Radium-228	pCi/g	3.3	100%	0.8		+/-0.3	1.4		+/-0.4	1.7		+/-0.4	1.9	J	+/-0.5	1.4		+/-0.4
Thorium-230	pCi/g	2.1	25%	0.6	U	+/-0.2	1.1	U	+/-0.4	1.1	UJ	+/-0.5	1.1	U	+/-0.4	1.1	UJ	+/-0.4
Thorium-232	pCi/g	1.2	100%	0.2		+/-0.1	0.9		+/-0.4	1	J	+/-0.4	0.9		+/-0.4	0.9	J	+/-0.4
Tritium	pCi/g	17.3	57%	0.1	U	+/-0.1	0.6	J	+/-0.1	0.8		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-233/234	pCi/g	0.9	50%	0.8	U	+/-0.3	0.5	J	+/-0.3	0.6	U	+/-0.2	0.6	J	+/-0.2	0.9		+/-0.3
Uranium-235	pCi/g	0.3	50%	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1	100%	0.4		+/-0.2	0.4		+/-0.2	0.9		+/-0.3	0.5	J	+/-0.2	1		+/-0.3

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-16			MW12-16			MW12-17			MW12-17			MW12-18		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123150			123151			123153			123154			123038		
DEPTH TO TOP OF SMAPLE						4			6			6			10			6		
DEPTH TO BOTTOM OF SAMPLE						6			8			8			12			8		
SAMPLE DATE						17-Oct-98			17-Oct-98			16-Oct-98			16-Oct-98			02-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8															
Bismuth-214	pCi/g	2.5	89%	33	37	1.8	J	+/-0.5	1.9	J	+/-0.4	1.5		+/-0.4	1.6		+/-0.4	1.7	J	+/-0.5
Cesium-137	pCi/g	0.4	59%	17	29	0.3		+/-0.2	0.3		+/-0.1	0.3		+/-0.1	0.3		+/-0.1	0.3		+/-0.2
Cobalt-57	pCi/g	0.2	21%	6	29	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	55%	16	29	0.2	J	+/-0.1	0.1	J	+/-0.1	0.1	UJ		0.2	J	+/-0.1	0.2		+/-0.1
Gross Alpha	pCi/g	12	100%	8	8															
Gross Beta	pCi/g	28	100%	8	8															
Lead-210	pCi/g	38.2	59%	17	29	2.9		+/-1.5	2.9		+/-1.7	2.2		+/-1.4	3.8		+/-1.8	2.3	J	+/-1.9
Lead-211	pCi/g	12.3	38%	11	29	2.6	UJ		7.3	J	+/-2.7	12.3	J	+/-6	8.6	J	+/-5.7	8.1	J	+/-5.3
Lead-214	pCi/g	1.9	86%	32	37	1.1		+/-0.4	1.4		+/-0.4	1.7		+/-0.3	1.7		+/-0.4	1.2		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	95.7	75%	9	12															
Radium-223	pCi/g	1	24%	7	29	0.5	U		0.4	U		0.4	U		0.4	U		0.9		+/-0.5
Radium-226	pCi/g	2.5	86%	25	29	1.8	J	+/-0.5	1.9	J	+/-0.4	1.5		+/-0.4	1.6		+/-0.4	1.7	J	+/-0.5
Radium-228	pCi/g	3.3	93%	27	29	1.6		+/-0.4	1		+/-0.4	2.3		+/-0.5	2		+/-0.6	1.5		+/-0.4
Thallium-208	pCi/g	0.46	100%	8	8															
Thorium-227	pCi/g	0	0%	0	9															
Thorium-230	pCi/g	1.8	69%	20	29	1.1	J	+/-0.4	1.1	J	+/-0.4	0.9		+/-0.3	1.1		+/-0.4	1.1	U	+/-0.6
Thorium-232	pCi/g	1.6	97%	28	29	0.9	J	+/-0.3	0.9	J	+/-0.3	0.7		+/-0.3	1		+/-0.4	0.8		+/-0.5
Thorium-234	pCi/g	0.39	100%	8	8															
Tritium	pCi/g	0.1	31%	9	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-177
Uranium-233/234	pCi/g	1.2	69%	20	29	0.6		+/-0.2	0.6		+/-0.2	0.5		+/-0.2	0.5	J	+/-0.2	0.8		+/-0.5
Uranium-235	pCi/g	0.1	31%	9	29	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.4	U	+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29	0.9	J	+/-0.3	0.6	J	+/-0.2	0.8	J	+/-0.3	0.6	J	+/-0.2	0.7	J	+/-0.4

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-18			MW12-35			MW12-35			MW12-9			MW12-9		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123039			123187			123188			123156			123157		
DEPTH TO TOP OF SMAPLE						10			10			14			6			10		
DEPTH TO BOTTOM OF SAMPLE						12			12			15.5			8			12		
SAMPLE DATE						02-Oct-98			29-Oct-98			29-Oct-98			17-Oct-98			17-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8															
Bismuth-214	pCi/g	2.5	89%	33	37	2.5	J	+/-0.6	2.1		+/-0.6	1.4		+/-0.3	1.4		+/-0.4	2.2		+/-0.5
Cesium-137	pCi/g	0.4	59%	17	29	0.1	U		0.2		+/-0.1	0.3		+/-0.2	0.1		+/-0.1	0.4		+/-0.1
Cobalt-57	pCi/g	0.2	21%	6	29	0.1		+/-0.1	0.2		+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	55%	16	29	0.2		+/-0.1	0.3		+/-0.2	0.1	U		0.2	J	+/-0.1	0.3	J	+/-0.2
Gross Alpha	pCi/g	12	100%	8	8															
Gross Beta	pCi/g	28	100%	8	8															
Lead-210	pCi/g	38.2	59%	17	29	4	J	+/-2.3	1.7	J	+/-1.4	2.2	J	+/-2	3.5		+/-2.3	3.9		+/-3.1
Lead-211	pCi/g	12.3	38%	11	29	1.2	UJ		2.2	U		1.5	U		3.8	J	+/-2.6	8	J	+/-5.1
Lead-214	pCi/g	1.9	86%	32	37	1.6		+/-0.4	1.4		+/-0.4	1.4		+/-0.4	1.5		+/-0.4	1.9		+/-0.4
Plutonium-239/240	pCi/g	0	0%	0	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	95.7	75%	9	12															
Radium-223	pCi/g	1	24%	7	29	1		+/-0.5	0.5		+/-0.4	0.5		+/-0.3	0.4	U		0.7		+/-0.4
Radium-226	pCi/g	2.5	86%	25	29	2.5	J	+/-0.6	2.1		+/-0.6	1.4		+/-0.3	1.4		+/-0.4	2.2		+/-0.5
Radium-228	pCi/g	3.3	93%	27	29	2		+/-0.6	2.2	J	+/-0.5	2	J	+/-0.4	1.8		+/-0.5	1.4		+/-0.4
Thallium-208	pCi/g	0.46	100%	8	8															
Thorium-227	pCi/g	0	0%	0	9															
Thorium-230	pCi/g	1.8	69%	20	29	1.4		+/-0.8	1	J	+/-0.6	1.8	J	+/-0.8	0.8	J	+/-0.3	1.2	J	+/-0.4
Thorium-232	pCi/g	1.6	97%	28	29	0.8		+/-0.6	0.8		+/-0.5	0.9		+/-0.5	0.7		+/-0.3	0.7		+/-0.3
Thorium-234	pCi/g	0.39	100%	8	8															
Tritium	pCi/g	0.1	31%	9	29	0.1	U	+/-174	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-233/234	pCi/g	1.2	69%	20	29	1.2	J	+/-0.6	0.6		+/-0.2	0.7	J	+/-0.2	0.8		+/-0.3	0.5		+/-0.2
Uranium-235	pCi/g	0.1	31%	9	29	0.1	J	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29	0.7	J	+/-0.4	0.8		+/-0.3	0.7	J	+/-0.2	0.7	J	+/-0.2	0.6	J	+/-0.2

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12B-1			MW12B-1			MW12B-1			SB12-5A			SB12-5A		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						MW12B-1-20			MW12B-1-03			MW12B-1-07			12519			12520		
DEPTH TO TOP OF SMAPLE						4			4			12			0			3		
DEPTH TO BOTTOM OF SAMPLE						6			6			13.5			3			6		
SAMPLE DATE						13-Jun-94			13-Jun-94			13-Jun-94			08-Nov-97			08-Nov-97		
QC CODE						DU			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	ESI			ESI			ESI			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	DETECTS	OF ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8	0.81		+/-0.26	0.67		+/-0.25	0.63		+/-0.2						
Bismuth-214	pCi/g	2.5	89%	33	37	0.85		+/-0.26	0.91		+/-0.27	0.93		+/-0.32	2.1	J	+/-0.5	1.6	UJ	
Cesium-137	pCi/g	0.4	59%	17	29										0.5	U		0.4	U	
Cobalt-57	pCi/g	0.2	21%	6	29										0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	55%	16	29										0.1	U		0.2	U	
Gross Alpha	pCi/g	12	100%	8	8	6		+/-4	3		+/-3	7		+/-5						
Gross Beta	pCi/g	28	100%	8	8	18		+/-5	22		+/-5	25		+/-6						
Lead-210	pCi/g	38.2	59%	17	29										2.1		+/-1	20.1	U	
Lead-211	pCi/g	12.3	38%	11	29										2.2	U		6.8	U	
Lead-214	pCi/g	1.9	86%	32	37	0.79		+/-0.14	0.76		+/-0.13	0.74		+/-0.13	1.9	U	+/-0.4	1.1	U	+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	29										0.3	UJ	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	95.7	75%	9	12										1.7		+/-3.7	2.6		+/-3.7
Radium-223	pCi/g	1	24%	7	29										0.5	U		0.4	U	
Radium-226	pCi/g	2.5	86%	25	29										2.1	J	+/-0.5	1.6	UJ	
Radium-228	pCi/g	3.3	93%	27	29										1.7		+/-0.7	1.9		+/-0.5
Thallium-208	pCi/g	0.46	100%	8	8	0.19		+/-0.04	0.32		+/-0.2	0.38		+/-0.23						
Thorium-227	pCi/g	0	0%	0	9										0.2	UJ	+/-0.1	0.2	U	+/-0.1
Thorium-230	pCi/g	1.8	69%	20	29										1	UJ	+/-0.5	0.8	UJ	+/-0.4
Thorium-232	pCi/g	1.6	97%	28	29										1.3	J	+/-0.6	1.6	J	+/-0.6
Thorium-234	pCi/g	0.39	100%	8	8	0.27		+/-0.25	0.23		+/-0.24	0.38		+/-0.38						
Tritium	pCi/g	0.1	31%	9	29										0.1		+/-0.1	0.1		+/-0.1
Uranium-233/234	pCi/g	1.2	69%	20	29										0.7	U	+/-0.3	0.5	U	+/-0.2
Uranium-235	pCi/g	0.1	31%	9	29										0.1		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29										0.4	U	+/-0.2	0.6	U	+/-0.2

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SB12-5A			SB12-5A			SB12-5A			SB12-5A			SB12-5A		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123097			12521			12522			12523			123098		
DEPTH TO TOP OF SMAPLE						6			6			9			12			12		
DEPTH TO BOTTOM OF SAMPLE						8			9			12			14			14		
SAMPLE DATE						14-Oct-98			08-Nov-97			08-Nov-97			08-Nov-97			14-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8															
Bismuth-214	pCi/g	2.5	89%	33	37	1.7	J	+/-0.6	1.3	J	+/-0.4	1.5	J	+/-0.4	1.1	J	+/-0.4	1.6	J	+/-0.4
Cesium-137	pCi/g	0.4	59%	17	29	0.3	J	+/-0.1	0.4	U		0.2	U		0.4	U		0.4	J	+/-0.2
Cobalt-57	pCi/g	0.2	21%	6	29	0.1		+/-0.1	0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	55%	16	29	0.6	J	+/-0.1	0.3	U		0.1	U		0.1	U		0.2	J	+/-0.1
Gross Alpha	pCi/g	12	100%	8	8															
Gross Beta	pCi/g	28	100%	8	8															
Lead-210	pCi/g	38.2	59%	17	29	1.4	UJ		2.8	U		39.9	U		2.2	U		4	J	+/-2.5
Lead-211	pCi/g	12.3	38%	11	29	1.1	UJ		7.9	U		2.4	U		1.5	U		6.9	J	+/-3.8
Lead-214	pCi/g	1.9	86%	32	37	1.6		+/-0.4	2	U	+/-0.5	1.6	U	+/-0.3	1.8	U	+/-0.4	1.4		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.2	0.1	U	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	95.7	75%	9	12	2	UJ	+/-5	4.7		+/-3.8	4.5		+/-3.8	6.1	U	+/-3.6	0.6	UJ	+/-5
Radium-223	pCi/g	1	24%	7	29	0.5	U		0.4	U		0.4	U		0.4	U		0.4	U	
Radium-226	pCi/g	2.5	86%	25	29	1.7	J	+/-0.6	1.3	J	+/-0.4	1.5	J	+/-0.4	1.1	J	+/-0.4	1.6	J	+/-0.4
Radium-228	pCi/g	3.3	93%	27	29	1.3		+/-0.5	1.7	U		1.4		+/-0.4	1.6		+/-0.4	2.2		+/-0.5
Thallium-208	pCi/g	0.46	100%	8	8															
Thorium-227	pCi/g	0	0%	0	9				0.3	UJ	+/-0.1				0.1	UJ	+/-0.2			
Thorium-230	pCi/g	1.8	69%	20	29	1.1	U	+/-0.4	1.2	UJ	+/-0.6	1.5	UJ	+/-0.9	0.8	UJ	+/-0.5	0.9	U	+/-0.4
Thorium-232	pCi/g	1.6	97%	28	29	0.7	J	+/-0.3	1	J	+/-0.5	0.7	J	+/-0.5	1.1	J	+/-0.6	0.4	UJ	+/-0.2
Thorium-234	pCi/g	0.39	100%	8	8															
Tritium	pCi/g	0.1	31%	9	29	0.1	UJ	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.2	69%	20	29	0.8	UJ	+/-0.3	0.8	U	+/-0.3	0.6	UJ	+/-0.2	0.7	U	+/-0.2	1.3	UJ	+/-0.4
Uranium-235	pCi/g	0.1	31%	9	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29	0.7	J	+/-0.2	0.8		+/-0.3	0.8	J	+/-0.3	0.7		+/-0.2	1.1	J	+/-0.3

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA army DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SB12-6			SB12-6			SB12-6			SB12-6			SB12-6		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						12514			12515			12516			12517			12518		
DEPTH TO TOP OF SMAPLE						0			3			6			9			12		
DEPTH TO BOTTOM OF SAMPLE						3			6			9			12			14.3		
SAMPLE DATE						08-Nov-97			08-Nov-97			08-Nov-97			08-Nov-97			08-Nov-97		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8															
Bismuth-214	pCi/g	2.5	89%	33	37	1.3	UJ		1.6	J	+/-0.4	1.9	UJ		2.1	J	+/-0.5	1	UJ	
Cesium-137	pCi/g	0.4	59%	17	29	0.3	U		0.3	U		0.1	U		0.1	U		0.3	U	
Cobalt-57	pCi/g	0.2	21%	6	29	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.6	55%	16	29	0.2	U		0.1	U		0.3	U		0.1	U		0.1	U	
Gross Alpha	pCi/g	12	100%	8	8															
Gross Beta	pCi/g	28	100%	8	8															
Lead-210	pCi/g	38.2	59%	17	29	18	U		3.6	U		4.2	U		1.4	U		12.2	U	
Lead-211	pCi/g	12.3	38%	11	29	3.9	U		1.3	U		17.8	U		9.7	U		1.1	U	
Lead-214	pCi/g	1.9	86%	32	37	1.3		+/-0.3	1.6		+/-0.3	1.8		+/-0.4	1.4		+/-0.4	0.9		+/-0.2
Plutonium-239/240	pCi/g	0	0%	0	29	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	95.7	75%	9	12	5.1		+/-3.8	95.7		+/-6.1	1.4		+/-3.7	7		+/-3.8	4.6		+/-3.8
Radium-223	pCi/g	1	24%	7	29	0.3	U		0.8		+/-0.4	0.4	U		0.5	U		0.4	U	
Radium-226	pCi/g	2.5	86%	25	29	1.3	UJ		1.6	J	+/-0.4	1.9	UJ		2.1	J	+/-0.5	1	UJ	
Radium-228	pCi/g	3.3	93%	27	29	1.6	J	+/-0.5	1.9		+/-0.4	3.3		+/-0.6	1.7	U		1		+/-0.4
Thallium-208	pCi/g	0.46	100%	8	8															
Thorium-227	pCi/g	0	0%	0	9	0.2	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.2	0.3	UJ	+/-0.1	0.3	UJ	+/-0.1
Thorium-230	pCi/g	1.8	69%	20	29	1.6	J	+/-0.6	0.6	UJ	+/-0.5	1.1	J	+/-0.6	0.9	J	+/-0.6	1.4	J	+/-0.7
Thorium-232	pCi/g	1.6	97%	28	29	1.3	J	+/-0.6	1.2	J	+/-0.7	0.9	J	+/-0.5	1.6	J	+/-0.8	1.3	J	+/-0.6
Thorium-234	pCi/g	0.39	100%	8	8															
Tritium	pCi/g	0.1	31%	9	29	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1
Uranium-233/234	pCi/g	1.2	69%	20	29	0.7	U	+/-0.2	0.6		+/-0.2	0.8	J	+/-0.3	0.7		+/-0.3	0.5	J	+/-0.2
Uranium-235	pCi/g	0.1	31%	9	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29	0.8		+/-0.3	0.8		+/-0.3	0.7	J	+/-0.2	0.5		+/-0.2	0.6	J	+/-0.2

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SB12B-1			TP12-25A			TP12-25A			TP12-25B			TP12-25C		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						SB12B-1-1			123077			123071			123072			123073		
DEPTH TO TOP OF SMAPLE						18			0.5			0.5			1			2		
DEPTH TO BOTTOM OF SAMPLE						21			0.5			0.5			1			2		
SAMPLE DATE						29-Jun-94			05-Oct-98			05-Oct-98			05-Oct-98			05-Oct-98		
QC CODE						SA			DU			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	ESI			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8	0.74		+/-0.25												
Bismuth-214	pCi/g	2.5	89%	33	37	0.76		+/-0.11	1.5		+/-0.4	1.7		+/-0.5	1.3		+/-0.3	2.2		+/-0.5
Cesium-137	pCi/g	0.4	59%	17	29				0.3	J	+/-0.2	0.1	J	+/-0.1	0.2	J	+/-0.1	0.3	J	+/-0.1
Cobalt-57	pCi/g	0.2	21%	6	29				0.1	J	+/-0.1	0.1	UJ		0.1	J	+/-0.1	0.1	UJ	
Cobalt-60	pCi/g	0.6	55%	16	29				0.2	J	+/-0.1	0.2	J	+/-0.1	0.2	J	+/-0.1	0.3	J	+/-0.1
Gross Alpha	pCi/g	12	100%	8	8	12		+/-5												
Gross Beta	pCi/g	28	100%	8	8	26		+/-6												
Lead-210	pCi/g	38.2	59%	17	29				6	J	+/-2.9	2.4	J	+/-2.2	20.9	U		3.8		+/-2.2
Lead-211	pCi/g	12.3	38%	11	29				10.6	J	+/-4.2	1.3	UJ		0.7	U		9.5		+/-2.2
Lead-214	pCi/g	1.9	86%	32	37	0.78		+/-0.1	1.2	J	+/-0.3	1.7	J	+/-0.5	1.6		+/-0.3	1.5		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	29				0.2	U	+/-0.2	0.3	UJ	+/-0.1	0.1	UJ	+/-0.1	0.2	UJ	+/-0.2
Promethium-147	pCi/g	95.7	75%	9	12															
Radium-223	pCi/g	1	24%	7	29				0.3	U		0.4	U		1		+/-0.6	0.5	U	
Radium-226	pCi/g	2.5	86%	25	29				1.5		+/-0.4	1.7		+/-0.5	1.3		+/-0.3	2.2		+/-0.5
Radium-228	pCi/g	3.3	93%	27	29				1.4		+/-0.4	1.6		+/-0.3	1.4		+/-0.5	1.9		+/-0.4
Thallium-208	pCi/g	0.46	100%	8	8	0.33		+/-0.78												
Thorium-227	pCi/g	0	0%	0	9															
Thorium-230	pCi/g	1.8	69%	20	29				0.8		+/-0.3	0.6		+/-0.3	0.8		+/-0.3	1		+/-0.4
Thorium-232	pCi/g	1.6	97%	28	29				0.5		+/-0.2	0.6		+/-0.3	0.8		+/-0.3	0.8		+/-0.3
Thorium-234	pCi/g	0.39	100%	8	8	0.36		+/-0.25												
Tritium	pCi/g	0.1	31%	9	29				0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-233/234	pCi/g	1.2	69%	20	29				0.6	J	+/-0.3	0.7	J	+/-0.3	0.9	J	+/-0.4	0.7	J	+/-0.3
Uranium-235	pCi/g	0.1	31%	9	29				0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.1	93%	27	29				0.5		+/-0.2	0.7	J	+/-0.3	0.8		+/-0.3	0.6		+/-0.3

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-26A			TP12-26B			TP12-26C			TP12B-1			TP12B-2		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123074			123075			123076			TP12B-1-1			TP12B-2-1		
DEPTH TO TOP OF SMAPLE						0.5			1.3			3			4			2.5		
DEPTH TO BOTTOM OF SAMPLE						0.5			1.3			3			4			2.5		
SAMPLE DATE						05-Oct-98			05-Oct-98			05-Oct-98			25-Jun-94			24-Jun-94		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			ESI			ESI		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8										0.63		+/-0.19	0.74		+/-0.21
Bismuth-214	pCi/g	2.5	89%	33	37	1.6		+/-0.3	2		+/-0.5	1		+/-0.3	0.69		+/-0.24	0.84		+/-0.11
Cesium-137	pCi/g	0.4	59%	17	29	0.2	J	+/-0.1	0.4	J	+/-0.3	0.1	UJ							
Cobalt-57	pCi/g	0.2	21%	6	29	0.1	UJ		0.1	UJ		0.1	J	+/-0.1						
Cobalt-60	pCi/g	0.6	55%	16	29	0.1	UJ		0.6	J	+/-0.1	0.4	J	+/-0.2						
Gross Alpha	pCi/g	12	100%	8	8										8		+/-6	8		+/-6
Gross Beta	pCi/g	28	100%	8	8										25		+/-6	28		+/-6
Lead-210	pCi/g	38.2	59%	17	29	19.9	U		2.9		+/-2.1	38.2		+/-37.2						
Lead-211	pCi/g	12.3	38%	11	29	4.2		+/-1.5	1.6	U		9.2		+/-2.7						
Lead-214	pCi/g	1.9	86%	32	37	1.1		+/-0.2	1.9		+/-0.5	1.2		+/-0.3	0.72		+/-0.1	0.84		+/-0.11
Plutonium-239/240	pCi/g	0	0%	0	29	0.1	UJ	+/-0.3	0.3	UJ	+/-0.1	0.2	UJ	+/-0.2						
Promethium-147	pCi/g	95.7	75%	9	12															
Radium-223	pCi/g	1	24%	7	29	0.4	U		0.5	U		0.4	U							
Radium-226	pCi/g	2.5	86%	25	29	1.6		+/-0.3	2		+/-0.5	1		+/-0.3						
Radium-228	pCi/g	3.3	93%	27	29	1.1		+/-0.4	1.2		+/-0.3	2.1		+/-0.6						
Thallium-208	pCi/g	0.46	100%	8	8										0.35		+/-0.2	0.44		+/-0.22
Thorium-227	pCi/g	0	0%	0	9															
Thorium-230	pCi/g	1.8	69%	20	29	1.1	J	+/-0.5	0.8		+/-0.3	0.9		+/-0.4						
Thorium-232	pCi/g	1.6	97%	28	29	0.4	J	+/-0.3	0.5		+/-0.3	0.8		+/-0.3						
Thorium-234	pCi/g	0.39	100%	8	8										0.21		+/-0.16	0.35		+/-0.25
Tritium	pCi/g	0.1	31%	9	29	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1						
Uranium-233/234	pCi/g	1.2	69%	20	29	0.5	UJ	+/-0.2	1	J	+/-0.3	1	J	+/-0.4						
Uranium-235	pCi/g	0.1	31%	9	29	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1						
Uranium-238	pCi/g	1.1	93%	27	29	0.4		+/-0.2	0.8		+/-0.3	0.7		+/-0.3						

TABLE G-29
FORMER DRY WASTE DISPOSAL PIT RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12		
LOCATION ID						TP12B-3			TP12B-3		
MATRIX						SOIL			SOIL		
SAMPLE ID						TP12B-53-1			TP12B-3-1		
DEPTH TO TOP OF SMAPLE						2.5			2.5		
DEPTH TO BOTTOM OF SAMPLE						2.5			2.5		
SAMPLE DATE						25-Jun-94			25-Jun-94		
QC CODE						DU			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	ESI			ESI		
			OF	OF	OF						
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	Value	(Q)	error	Value	(Q)	error
Actinium-228	pCi/g	0.81	100%	8	8	0.52		+/-0.17	0.56		+/-0.18
Bismuth-214	pCi/g	2.5	89%	33	37	0.52		+/-0.1	0.49		+/-0.09
Cesium-137	pCi/g	0.4	59%	17	29						
Cobalt-57	pCi/g	0.2	21%	6	29						
Cobalt-60	pCi/g	0.6	55%	16	29						
Gross Alpha	pCi/g	12	100%	8	8	7		+/-6	6		+/-6
Gross Beta	pCi/g	28	100%	8	8	14		+/-5	20		+/-6
Lead-210	pCi/g	38.2	59%	17	29						
Lead-211	pCi/g	12.3	38%	11	29						
Lead-214	pCi/g	1.9	86%	32	37	0.54		+/-0.12	0.56		+/-0.12
Plutonium-239/240	pCi/g	0	0%	0	29						
Promethium-147	pCi/g	95.7	75%	9	12						
Radium-223	pCi/g	1	24%	7	29						
Radium-226	pCi/g	2.5	86%	25	29						
Radium-228	pCi/g	3.3	93%	27	29						
Thallium-208	pCi/g	0.46	100%	8	8	0.46		+/-0.22	0.21		+/-0.7
Thorium-227	pCi/g	0	0%	0	9						
Thorium-230	pCi/g	1.8	69%	20	29						
Thorium-232	pCi/g	1.6	97%	28	29						
Thorium-234	pCi/g	0.39	100%	8	8	0.39		+/-0.41	0.38		+/-0.31
Tritium	pCi/g	0.1	31%	9	29						
Uranium-233/234	pCi/g	1.2	69%	20	29						
Uranium-235	pCi/g	0.1	31%	9	29						
Uranium-238	pCi/g	1.1	93%	27	29						

TABLE G-30
EM-5 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-22			SS12-102			SS12-103			SS12-104		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPE ID						123068			123296			123297			123298		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						10/4/1998			11/12/1998			11/12/1998			11/12/1998		
QC CODE						SA			SA			SA			SA		
STUDY ID						RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES												
Bismuth-214	pCi/g	2.6	100%	21	21	1.2		+/-0.3	1.6	J	+/-0.3	1.4	J	+/-0.4	2.3	J	+/-0.5
Cesium-137	pCi/g	1	86%	18	21	0.7	J	+/-0.2	0.4	J	+/-0.1	0.7		+/-0.2	0.5	J	+/-0.2
Cobalt-57	pCi/g	0.2	24%	5	21	0.1	UJ		0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	24%	5	21	0.1	J	+/-0.1	0.1		+/-0.1	0.1	U		0.2		+/-0.1
Lead-210	pCi/g	55.9	62%	13	21	38		+/-35.8	25.7	U		19.2	U		4.2		+/-2.6
Lead-211	pCi/g	11.7	33%	7	21	11.7		+/-4.8	3.1	J	+/-1.6	0.8	U		1.8	UJ	
Lead-214	pCi/g	2.3	100%	21	21	1.4		+/-0.3	1		+/-0.2	1.8	J	+/-0.4	1.7		+/-0.4
Plutonium-239/240	pCi/g	0.2	10%	2	21	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.2		+/-0.2	0.1	U	+/-0.1
Radium-223	pCi/g	1.5	14%	3	21	0.5	U		1.3		+/-0.7	0.5	U		0.4	U	
Radium-226	pCi/g	2.6	100%	21	21	1.2		+/-0.3	1.6	J	+/-0.3	1.4	J	+/-0.4	2.3	J	+/-0.5
Radium-228	pCi/g	3.4	95%	20	21	0.7		+/-0.3	1.9	J	+/-0.4	1.1	J	+/-0.4	1.9	J	+/-0.4
Thorium-230	pCi/g	1.9	24%	5	21	1.6		+/-0.6	1	UJ	+/-0.4	1.4	J	+/-0.6	1.2	UJ	+/-0.5
Thorium-232	pCi/g	1.5	100%	21	21	1		+/-0.4	0.9	J	+/-0.3	1.3	J	+/-0.5	0.8	J	+/-0.3
Tritium	pCi/g	105	90%	19	21	7.2	J	+/-0.3	3.1	J	+/-0.1	2.7		+/-0.1	0.1	U	+/-0.1
Uranium-234	pCi/g	1.6	95%	20	21	0.7	J	+/-0.3	0.7		+/-0.3	0.9		+/-0.3	1		+/-0.3
Uranium-235	pCi/g	0.5	52%	11	21	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	100%	21	21	0.8		+/-0.3	0.8		+/-0.3	0.9	J	+/-0.3	1		+/-0.3

TABLE G-30
EM-5 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				SS12-105			SS12-106			SS12-107			SS12-108			SS12-109		
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPE ID				123299			123300			123301			123302			123303		
DEPTH TO TOP OF SAMPLE				0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE				11/16/1998			11/12/1998			11/12/1998			11/12/1998			11/17/1998		
QC CODE				SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION															
Bismuth-214	pCi/g	2.6	100%	1.2	J	+/-0.3	1.4	J	+/-0.3	1.2	J	+/-0.3	1.9	J	+/-0.4	1.6		
Cesium-137	pCi/g	1	86%	0.6		+/-0.2	0.8	J	+/-0.2	0.7		+/-0.2	0.4	J	+/-0.1	0.5		
Cobalt-57	pCi/g	0.2	24%	0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.4	24%	0.1	U		0.1	U		0.1	U		0.3		+/-0.1	0.1	U	
Lead-210	pCi/g	55.9	62%	2	U		19.6	U		55.9		+/-35.2	50.6		+/-32.8	23.1	UJ	
Lead-211	pCi/g	11.7	33%	8.4		+/-4.3	0.9	U		2.6	U		3.8	J	+/-2.1	1.9	UJ	
Lead-214	pCi/g	2.3	100%	1.3	J	+/-0.4	1.5	J	+/-0.3	1.6	J	+/-0.5	1.5		+/-0.2	1.1		
Plutonium-239/240	pCi/g	0.2	10%	0.3	U	+/-0.2	0.2	U	+/-0.2	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	
Radium-223	pCi/g	1.5	14%	0.3	U		1.5		+/-0.6	0.4	U		0.4	U		0.4	U	
Radium-226	pCi/g	2.6	100%	1.2	J	+/-0.3	1.4	J	+/-0.3	1.2	J	+/-0.3	1.9	J	+/-0.4	1.6		
Radium-228	pCi/g	3.4	95%	2.1		+/-0.4	2.5	J	+/-0.5	1.9	J	+/-0.6	2.4	J	+/-0.6	1.5		
Thorium-230	pCi/g	1.9	24%	0.8	U	+/-0.3	1.3	J	+/-0.6	1.2	U	+/-0.5	1	UJ	+/-0.4	0.9	UJ	
Thorium-232	pCi/g	1.5	100%	0.9		+/-0.3	1.4	J	+/-0.6	1.1		+/-0.5	1	J	+/-0.4	0.9	J	
Tritium	pCi/g	105	90%	5		+/-0.1	4.5		+/-0.1	7.6		+/-0.2	0.1	U	+/-0.1	105		
Uranium-234	pCi/g	1.6	95%	1.6	J	+/-0.7	0.6		+/-0.2	0.8		+/-0.3	0.7		+/-0.3	0.7	UJ	
Uranium-235	pCi/g	0.5	52%	0.5	J	+/-0.3	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		
Uranium-238	pCi/g	1.3	100%	1	J	+/-0.5	0.9	J	+/-0.3	1	J	+/-0.3	0.8		+/-0.3	0.8		

TABLE G-30
EM-5 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY					SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID					SS12-110			SS12-111			SS12-112			SS12-113			SS12-114
MATRIX					SOIL			SOIL			SOIL			SOIL			SOIL
SAMPE ID					123304			123305			123306			123307			123308
DEPTH TO TOP OF SAMPLE					0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE					0.2			0.2			0.2			0.2			0.2
SAMPLE DATE					11/12/1998			11/12/1998			11/12/1998			11/12/1998			11/17/1998
QC CODE					SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1
PARAMETER	UNIT	MAXIMUM	DETECTION														
Bismuth-214	pCi/g	2.6	100%	+/-0.3	2.2 J	+/-0.5		2.3 J	+/-0.5		2 J	+/-0.4		1.8 J	+/-0.6		2.6
Cesium-137	pCi/g	1	86%	+/-0.1	0.3 J	+/-0.1		0.5 J	+/-0.3		0.7	+/-0.3		0.9 J	+/-0.2		0.1
Cobalt-57	pCi/g	0.2	24%		0.1 U			0.1	+/-0.1		0.1 U			0.2	+/-0.1		0.1
Cobalt-60	pCi/g	0.4	24%		0.1 U			0.4	+/-0.3		0.1 U			0.1 U			0.1
Lead-210	pCi/g	55.9	62%		3.1	+/-1.7		3.2	+/-1.9		6.6	+/-2.6		6.8	+/-3.4		8.4
Lead-211	pCi/g	11.7	33%		5.3 J	+/-2.5		1.9 UJ			1.4 U			1 UJ			4
Lead-214	pCi/g	2.3	100%	+/-0.2	2	+/-0.4		2.3	+/-0.4		1.8 J	+/-0.4		1.9	+/-0.4		2.2
Plutonium-239/240	pCi/g	0.2	10%	+/-0.1	0.1 U	+/-0.1		0.1 U	+/-0.1		0.1	+/-0.1		0.1 U	+/-0.1		0.1
Radium-223	pCi/g	1.5	14%		0.4 U			0.5 U			0.5 U			0.6 U			0.8
Radium-226	pCi/g	2.6	100%	+/-0.3	2.2 J	+/-0.5		2.3 J	+/-0.5		2 J	+/-0.4		1.8 J	+/-0.6		2.6
Radium-228	pCi/g	3.4	95%	+/-0.4	2.1 J	+/-0.6		1.2 J	+/-0.5		2 J	+/-0.5		2.4 J	+/-0.6		2
Thorium-230	pCi/g	1.9	24%	+/-0.4	0.8 UJ	+/-0.3		1.4 UJ	+/-0.6		1 UJ	+/-0.5		1.3 UJ	+/-0.5		1.3
Thorium-232	pCi/g	1.5	100%	+/-0.4	0.9 J	+/-0.3		1.2 J	+/-0.5		1.1 J	+/-0.6		0.9 J	+/-0.4		1.3
Tritium	pCi/g	105	90%	+/-0.6	16.2 J	+/-0.2		7.5 J	+/-0.2		5	+/-0.2		0.4 J	+/-0.1		0.1
Uranium-234	pCi/g	1.6	95%	+/-0.2	1.2	+/-0.4		1.1	+/-0.3		0.7	+/-0.2		0.8	+/-0.3		0.6
Uranium-235	pCi/g	0.5	52%	+/-0.1	0.1 U	+/-0.1		0.1	+/-0.1		0.1	+/-0.1		0.1 U	+/-0.1		0.1
Uranium-238	pCi/g	1.3	100%	+/-0.3	1.3	+/-0.4		0.8	+/-0.3		0.8 J	+/-0.2		0.8	+/-0.3		0.8

TABLE G-30
EM-5 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-115			SS12-116			SS12-117			SS12-118		
MATRIX						SOIL			SOIL			SOIL			SOIL		
SAMPE ID						123309			123310			123311			123312		
DEPTH TO TOP OF SAMPLE						0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2		
SAMPLE DATE						11/17/1998			11/12/1998			11/12/1998			11/12/1998		
QC CODE						SA			SA			SA			SA		
STUDY ID				tep 1		RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION														
Bismuth-214	pCi/g	2.6	100%	J	+/-0.7	1.6		+/-0.4	1.7	J	+/-0.4	2	J	+/-0.4	2.1	J	+/-0.5
Cesium-137	pCi/g	1	86%	U		0.1	U		0.5		+/-0.3	0.9		+/-0.2	0.4		+/-0.1
Cobalt-57	pCi/g	0.2	24%	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.4	24%	U		0.1	U		0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	55.9	62%		+/-5.3	6.7	J	+/-4.2	3.6		+/-2.4	53.2		+/-36.2	32.7	U	
Lead-211	pCi/g	11.7	33%	UJ		8.6	J	+/-2.7	2	U		1.9	U		0.9	U	
Lead-214	pCi/g	2.3	100%	J	+/-0.6	1.8		+/-0.5	1.8	J	+/-0.4	1.5	J	+/-0.3	2.1	J	+/-0.4
Plutonium-239/240	pCi/g	0.2	10%	U	+/-0.1	0.2	U	+/-0.1	0.3	U	+/-0.1	0.2	UJ	+/-0.1	0.3	U	+/-0.1
Radium-223	pCi/g	1.5	14%	U		0.5	U		0.5	U		0.4	U		0.5	U	
Radium-226	pCi/g	2.6	100%	J	+/-0.7	1.6		+/-0.4	1.7	J	+/-0.4	2	J	+/-0.4	2.1	J	+/-0.5
Radium-228	pCi/g	3.4	95%	J	+/-0.6	3.4		+/-0.6	1.9	J	+/-0.4	1.9	J	+/-0.4	2.2	J	+/-0.6
Thorium-230	pCi/g	1.9	24%	U	+/-0.4	1.7	U	+/-0.6	1.4	J	+/-0.6	1.9		+/-0.7	1	U	+/-0.4
Thorium-232	pCi/g	1.5	100%		+/-0.5	1.5		+/-0.6	0.9	J	+/-0.4	1.5		+/-0.6	0.8		+/-0.3
Tritium	pCi/g	105	90%		+/-0.1	3.1		+/-0.1	7.7		+/-0.2	3.7		+/-0.1	4.8		+/-0.1
Uranium-234	pCi/g	1.6	95%		+/-0.2	0.8	J	+/-0.3	1		+/-0.3	0.9		+/-0.3	0.6		+/-0.2
Uranium-235	pCi/g	0.5	52%	U	+/-0.1	0.1	UJ	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.3	100%		+/-0.3	0.8		+/-0.2	0.7	J	+/-0.3	0.9	J	+/-0.3	0.8	J	+/-0.3

TABLE G-30
EM-5 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY				SEAD-12			SEAD-12			SEAD-12		
LOCATION ID				SS12-119			SS12-120			SS12-121		
MATRIX				SOIL			SOIL			SOIL		
SAMPE ID				123313			123362			123314		
DEPTH TO TOP OF SAMPLE				0			0			0		
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2		
SAMPLE DATE				11/12/1998			11/16/1998			11/12/1998		
QC CODE				SA			SA			SA		
STUDY ID				RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION									
Bismuth-214	pCi/g	2.6	100%	1.4	J	+/-0.3	1.2	J	+/-0.3	1.6	J	+/-0.3
Cesium-137	pCi/g	1	86%	1		+/-0.2	0.5		+/-0.1	0.1	U	
Cobalt-57	pCi/g	0.2	24%	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.4	24%	0.1	U		0.1	U		0.1	U	
Lead-210	pCi/g	55.9	62%	50.4		+/-32.2	24.2	U		20.4	U	
Lead-211	pCi/g	11.7	33%	1.7	U		1.6	U		11.5		+/-5.4
Lead-214	pCi/g	2.3	100%	1.6	J	+/-0.3	1.2	J	+/-0.2	1.6	J	+/-0.3
Plutonium-239/240	pCi/g	0.2	10%	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Radium-223	pCi/g	1.5	14%	0.5	U		0.4		+/-0.3	0.4	U	
Radium-226	pCi/g	2.6	100%	1.4	J	+/-0.3	1.2	J	+/-0.3	1.6	J	+/-0.3
Radium-228	pCi/g	3.4	95%	2.5	J	+/-0.6	1.6		+/-0.4	0.3	UJ	
Thorium-230	pCi/g	1.9	24%	1.3	UJ	+/-0.5	1.2	U	+/-0.4	0.8	U	+/-0.3
Thorium-232	pCi/g	1.5	100%	1.1	J	+/-0.5	0.7		+/-0.3	0.7		+/-0.3
Tritium	pCi/g	105	90%	14		+/-0.2	2		+/-0.1	7.9		+/-0.2
Uranium-234	pCi/g	1.6	95%	0.4		+/-0.2	0.9	J	+/-0.3	1.1		+/-0.4
Uranium-235	pCi/g	0.5	52%	0.1		+/-0.1	0.1	U	+/-0.1	0.2		+/-0.1
Uranium-238	pCi/g	1.3	100%	0.7	J	+/-0.2	0.8		+/-0.3	1.1	J	+/-0.4

TABLE G-31
EM-5 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-22			MW12-23			MW12-23			TP12-15A			TP12-15B		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPE ID						123069			123079			123080			123031			123032		
DEPTH TO TOP OF SAMPLE						2			0			2			3.5			2		
DEPTH TO BOTTOM OF SAMPLE						4			2			4			3.5			2		
SAMPLE DATE						10/4/1998			10/5/1998			10/5/1998			10/2/1998			10/2/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID						RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES															
Bismuth-214	pCi/g	2.6	100%	9	9	1.7		+/-0.3	2		+/-0.5	1.6		+/-0.3	1.5	J	+/-0.4	2.6	J	
Cesium-137	pCi/g	0.6	89%	8	9	0.2	UJ		0.6	J	+/-0.2	0.2	J	+/-0.1	0.4		+/-0.1	0.5		
Cobalt-57	pCi/g	0.1	22%	2	9	0.1	UJ		0.1	UJ		0.1	UJ		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.5	89%	8	9	0.4	J	+/-0.2	0.3	J	+/-0.1	0.2	J	+/-0.1	0.5		+/-0.2	0.5		
Lead-210	pCi/g	76.9	89%	8	9	38.9		+/-31.7	6.6		+/-3.5	23.1	U		50.2	J	+/-49.4	5.9	J	
Lead-211	pCi/g	12	67%	6	9	7.5		+/-4.6	7.8		+/-3.9	3.7		+/-3.2	0.7	UJ		2.7	UJ	
Lead-214	pCi/g	2.1	100%	9	9	1.7		+/-0.4	2.1		+/-0.6	1.5		+/-0.2	1.4		+/-0.3	1.7		
Plutonium-239/240	pCi/g	0	0%	0	9	0.1	UJ	+/-0.2	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Radium-223	pCi/g	1.6	11%	1	9	0.5	U		0.5	U		0.5	U		0.5	U		1.6		
Radium-226	pCi/g	2.6	100%	9	9	1.7		+/-0.3	2		+/-0.5	1.6		+/-0.3	1.5	J	+/-0.4	2.6	J	
Radium-228	pCi/g	2.7	100%	9	9	2.3		+/-0.6	2.7		+/-0.6	2.5		+/-0.6	2.1		+/-0.6	1.9		
Thorium-230	pCi/g	3.3	89%	8	9	1.5	J	+/-0.6	1		+/-0.4	1.5		+/-0.5	1.8		+/-0.8	3.3		
Thorium-232	pCi/g	1.9	100%	9	9	1.9	J	+/-0.7	0.6		+/-0.3	1		+/-0.4	0.5		+/-0.4	0.9		
Tritium	pCi/g	0.4	33%	3	9	0.1	UJ	+/-0.1	0.4	J	+/-0.1	0.1	UJ	+/-0.1	0.1	ND	+/-175	0.1		
Uranium-234	pCi/g	1.2	100%	9	9	0.9	J	+/-0.4	0.8	J	+/-0.4	0.7	J	+/-0.3	1		+/-0.6	1.2		
Uranium-235	pCi/g	0.1	44%	4	9	0.1	U	+/-0.1	0.2	UJ	+/-0.2	0.1	U	+/-0.1	0.4	U	+/-0.1	0.1		
Uranium-238	pCi/g	1.1	100%	9	9	0.7		+/-0.3	0.7	J	+/-0.4	1		+/-0.3	0.8	J	+/-0.5	0.4	J	

TABLE G-31
EM-5 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID							TP12-15C			TP12-16A			TP12-16B			TP12-16C		
MATRIX							SOIL			SOIL			SOIL			SOIL		
SAMPE ID							123033			123044			123045			123078		
DEPTH TO TOP OF SAMPLE							0.8			0.6			2			0.5		
DEPTH TO BOTTOM OF SAMPLE							0.8			0.6			2			2		
SAMPLE DATE							10/2/1998			10/3/1998			10/3/1998			10/3/1998		
QC CODE							SA			SA			SA			SA		
STUDY ID							RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMUM	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES													
Bismuth-214	pCi/g	2.6	100%	9	9	+/-0.6	1.9	J	+/-0.4	1.7	J	+/-0.3	2.6	J	+/-0.4	1.3		+/-0.4
Cesium-137	pCi/g	0.6	89%	8	9	+/-0.2	0.3		+/-0.1	0.6		+/-0.2	0.3		+/-0.2	0.3	J	+/-0.1
Cobalt-57	pCi/g	0.1	22%	2	9		0.1		+/-0.1	0.1	U		0.1	U		0.1	J	+/-0.1
Cobalt-60	pCi/g	0.5	89%	8	9	+/-0.3	0.3		+/-0.1	0.1	U		0.2		+/-0.1	0.5	J	+/-0.2
Lead-210	pCi/g	76.9	89%	8	9	+/-2	76.9	J	+/-48.6	43.5	J	+/-42.9	3.5	J	+/-1.6	27.4		+/-18.5
Lead-211	pCi/g	12	67%	6	9		6.4	J	+/-2.4	1.8	UJ		12	J	+/-9.1	4.1		+/-2.4
Lead-214	pCi/g	2.1	100%	9	9	+/-0.5	1.5		+/-0.3	1.4		+/-0.3	2.1		+/-0.5	1.4		+/-0.2
Plutonium-239/240	pCi/g	0	0%	0	9	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.2	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Radium-223	pCi/g	1.6	11%	1	9	+/-0.7	0.5	U		0.4	U		0.5	U		0.5	U	
Radium-226	pCi/g	2.6	100%	9	9	+/-0.6	1.9	J	+/-0.4	1.7		+/-0.3	2.6	J	+/-0.4	1.3		+/-0 4
Radium-228	pCi/g	2.7	100%	9	9	+/-0.6	2.1		+/-0.6	1.7	J	+/-0.5	2.7		+/-0.6	2.2		+/-0.6
Thorium-230	pCi/g	3.3	89%	8	9	+/-1.4	1.6		+/-0.8	2.2		+/-0.9	1.1	U	+/-0.7	1.1	J	+/-0.5
Thorium-232	pCi/g	1.9	100%	9	9	+/-0.7	1.6		+/-0.8	1.1		+/-0.6	1.1		+/-0.6	1	J	+/-0.4
Tritium	pCi/g	0.4	33%	3	9	+/-188	0.2		+/-239	0.1	U	+/-179	0.1	U	+/-178	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.2	100%	9	9	+/-0.7	0.7		+/-0.5	0.9		+/-0.5	1.1		+/-0.6	0.8	J	+/-0.3
Uranium-235	pCi/g	0.1	44%	4	9	+/-0.3	0.1		+/-0.1	0.1		+/-0.2	0.1		+/-0.2	0.1	U	+/-0 1
Uranium-238	pCi/g	1.1	100%	9	9	+/-0.4	1.1	J	+/-0.6	0.4	J	+/-0.4	0.9	J	+/-0.5	0.8		+/-0.3

TABLE G-32
EM-6 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-24			MW12-25			MW12-26			SS12-100			SS12-101		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123161			123164			123167			123294			123295		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						19-Oct-98			18-Oct-98			18-Oct-98			12-Nov-98			12-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Bismuth-214	pCi/g	2.4	100%	16	16	1.6		+/-0.4	1.6		+/-0.6	1.7		+/-0.5	1.3	J	+/-0.4	1.4	J	
Cesium-137	pCi/g	0.5	56%	9	16	0.1	UJ		0.5		+/-0.3	0.1		+/-0.1	0.3		+/-0.1	0.4	J	
Cobalt-57	pCi/g	0.1	25%	4	16	0.1	UJ		0.1		+/-0.1	0.1	U		0.1	U		0.1		
Cobalt-60	pCi/g	0.7	50%	8	16	0.4		+/-0.1	0.4	J	+/-0.1	0.1	J	+/-0.1	0.1	U		0.7		
Lead-210	pCi/g	6.7	50%	8	16	3	J	+/-1.7	6.7		+/-3.2	3.4		+/-2.3	3.5		+/-1.8	3.3		
Lead-211	pCi/g	13.3	44%	7	16	10	J	+/-4	2.7	UJ		13.3	J	+/-5.4	2.1	U		4	J	
Lead-214	pCi/g	2	100%	16	16	1.4		+/-0.4	1.7		+/-0.4	1.6		+/-0.4	1.1	J	+/-0.4	1.6		
Plutonium-239/240	pCi/g	0.2	19%	3	16	0.2	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1	0.1	U	
Radium-223	pCi/g	1	13%	2	16	0.5	U		0.5	U		0.6	U		0.4	U		1		
Radium-226	pCi/g	2.4	100%	16	16	1.6		+/-0.4	1.6		+/-0.6	1.7		+/-0.5	1.3	J	+/-0.4	1.4	J	
Radium-228	pCi/g	3.5	100%	16	16	1.6		+/-0.3	2.1		+/-0.5	3.5		+/-0.8	1.8	J	+/-0.4	3.3	J	
Thorium-230	pCi/g	1.9	31%	5	16	1.2	J	+/-0.5	1	J	+/-0.4	1.9	J	+/-0.7	1	U	+/-0.4	1.3	UJ	
Thorium-232	pCi/g	3.2	100%	16	16	1.5	J	+/-0.6	0.9	J	+/-0.4	3.2		+/-1	1.2		+/-0.4	1.4	J	
Tritium	pCi/g	1.5	50%	8	16	0.1	U	+/-0.1	0.6		+/-0.1	0.1	U	+/-0.1	1		+/-0.1	0.1	J	
Uranium-234	pCi/g	1.1	100%	16	16	1.1	J	+/-0.3	0.7		+/-0.2	0.6		+/-0.2	0.9		+/-0.3	0.6		
Uranium-235	pCi/g	0.1	19%	3	16	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	
Uranium-238	pCi/g	1	100%	16	16	0.9		+/-0.3	0.6	J	+/-0.2	0.7	J	+/-0.2	1	J	+/-0.4	0.8		

TABLE G-32
EM-6 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY					SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID					SS12-90			SS12-91			SS12-92			SS12-93			SS12-94		
MATRIX					SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID					123283			123284			123285			123286			123288		
DEPTH TO TOP OF SAMPLE					0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE					0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE					12-Nov-98			16-Nov-98			12-Nov-98			12-Nov-98			12-Nov-98		
QC CODE					SA			SA			SA			SA			DU		
STUDY ID			FREQUENCY OF		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION																
Bismuth-214	pCi/g	2.4	100%	+/-0.3	1.8	J	+/-0.6	2.4	J	+/-0.4	1.3	J	+/-0.4	1	J	+/-0.4	1.6	J	+/-0.3
Cesium-137	pCi/g	0.5	56%	+/-0.2	0.1	U		0.1	U		0.2	J	+/-0.1	0.1	UJ		0.1	U	
Cobalt-57	pCi/g	0.1	25%	+/-0.1	0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.7	50%	+/-0.2	0.1	U		0.1	U		0.2		+/-0.1	0.3		+/-0.1	0.1	U	
Lead-210	pCi/g	6.7	50%	+/-1.8	4.2		+/-3.3	4.4		+/-2.5	36.4	U		28.1	U		12.1	U	
Lead-211	pCi/g	13.3	44%	+/-1.8	3.3	U		1.9	U		0.8	UJ		7.3	J	+/-5.6	0.6	U	
Lead-214	pCi/g	2	100%	+/-0.4	2	J	+/-0.4	1.6	J	+/-0.3	1.5		+/-0.4	1.5		+/-0.4	1.2	J	+/-0.3
Plutonium-239/240	pCi/g	0.2	19%	+/-0.1	0.2	J	+/-0.2	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.2
Radium-223	pCi/g	1	13%	+/-0.7	0.9		+/-0.5	0.5	U		0.4	U		0.5	U		0.4	U	
Radium-226	pCi/g	2.4	100%	+/-0.3	1.8	J	+/-0.6	2.4	J	+/-0.4	1.3	J	+/-0.4	1	J	+/-0.4	1.6	J	+/-0.3
Radium-228	pCi/g	3.5	100%	+/-0.6	1.9	J	+/-0.5	2.6		+/-0.5	2.5	J	+/-0.5	2.1	J	+/-0.5	2.1	J	+/-0.6
Thorium-230	pCi/g	1.9	31%	+/-0.7	1.5	J	+/-0.6	1.1	U	+/-0.4	1.6	UJ	+/-0.6	0.9	UJ	+/-0.4	1.1	UJ	+/-0.6
Thorium-232	pCi/g	3.2	100%	+/-0.8	1.3	J	+/-0.5	1.6		+/-0.5	1.4	J	+/-0.5	0.8	J	+/-0.3	1.9	J	+/-0.8
Tritium	pCi/g	1.5	50%	+/-0.1	1.5		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.4		+/-0.1
Uranium-234	pCi/g	1.1	100%	+/-0.2	0.9		+/-0.4	1	J	+/-0.3	0.8		+/-0.3	0.9		+/-0.3	0.9		+/-0.3
Uranium-235	pCi/g	0.1	19%	+/-0.1	0.1		+/-0.1	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1	100%	+/-0.3	0.9	J	+/-0.4	1	J	+/-0.3	1		+/-0.3	0.9		+/-0.3	0.7	J	+/-0.2

TABLE G-32
EM-6 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY				SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID				SS12-94			SS12-95			SS12-96			SS12-97			SS12-98			SS12-99
MATRIX				SOIL			SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID				123287			123289			123290			123291			123292			123293
DEPTH TO TOP OF SAMPLE				0			0			0			0			0			0
DEPTH TO BOTTOM OF SAMPLE				0.2			0.2			0.2			0.2			0.2			0.2
SAMPLE DATE				12-Nov-98			12-Nov-98			16-Nov-98			12-Nov-98			12-Nov-98			12-Nov-98
QC CODE				SA			SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase
PARAMETER	UNIT	MAXIMU	DETECTION																	
Bismuth-214	pCi/g	2.4	100%	1.4	J	+/-0.4	1.2	J	+/-0.4	1.8	J	+/-0.4	1.6	J	+/-0.3	1.1	J	+/-0.2	1.6
Cesium-137	pCi/g	0.5	56%	0.1	U		0.4	J	+/-0.2	0.2		+/-0.2	0.2	J	+/-0.1	0.1	U		0.3
Cobalt-57	pCi/g	0.1	25%	0.1	U		0.1	U		0.1	U		0.1	U		0.1		+/-0.1	0.1
Cobalt-60	pCi/g	0.7	50%	0.1	U		0.4		+/-0.1	0.1	U		0.1		+/-0.1	0.1	U		0.1
Lead-210	pCi/g	6.7	50%	18.1	U		26	U		1.7	U		29.3	U		24.4	U		2.8
Lead-211	pCi/g	13.3	44%	2.7	U		5.2	J	+/-2.3	0.8	U		6.8	J	+/-2.1	5.1		+/-3.9	1.4
Lead-214	pCi/g	2	100%	1.7	J	+/-0.3	1.2		+/-0.4	1.7	J	+/-0.4	1.4		+/-0.3	1.4	J	+/-0.3	1.5
Plutonium-239/240	pCi/g	0.2	19%	0.2	U	+/-0.1	0.3	U	+/-0.2	0.1	U	+/-0.1	0.2	U	+/-0.1	0.2	U	+/-0.1	0.2
Radium-223	pCi/g	1	13%	0.4	U		0.4	U		0.5	U		0.5	U		0.3	U		0.4
Radium-226	pCi/g	2.4	100%	1.4	J	+/-0.4	1.2	J	+/-0.4	1.8	J	+/-0.4	1.6	J	+/-0.3	1.1	J	+/-0.2	1.6
Radium-228	pCi/g	3.5	100%	1.7	J	+/-0.4	1.9	J	+/-0.5	3.2		+/-0.6	2.1	J	+/-0.6	1.9	J	+/-0.5	2.3
Thorium-230	pCi/g	1.9	31%	1.2	UJ	+/-0.6	1	UJ	+/-0.4	1.1	U	+/-0.4	1.2	UJ	+/-0.4	1.1	U	+/-0.4	1.4
Thorium-232	pCi/g	3.2	100%	1.7	J	+/-0.6	1	J	+/-0.4	1.3		+/-0.5	0.9	J	+/-0.4	0.9		+/-0.3	1.2
Tritium	pCi/g	1.5	50%	0.6		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.9		+/-0.1	0.9
Uranium-234	pCi/g	1.1	100%	0.8		+/-0.3	0.7		+/-0.3	1	J	+/-0.3	0.5		+/-0.2	0.8		+/-0.3	0.8
Uranium-235	pCi/g	0.1	19%	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1
Uranium-238	pCi/g	1	100%	0.6	J	+/-0.2	0.7		+/-0.2	0.9		+/-0.3	0.8		+/-0.3	1	J	+/-0.3	0.9

TABLE G-32
EM-6 RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY LOCATION ID MATRIX SAMPLE ID DEPTH TO TOP OF SAMPLE DEPTH TO BOTTOM OF SAMPLE SAMPLE DATE QC CODE STUDY ID PARAMETER	UNIT	MAXIMU	FREQUENCY OF DETECTION	Step 1	
Bismuth-214	pCi/g	2.4	100%	J	+/-0.6
Cesium-137	pCi/g	0.5	56%		+/-0.1
Cobalt-57	pCi/g	0.1	25%	U	
Cobalt-60	pCi/g	0.7	50%	U	
Lead-210	pCi/g	6.7	50%		+/-1.7
Lead-211	pCi/g	13.3	44%	U	
Lead-214	pCi/g	2	100%	J	+/-0.4
Plutonium-239/240	pCi/g	0.2	19%	J	+/-0.2
Radium-223	pCi/g	1	13%	U	
Radium-226	pCi/g	2.4	100%	J	+/-0.6
Radium-228	pCi/g	3.5	100%	J	+/-0.5
Thorium-230	pCi/g	1.9	31%		+/-0.5
Thorium-232	pCi/g	3.2	100%		+/-0.5
Tritium	pCi/g	1.5	50%		+/-0.1
Uranium-234	pCi/g	1.1	100%		+/-0.3
Uranium-235	pCi/g	0.1	19%	U	+/-0.1
Uranium-238	pCi/g	1	100%	J	+/-0.3

TABLE G-33
EM-6 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-24			MW12-24			MW12-25			MW12-25			MW12-26		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123162			123163			123165			123166			123168		
DEPTH TO TOP OF SAMPLE						2			6			2			6			2		
DEPTH TO BOTTOM OF SAMPLE						4			8			4			8			4		
SAMPLE DATE						19-Oct-98			19-Oct-98			18-Oct-98			18-Oct-98			18-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Bismuth-214	pCi/g	2.4	100%	12	12	1.6		+/-0.4	1.8		+/-0.5	1.8		+/-0.6	1.3		+/-0.5	2.4		
Cesium-137	pCi/g	0.7	83%	10	12	0.2	J	+/-0.1	0.5	J	+/-0.3	0.5		+/-0.3	0.1		+/-0.1	0.7		
Cobalt-57	pCi/g	0.2	50%	6	12	0.1	UJ		0.1	J	+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.8	67%	8	12	0.1		+/-0.1	0.1	U		0.1	UJ		0.2	J	+/-0.1	0.1	UJ	
Lead-210	pCi/g	6.2	50%	6	12	1.6	UJ		1.9	UJ		1.5	U		2.5		+/-1.8	4.8		
Lead-211	pCi/g	16.7	75%	9	12	9.3	J	+/-2.5	3.9	J	+/-1.8	10.6	J	+/-4.8	1.8	UJ		14.3	J	
Lead-214	pCi/g	2.3	100%	12	12	1.4		+/-0.4	1.6		+/-0.5	1.4		+/-0.4	2		+/-0.4	1.6		
Plutonium-239/240	pCi/g	0	0%	0	12	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Promethium-147	pCi/g	0	0%	0	6															
Radium-223	pCi/g	0.4	8%	1	12	0.4	U		0.4	U		0.4	U		0.5	U		0.5	U	
Radium-226	pCi/g	2.4	100%	12	12	1.6		+/-0.4	1.8		+/-0.5	1.8		+/-0.6	1.3		+/-0.5	2.4		
Radium-228	pCi/g	3.1	100%	12	12	1.6		+/-0.4	2.9		+/-0.7	2.1		+/-0.6	2.8		+/-0.7	1.8		
Thorium-230	pCi/g	1.7	67%	8	12	0.9	J	+/-0.4	1.5	J	+/-0.6	1.3	J	+/-0.5	1.1		+/-0.4	1	J	
Thorium-232	pCi/g	2	100%	12	12	1.1		+/-0.4	1.7	J	+/-0.7	1.5	J	+/-0.6	1		+/-0.4	1		
Tritium	pCi/g	4.1	8%	1	12	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	
Uranium-234	pCi/g	1.2	92%	11	12	0.7	J	+/-0.3	1.2	J	+/-0.4	0.5		+/-0.2	0.7	J	+/-0.3	0.7		
Uranium-235	pCi/g	0.1	42%	5	12	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1	0.1	U	
Uranium-238	pCi/g	1.3	100%	12	12	0.5		+/-0.2	1.3		+/-0.4	0.7	J	+/-0.2	0.5	J	+/-0.2	0.8	J	

TABLE G-33
EM-6 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY							SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12
LOCATION ID							MW12-26			TP12-11A			TP12-11B			TP12-11C			TP12-12A
MATRIX							SOIL			SOIL			SOIL			SOIL			SOIL
SAMPLE ID							123169			123109			123110			123111			123118
DEPTH TO TOP OF SAMPLE							6			6			6.5			0.5			0.5
DEPTH TO BOTTOM OF SAMPLE							8			6			6.5			0.5			0.5
SAMPLE DATE							18-Oct-98			14-Oct-98			14-Oct-98			14-Oct-98			14-Oct-98
QC CODE							SA			SA			SA			SA			SA
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES														
Bismuth-214	pCi/g	2.4	100%	12	12	+/-0.6	1.6		+/-0.7	1.8		+/-0.4	1.5		+/-0.7	2.4		+/-0.4	2.3
Cesium-137	pCi/g	0.7	83%	10	12	+/-0.3	0.2	U		0.4		+/-0.2	0.7		+/-0.2	0.6		+/-0.1	0.3
Cobalt-57	pCi/g	0.2	50%	6	12		0.1		+/-0.1	0.1	U		0.2		+/-0.1	0.1	U		0.2
Cobalt-60	pCi/g	0.8	67%	8	12		0.4	J	+/-0.1	0.1	UJ		0.7	J	+/-0.2	0.2	J	+/-0.1	0.3
Lead-210	pCi/g	6.2	50%	6	12	+/-3.1	3.6		+/-2.7	5.6	J	+/-2.5	2.1	UJ		2.1	UJ		6.2
Lead-211	pCi/g	16.7	75%	9	12	+/-3.1	11.2	J	+/-6.5	9.7	J	+/-7.1	14.6	J	+/-8.3	2	UJ		2
Lead-214	pCi/g	2.3	100%	12	12	+/-0.3	1.8		+/-0.5	2.1		+/-0.6	1.9		+/-0.5	1.3		+/-0.5	2.3
Plutonium-239/240	pCi/g	0	0%	0	12	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1
Promethium-147	pCi/g	0	0%	0	6					5.9	UJ	+/-5.1	5.4	UJ	+/-5.1	6.6	UJ	+/-5.2	2.5
Radium-223	pCi/g	0.4	8%	1	12		0.6	U		0.4		+/-0.4	0.5	U		0.6	U		0.6
Radium-226	pCi/g	2.4	100%	12	12	+/-0.6	1.6		+/-0.7	1.8		+/-0.4	1.5		+/-0.7	2.4		+/-0.4	2.3
Radium-228	pCi/g	3.1	100%	12	12	+/-0.5	2.4		+/-0.5	3.1	J	+/-0.7	1.5	J	+/-0.6	2.6	J	+/-0.8	2.1
Thorium-230	pCi/g	1.7	67%	8	12	+/-0.4	1.7	J	+/-0.7	1	U	+/-0.4	1.3		+/-0.5	1	U	+/-0.4	1.2
Thorium-232	pCi/g	2	100%	12	12	+/-0.4	2	J	+/-0.7	1		+/-0.4	1.3		+/-0.5	0.9		+/-0.3	1.3
Tritium	pCi/g	4.1	8%	1	12	+/-0.1	0.1	U	+/-0.1	4.1	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1
Uranium-234	pCi/g	1.2	92%	11	12	+/-0.2	0.5	J	+/-0.2	0.7		+/-0.3	0.6	U	+/-0.2	0.8		+/-0.3	0.8
Uranium-235	pCi/g	0.1	42%	5	12	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1
Uranium-238	pCi/g	1.3	100%	12	12	+/-0.3	0.7	J	+/-0.2	0.6		+/-0.3	0.7		+/-0.2	1		+/-0.4	0.8

TABLE G-33
EM-6 RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY								SEAD-12			SEAD-12		
LOCATION ID								TP12-12B			TP12-12C		
MATRIX								SOIL			SOIL		
SAMPLE ID								123119			123120		
DEPTH TO TOP OF SAMPLE								1.5			4		
DEPTH TO BOTTOM OF SAMPLE								1.5			4		
SAMPLE DATE								14-Oct-98			14-Oct-98		
QC CODE								SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMETER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES								
Bismuth-214	pCi/g	2.4	100%	12	12		+/-0.7	1.9		+/-0.6	2.3		+/-0.6
Cesium-137	pCi/g	0.7	83%	10	12		+/-0.2	0.6		+/-0.2	0.2	U	
Cobalt-57	pCi/g	0.2	50%	6	12		+/-0.1	0.1		+/-0.1	0.2		+/-0.1
Cobalt-60	pCi/g	0.8	67%	8	12	J	+/-0.2	0.3	J	+/-0.1	0.8	J	+/-0.2
Lead-210	pCi/g	6.2	50%	6	12	J	+/-4.3	2	UJ		4.5	J	+/-3.7
Lead-211	pCi/g	16.7	75%	9	12	UJ		10	J	+/-8.8	16.7	J	+/-7.6
Lead-214	pCi/g	2.3	100%	12	12		+/-0.5	1.7		+/-0.5	1.9		+/-0.5
Plutonium-239/240	pCi/g	0	0%	0	12	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	6	UJ	+/-5	2	UJ	+/-5	2.8	UJ	+/-5.1
Radium-223	pCi/g	0.4	8%	1	12	U		0.6	U		0.6	U	
Radium-226	pCi/g	2.4	100%	12	12		+/-0.7	1.9		+/-0.6	2.3		+/-0.6
Radium-228	pCi/g	3.1	100%	12	12	J	+/-0.7	2.8	J	+/-0.6	2	J	+/-0.5
Thorium-230	pCi/g	1.7	67%	8	12		+/-0.5	1.2	UJ	+/-0.5	1.1	U	+/-0.4
Thorium-232	pCi/g	2	100%	12	12		+/-0.5	1.2	J	+/-0.5	1		+/-0.4
Tritium	pCi/g	4.1	8%	1	12	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.2	92%	11	12		+/-0.3	0.7	J	+/-0.2	0.7		+/-0.3
Uranium-235	pCi/g	0.1	42%	5	12	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.3	100%	12	12		+/-0.3	0.3	J	+/-0.1	0.8		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-27			SS12-236			SS12-237			MW12-31			MW12-32		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123061			123433			123417			123172			123178		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						10/4/1998			11/17/1998			11/17/1998			26-Oct-98			26-Oct-98		
QC CODE						SA			SA			SA			SA			DU		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	2.5		+/-0.4	1.6	J	+/-0.5	1.7		+/-0.6	1.2		+/-0.4	1.9		+/-0.5
Cesium-137	pCi/g	1.5	92%	59	64	1	J	+/-0.4	0.6		+/-0.2	0.8	J	+/-0.2	0.7	J	+/-0.3	0.8	J	+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	J	+/-0.1	0.2		+/-0.1	0.1	U		0.1	J	+/-0.1	0.1	J	+/-0.1
Cobalt-60	pCi/g	0.7	69%	44	64	0.7	J	+/-0.2	0.1	U		0.1	U		0.5		+/-0.2	0.5		+/-0.2
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	2.2	U		38.1	UJ		8.4		+/-4.4	5.7	J	+/-2.2	4.7	J	+/-2.4
Lead-211	pCi/g	20.1	55%	35	64	2.7	U		3.1	UJ		2.7	U		3.2	UJ		1.1	UJ	
Lead-214	pCi/g	2.9	95%	62	65	2.4		+/-0.6	1.6		+/-0.3	1.4	J	+/-0.4	1.4		+/-0.4	2.1		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.2	U	+/-0.2	0.2		+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2							6.5	U	+/-3.7						
Radium-223	pCi/g	1.7	13%	8	64	0.7	U		0.6	U		0.5	ND		0.5	U		0.5	U	
Radium-226	pCi/g	3	89%	57	64	2.5		+/-0.4	1.6	J	+/-0.5	1.7		+/-0.6	1.2	U	+/-0.4	1.9	U	+/-0.5
Radium-228	pCi/g	3.6	88%	56	64	2.6		+/-0.6	1.8	J	+/-0.6	2.2		+/-0.7	1.9		+/-0.6	2.5		+/-0.5
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	0.9		+/-0.4	0.6	UJ	+/-0.3	1.2	U	+/-0.5	1.5	UJ	+/-0.6	1.1	UJ	+/-0.5
Thorium-232	pCi/g	1.8	98%	63	64	0.8		+/-0.4	1.2	J	+/-0.5	1.1		+/-0.4	1.4		+/-0.5	0.8	J	+/-0.4
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	1.8	J	+/-0.1	146	J	+/-0.6	7.2	J	+/-0.2	0.1	U	+/-0.1	26.7		+/-0.2
Uranium-234	pCi/g	1.9	81%	52	64	0.7	J	+/-0.3	0.9		+/-0.3	1.1	J	+/-0.3	1	UJ	+/-0.3	1.1	UJ	+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	ND	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.8		+/-0.3	0.8	J	+/-0.3	0.9	J	+/-0.3	0.8		+/-0.3	1		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-32			SS12-238			SS12-239			MW12-37			MW12-37		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123175			123434			123435			123201			123210		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						26-Oct-98			17-Nov-98			17-Nov-98			11/1/1998			11/1/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES	N			N			N								
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	1.2		+/-0.5	2.9	J	+/-0.6	1.6		+/-0.5	1.8		+/-0.4	1.2		+/-0.3
Cesium-137	pCi/g	1.5	92%	59	64	0.9	J	+/-0.3	0.3		+/-0.3	0.4		+/-0.2	0.5	UJ	+/-0.1	0.6	UJ	+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	UJ		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.3		+/-0.1	0.1	U		0.1	U		0.3	UJ	+/-0.1	0.5	UJ	+/-0.1
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	4.7	J	+/-2.4	6.4	J	+/-2.8	17.3	UJ		2.7	J	+/-1.8	1.6	UJ	
Lead-211	pCi/g	20.1	55%	35	64	10.8	J	+/-6.3	2	UJ		0.7	UJ		1.4	UJ		2.4	J	+/-1.8
Lead-214	pCi/g	2.9	95%	62	65	1.4		+/-0.4	2.2		+/-0.5	1.2		+/-0.3	1.4	UJ	+/-0.4	1.4	UJ	+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.6	U		0.4	U		0.4	UJ		0.3	UJ	
Radium-226	pCi/g	3	89%	57	64	1.2	U	+/-0.5	2.9	J	+/-0.6	1.6		+/-0.5	1.8		+/-0.4	1.2		+/-0.3
Radium-228	pCi/g	3.6	88%	56	64	2		+/-0.5	3.3	J	+/-0.7	1.9		+/-0.5	2.3		+/-0.5	1.3		+/-0.5
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	0.8	UJ	+/-0.4	1.2		+/-0.5	1	U	+/-0.4	0.3	J	+/-0.2	0.6	J	+/-0.4
Thorium-232	pCi/g	1.8	98%	63	64	1.4	J	+/-0.6	1.2		+/-0.5	1.2		+/-0.4	0.7	J	+/-0.3	0.6	J	+/-0.4
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	0.1	U	+/-0.1	117	J	+/-0.6	38		+/-0.3	0.1	U	+/-0.1	0.6	U	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	1.1	UJ	+/-0.3	1		+/-0.3	0.9		+/-0.3	0.4	UJ	+/-0.2	0.9	J	+/-0.6
Uranium-235	pCi/g	0.2	28%	18	64	0.1	J	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.4	UJ	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.9		+/-0.3	1.1	J	+/-0.3	1.1		+/-0.3	0.5		+/-0.2	0.5	J	+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-40			MW12A-1			SS12-19			SS12-20			SS12-21		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123121			MW12A-1-00			123104			123214			123215		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						14-Oct-98			10-Jun-94			13-Oct-98			03-Nov-98			03-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			ESI			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1				0.78	+/-0.34										
Bismuth-214	pCi/g	3	94%	61	65	2.2		+/-0.4	0.72	+/-0.28		1.6	J	+/-0.4	2.1	J	+/-0.5	1.9	J	+/-0.7
Cesium-137	pCi/g	1.5	92%	59	64	1		+/-0.5				0.7	J	+/-0.3	1.1		+/-0.2	1		+/-0.3
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U					0.1		+/-0.1	0.1		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.4	J	+/-0.1				0.4	J	+/-0.1	0.2	J	+/-0.1	0.3	J	+/-0.1
Gross Alpha	pCi/g	13	100%	1	1				13	+/-5										
Gross Beta	pCi/g	27	100%	1	1				27	+/-6										
Lead-210	pCi/g	72.3	63%	40	64	7.6	J	+/-5				2.1	UJ		3.7	J	+/-2.9	3.7	J	+/-2
Lead-211	pCi/g	20.1	55%	35	64	20.1	J	+/-13.3				2.4	UJ		1	UJ		3.4	UJ	
Lead-214	pCi/g	2.9	95%	62	65	2		+/-0.5	0.83	+/-0.11		1.8		+/-0.4	1.9		+/-0.4	2		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	U	+/-0.1				0.1	U	+/-0.1	0.2	U	+/-0.1	0.1	J	+/-0.1
Promethium-147	pCi/g	0	0%	0	2	0.4	UJ	+/-5												
Radium-223	pCi/g	1.7	13%	8	64	0.6	U					0.4	U		0.4	U		0.5	U	
Radium-226	pCi/g	3	89%	57	64	2.2		+/-0.4				1.6	J	+/-0.4	2.1	J	+/-0.5	1.9	J	+/-0.7
Radium-228	pCi/g	3.6	88%	56	64	2.1	J	+/-0.7				1.6		+/-0.5	1.7	J	+/-0.7	1.5	J	+/-0.5
Thallium-208	pCi/g	0.26	100%	1	1				0.26	+/-0.05										
Thorium-230	pCi/g	2.2	48%	31	64	1.1	UJ	+/-0.5				1.4	J	+/-0.6	0.9	UJ	+/-0.4	0.8	UJ	+/-0.3
Thorium-232	pCi/g	1.8	98%	63	64	1.4	J	+/-0.6				1.7	J	+/-0.6	1		+/-0.4	0.8		+/-0.3
Thorium-234	pCi/g	0.76	100%	1	1				0.76	+/-0.4										
Tritium	pCi/g	418	84%	54	64	5.2	J	+/-0.1				0.1	UJ	+/-0.1	3.8		+/-0.1	210		+/-0.8
Uranium-234	pCi/g	1.9	81%	52	64	1		+/-0.3				1	UJ	+/-0.3	1		+/-0.3	0.8		+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1				0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.9		+/-0.3				1	J	+/-0.3	0.8		+/-0.3	0.8		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-22			SS12-23			SS12-232			SS12-232			SS12-233		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123216			123217			123428			123427			123429		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						03-Nov-98			03-Nov-98			16-Nov-98			16-Nov-98			16-Nov-98		
QC CODE						SA			SA			DU			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	3	J	+/-0.6	2.4	J	+/-0.6	1.8		+/-0.4	1.8		+/-0.5	1.3	J	+/-0.3
Cesium-137	pCi/g	1.5	92%	59	64	0.6		+/-0.1	1.3		+/-0.4	0.7	J	+/-0.3	1	J	+/-0.3	0.4		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.3	J	+/-0.1	0.3	J	+/-0.1	0.1	U		0.1	U		0.1	U	
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	5.5	J	+/-2.9	6	J	+/-3.2	22	UJ		6.5		+/-2.5	28	U	
Lead-211	pCi/g	20.1	55%	35	64	1.3	UJ		1	UJ		8.6	J	+/-3.5	2.3	U		6	J	+/-2.1
Lead-214	pCi/g	2.9	95%	62	65	2.4		+/-0.6	2.2		+/-0.6	1.8		+/-0.5	2.1		+/-0.4	1.3	J	+/-0.3
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1	0.3	UJ	+/-0.2	0.2		+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.5	U		0.5	U		0.4	U		0.3	U	
Radium-226	pCi/g	3	89%	57	64	3	J	+/-0.6	2.4	J	+/-0.6	1.8		+/-0.4	1.8		+/-0.5	1.3	J	+/-0.3
Radium-228	pCi/g	3.6	88%	56	64	1.7	J	+/-0.7	1.5	J	+/-0.6	1.8		+/-0.5	2.8		+/-0.7	1.2	J	+/-0.4
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	0.8	UJ	+/-0.4	0.9	UJ	+/-0.4	1.1	U	+/-0.5	1.5		+/-0.5	1	U	+/-0.4
Thorium-232	pCi/g	1.8	98%	63	64	1.3	J	+/-0.5	1.2		+/-0.4	1.3		+/-0.5	1.3		+/-0.5	0.7		+/-0.3
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	4.1		+/-0.1	7		+/-0.2	46.2	J	+/-0.4	25.2		+/-0.2	0.1	U	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	0.7		+/-0.2	1.4		+/-0.4	1	J	+/-0.3	1.4		+/-0.4	0.8		+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.5		+/-0.2	1.1		+/-0.3	1.3	J	+/-0.4	0.8		+/-0.3	0.7		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-24			SS12-25			SS12-26			SS12-27			SS12-27		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123218			123219			123220			123224			123223		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						03-Nov-98			03-Nov-98			03-Nov-98			09-Nov-98			04-Nov-98		
QC CODE						SA			SA			SA			DU			SA		
STUDY ID						RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	FREQUENCY OF DETECTION	NUMBER OF DETECTS	NUMBER OF ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	1.8	J	+/-0.4	2.3	J	+/-0.5	1.7	J	+/-0.5	3	J	+/-0.4	1.3	J	+/-0.4
Cesium-137	pCi/g	1.5	92%	59	64	0.4		+/-0.3	0.9		+/-0.3	0.7		+/-0.2	0.9		+/-0.2	0.8		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.2	J	+/-0.1	0.2	J	+/-0.1	0.2	J	+/-0.2	0.1	J	+/-0.1	0.4	J	+/-0.1
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	4.1	J	+/-2.2	2	UJ		8.2	J	+/-3.6	8.1		+/-3.6	5.8		+/-3.4
Lead-211	pCi/g	20.1	55%	35	64	12.7	J	+/-3.1	6.9	J	+/-2.9	1.4	UJ		19.2	J	+/-7.2	2.5	UJ	
Lead-214	pCi/g	2.9	95%	62	65	1.9		+/-0.4	2.5		+/-0.5	2		+/-0.4	2		+/-0.4	1.6		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	J	+/-0.1	0.2	U	+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.4	U		0.5	U		1.7	J	+/-0.7	0.5	UJ	
Radium-226	pCi/g	3	89%	57	64	1.8	J	+/-0.4	2.3	J	+/-0.5	1.7	J	+/-0.5	3	J	+/-0.4	1.3	J	+/-0.4
Radium-228	pCi/g	3.6	88%	56	64	1.3	J	+/-0.5	2.1	J	+/-0.5	2	J	+/-0.5	2		+/-0.5	1.9	J	+/-0.5
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	0.9	UJ	+/-0.5	1	UJ	+/-0.4	0.7	UJ	+/-0.4	1.4	UJ	+/-0.6	1.3	UJ	+/-0.6
Thorium-232	pCi/g	1.8	98%	63	64	1.3	J	+/-0.6	1		+/-0.4	0.7		+/-0.3	1	J	+/-0.5	1.5	J	+/-0.6
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	0.1	U	+/-0.1	33.1		+/-0.3	21.7		+/-0.3	0.8	J	+/-0.1	11.5	J	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	0.7	J	+/-0.2	0.9		+/-0.3	1		+/-0.3	0.9	J	+/-0.3	0.6		+/-0.2
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.8	J	+/-0.3	0.9		+/-0.3	1.4		+/-0.4	1	J	+/-0.3	0.6	J	+/-0.2

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-28			SS12-29			SS12-30			SS12-31			SS12-32		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123225			123226			123227			123228			123229		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						09-Nov-98			09-Nov-98			09-Nov-98			09-Nov-98			09-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	2.8	J	+/-0.6	3	J	+/-0.6	1.3	J	+/-0.3	1.8	J	+/-0.5	2.4	J	+/-0.5
Cesium-137	pCi/g	1.5	92%	59	64	0.2		+/-0.1	0.8		+/-0.3	0.6		+/-0.3	0.5		+/-0.1	0.9		+/-0.3
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.2		+/-0.2
Cobalt-60	pCi/g	0.7	69%	44	64	0.2		+/-0.1	0.3		+/-0.1	0.4		+/-0.1	0.2		+/-0.1	0.1	U	
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	5.3		+/-4	4.1		+/-2.3	3.3		+/-2.1	4.1		+/-3.1	5.2		+/-2.4
Lead-211	pCi/g	20.1	55%	35	64	1.9	U		5		+/-1.9	11.5		+/-6.2	7.6		+/-4.3	2.1	U	
Lead-214	pCi/g	2.9	95%	62	65	2		+/-0.4	2		+/-0.5	1.8		+/-0.4	1.9		+/-0.4	2.4		+/-0.5
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.2	U	+/-0.1	0.3	U	+/-0.1	0.2	U	+/-0.1	0.1	UJ	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.4	U		0.4	U		0.4	U		0.5	U	
Radium-226	pCi/g	3	89%	57	64	2.8	J	+/-0.6	3	J	+/-0.6	1.3	J	+/-0.3	1.8	J	+/-0.5	2.4	J	+/-0.5
Radium-228	pCi/g	3.6	88%	56	64	2.4		+/-0.5	3.6		+/-1	1.8		+/-0.4	2.6		+/-0.7	2.2		+/-0.8
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1.6	UJ	+/-0.7	1.2	UJ	+/-0.5	1.3	U	+/-0.5	1	U	+/-0.4	1.3	UJ	+/-0.6
Thorium-232	pCi/g	1.8	98%	63	64	1.4	J	+/-0.6	0.7	J	+/-0.4	1.2		+/-0.4	1		+/-0.4	1.8	J	+/-0.8
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	29.4	J	+/-0.2	9.1	J	+/-0.2	0.8	J	+/-0.1	0.4	J	+/-0.1	4.8	J	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	0.6		+/-0.2	0.6		+/-0.2	0.6	J	+/-0.2	0.7		+/-0.3	0.7		+/-0.2
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.9	J	+/-0.3	0.8	J	+/-0.3	0.6	J	+/-0.2	0.6	J	+/-0.2	0.6	J	+/-0.2

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-33			SS12-34			SS12-35			SS12-36			SS12-37		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123230			123231			123232			123233			123234		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						10-Nov-98			09-Nov-98			09-Nov-98			10-Nov-98			09-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	1.3		+/-0.3	0.3		+/-0.2	1.6		+/-0.3	0.1	U		2.8		+/-0.6
Cesium-137	pCi/g	1.5	92%	59	64	0.5		+/-0.1	0.2		+/-0.1	0.6		+/-0.2	0.1		+/-0.1	0.8		+/-0.1
Cobalt-57	pCi/g	0.2	39%	25	64	0.1		+/-0.1	0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.7	69%	44	64	0.3		+/-0.1	0.1		+/-0.1	0.2		+/-0.1	0.1		+/-0.1	0.1	U	
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	4.6	J	+/-1.9	29.9	UJ		9	J	+/-4.2	23.1	UJ		1.2	UJ	
Lead-211	pCi/g	20.1	55%	35	64	8.2		+/-4.1	5.9		+/-2.1	2.5	U		1.7	U		10.1		+/-5.2
Lead-214	pCi/g	2.9	95%	62	65	1.4		+/-0.4	0.3		+/-0.2	2.6		+/-0.4	0.2		+/-0.2	2.5		+/-0.6
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	U	+/-0.1	0.1	J	+/-0.1	0.1	U	+/-0.1	0.2	J	+/-0.1	0.2	UJ	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.4	U		0.5	U		1.5		+/-0.3	0.4	U	
Radium-226	pCi/g	3	89%	57	64	1.3		+/-0.3	0.3		+/-0.2	1.6		+/-0.3	0.1	U		2.8		+/-0.6
Radium-228	pCi/g	3.6	88%	56	64	1.9		+/-0.4	0.4	U		2		+/-0.7	0.1	U		1.9		+/-0.4
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	0.3	U	+/-0.3	1.3	J	+/-0.6	0.9		+/-0.4	1.2		+/-0.5	0.8	J	+/-0.4
Thorium-232	pCi/g	1.8	98%	63	64	0.9		+/-0.4	1.5	J	+/-0.6	1.2		+/-0.4	1		+/-0.4	1.2	J	+/-0.5
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	180		+/-0.7	0.2		+/-0.1	418		+/-1.1	2.6		+/-0.1	119		+/-0.7
Uranium-234	pCi/g	1.9	81%	52	64	0.6	U	+/-0.2	1		+/-0.4	1.4		+/-0.4	0.7		+/-0.3	1		+/-0.4
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.5	J	+/-0.2	0.8	J	+/-0.3	1.2	J	+/-0.4	0.6	J	+/-0.2	1.3	J	+/-0.4

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-38			SS12-39			SS12-40			SS12-41			SS12-42		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123235			123236			123237			123238			123239		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						10-Nov-98			09-Nov-98			09-Nov-98			10-Nov-98			09-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	2.4		+/-0.5	0.5		+/-0.2	2.4	J	+/-0.6	0.4		+/-0.2	2.8		+/-0.7
Cesium-137	pCi/g	1.5	92%	59	64	1.4	J	+/-0.2	0.2		+/-0.1	1		+/-0.3	0.1	J	+/-0.1	0.9		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1	0.1		+/-0.1
Cobalt-60	pCi/g	0.7	69%	44	64	0.2	U		0.1	U		0.3		+/-0.1	0.1	U		0.6		+/-0.2
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	3.6	J	+/-2.9	19	UJ		3.6		+/-1.7	72.3	J	+/-36.1	7	J	+/-3
Lead-211	pCi/g	20.1	55%	35	64	4.3	U		7.6		+/-2.8	2.5	UJ		4		+/-1.8	2.2	U	
Lead-214	pCi/g	2.9	95%	62	65	2.5		+/-0.6	0.4		+/-0.1	1.9	J	+/-0.4	0.7		+/-0.3	2.3		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	UJ	+/-0.1	0.1	J	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.6	UJ		1.3		+/-0.6	0.5	U		1.3	J	+/-0.5	0.5	U	
Radium-226	pCi/g	3	89%	57	64	2.4		+/-0.5	0.5		+/-0.2	2.4	J	+/-0.6	0.4		+/-0.2	2.8		+/-0.7
Radium-228	pCi/g	3.6	88%	56	64	2.2		+/-0.6	0.1	U		1.5		+/-0.4	0.3		+/-0.2	2.1		+/-0.6
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1	UJ	+/-0.4	1.3		+/-0.5	0.9		+/-0.4	1.1	UJ	+/-0.4	0.7		+/-0.3
Thorium-232	pCi/g	1.8	98%	63	64	1.2		+/-0.4	0.8		+/-0.3	0.6	J	+/-0.3	0.8		+/-0.3	1.2		+/-0.5
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	27.3	J	+/-0.3	5.4		+/-0.1	29.6	J	+/-0.3	47.6	J	+/-0.3	8.9		+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	1.5		+/-0.4	0.7		+/-0.2	0.8		+/-0.3	0.6	U	+/-0.2	0.6	U	+/-0.2
Uranium-235	pCi/g	0.2	28%	18	64	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	1.4		+/-0.4	0.8	J	+/-0.3	1		+/-0.3	0.6		+/-0.2	0.7	J	+/-0.2

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-43			SS12-44			SS12-45			SS12-46			SS12-47		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123105			123240			123241			123242			123243		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						13-Oct-98			10-Nov-98			09-Nov-98			09-Nov-98			09-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1		RI Phase 1	Step 1	
PARAMTER	UNIT	MAXIMU	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	2.5	J	+/-0.7	0.1	U		0.2	U		2.7		+/-0.6	1.1		+/-0.4
Cesium-137	pCi/g	1.5	92%	59	64	1.4	J	+/-0.4	0.3		+/-0.3	0.3	J	+/-0.1	1.1		+/-0.4	0.1	UJ	
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1		+/-0.1	0.1	U		0.2		+/-0.1	0.1	UJ	
Cobalt-60	pCi/g	0.7	69%	44	64	0.5	J	+/-0.2	0.1		+/-0.1	0.3		+/-0.1	0.4		+/-0.1	0.3		+/-0.1
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	7	J	+/-2.9	20.7	UJ		13.9	UJ		4.8	J	+/-2.6	21.8	UJ	
Lead-211	pCi/g	20.1	55%	35	64	12.7	J	+/-4.4	1.5	U		3		+/-2.5	8.1		+/-7.2	8.2		+/-3.4
Lead-214	pCi/g	2.9	95%	62	65	1.4		+/-0.4	0.4		+/-0.2	0.5		+/-0.1	2.9		+/-0.4	0.2		+/-0.1
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	U	+/-0.1	0.1	J	+/-0.1	0.1	UJ	+/-0.1	0.2	J	+/-0.1	0.2	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.6	U		1.2		+/-0.6	0.4	UJ		0.5	U		0.3	UJ	
Radium-226	pCi/g	3	89%	57	64	2.5	J	+/-0.7	0.1	U		0.2	U		2.7		+/-0.6	1.1		+/-0.4
Radium-228	pCi/g	3.6	88%	56	64	2.6		+/-0.9	0.2	U		0.3	U		2.1		+/-0.5	0.7		+/-0.3
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1.7	J	+/-0.6	1		+/-0.4	1.4	J	+/-0.5	1.4	J	+/-0.5	0.8	UJ	+/-0.4
Thorium-232	pCi/g	1.8	98%	63	64	1.3	J	+/-0.5	0.7		+/-0.3	1.1		+/-0.4	1.3	J	+/-0.5	0.7		+/-0.3
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	2.2	J	+/-0.1	1		+/-0.1	99.4	J	+/-0.5	7.6		+/-0.1	6.6	J	+/-0.2
Uranium-234	pCi/g	1.9	81%	52	64	2	UJ	+/-0.4	0.4	U	+/-0.2	0.7		+/-0.3	0.8		+/-0.3	1.1		+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	1.6	J	+/-0.4	0.6	J	+/-0.2	1.1		+/-0.3	0.8	J	+/-0.3	1.1		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-48			SS12-48			SS12-49			SS12-50			SS12-51		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123245			123244			123246			123247			123248		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						10-Nov-98			10-Nov-98			09-Nov-98			11-Nov-98			11-Nov-98		
QC CODE						DU			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	0.1	UJ		0.8	J	+/-0.2	1.4		+/-0.4	2.3	J	+/-0.6	2.2	J	+/-0.5
Cesium-137	pCi/g	1.5	92%	59	64	0.1	UJ		0.1	J	+/-0.1	1	J	+/-0.2	1		+/-0.3	1.5		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1	UJ		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.3	J	+/-0.1	0.1	UJ		0.3		+/-0.2	0.3		+/-0.1	0.6		+/-0.3
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	15.3	UJ		18.6	UJ		5.4	J	+/-3.3	5.4		+/-3	5.6		+/-3.3
Lead-211	pCi/g	20.1	55%	35	64	6		+/-3.2	5.8		+/-2.5	13.9		+/-9	11.7	J	+/-5.6	13.6	J	+/-7.9
Lead-214	pCi/g	2.9	95%	62	65	0.3	J	+/-0.2	0.1	UJ		1.3		+/-0.4	2.2	J	+/-0.5	2.4	J	+/-0.5
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1	J	+/-0.1	0.2	J	+/-0.1	0.1	UJ	+/-0.1	0.2	U	+/-0.1	0.1		+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.4	U		0.5	U		0.5	UJ		0.6	U		0.5	U	
Radium-226	pCi/g	3	89%	57	64	0.1	UJ		0.8	J	+/-0.2	1.4		+/-0.4	2.3	J	+/-0.6	2.2	J	+/-0.5
Radium-228	pCi/g	3.6	88%	56	64	0.1	UJ		0.5	J	+/-0.3	2.1		+/-0.5	1.7		+/-0.6	2.1		+/-0.4
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1.1	J	+/-0.4	2.1	J	+/-0.8	0.8	UJ	+/-0.4	1.7		+/-0.6	1.8		+/-0.6
Thorium-232	pCi/g	1.8	98%	63	64	1.1	J	+/-0.4	1.7	J	+/-0.7	0.5	J	+/-0.3	1.4	J	+/-0.5	0.8	J	+/-0.3
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	21.2	J	+/-0.3	0.1	J	+/-0.1	0.2	J	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	0.9		+/-0.3	1.1		+/-0.3	0.8		+/-0.3	1.9		+/-0.5	1		+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2		+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	1.3	J	+/-0.4	1	J	+/-0.3	0.8		+/-0.3	1.8		+/-0.5	0.7		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-52			SS12-53			SS12-54			SS12-55			SS12-56		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123249			123250			123251			123106			123252		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						11-Nov-98			11-Nov-98			11-Nov-98			13-Oct-98			11-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	1.7	J	+/-0.4	1.7	J	+/-0.4	1.6	J	+/-0.3	2.1	J	+/-0.5	1.9	J	+/-0.6
Cesium-137	pCi/g	1.5	92%	59	64	1		+/-0.4	0.8		+/-0.2	0.4		+/-0.1	0.6	J	+/-0.3	0.6		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1		+/-0.1	0.1	U		0.1		+/-0.1	0.2		+/-0.1	0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.1		+/-0.1	0.1	U		0.1		+/-0.1	0.3	J	+/-0.1	0.2	U	
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	6.2		+/-3.9	38.9	U		20	U		6.6	J	+/-3.5	1.5	UJ	
Lead-211	pCi/g	20.1	55%	35	64	2.6	UJ		5.8	J	+/-4.8	2	J	+/-1.9	17	J	+/-7.2	2.9	UJ	
Lead-214	pCi/g	2.9	95%	62	65	2.2	J	+/-0.5	1.3	J	+/-0.3	1.2	J	+/-0.3	2		+/-0.5	2		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.2	UJ	+/-0.2
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.6	U		0.8		+/-0.5	0.5	U		0.6	U		0.7	UJ	
Radium-226	pCi/g	3	89%	57	64	1.7	J	+/-0.4	1.7	J	+/-0.4	1.6	J	+/-0.3	2.1	J	+/-0.5	1.9	J	+/-0.6
Radium-228	pCi/g	3.6	88%	56	64	2.6		+/-0.6	2.2		+/-0.6	0.5	U		2.4		+/-0.5	2.5	J	+/-0.6
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1		+/-0.4	1		+/-0.4	1		+/-0.4	1.1	U	+/-0.4	0.9	UJ	+/-0.4
Thorium-232	pCi/g	1.8	98%	63	64	0.9	J	+/-0.4	1.2	J	+/-0.4	1.2	J	+/-0.4	1	J	+/-0.4	1.1		+/-0.4
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	228	J	+/-0.9	130	J	+/-0.8	25.4	J	+/-0.2	16.9	J	+/-0.3	1.7	J	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	1.1		+/-0.3	1.1		+/-0.4	0.5		+/-0.2	0.9	UJ	+/-0.3	0.5	J	+/-0.2
Uranium-235	pCi/g	0.2	28%	18	64	0.2		+/-0.1	0.2		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	1.3		+/-0.4	1.1		+/-0.4	0.9		+/-0.3	0.8	J	+/-0.3	0.7		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-57			SS12-58			SS12-59			SS12-60			SS12-61		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123253			123254			123255			123256			123257		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						11-Nov-98			11-Nov-98			11-Nov-98			12-Nov-98			10-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	1.8	J	+/-0.6	1.8	J	+/-0.3	1.4	J	+/-0.4	1.5	J	+/-0.5	1.7		+/-0.4
Cesium-137	pCi/g	1.5	92%	59	64	0.1	U		0.3		+/-0.1	0.3		+/-0.1	0.6		+/-0.2	0.7	J	+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.3	U		0.1	U		0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.5		+/-0.2	0.1	U		0.3		+/-0.1	0.1	U		0.1		+/-0.1
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	29.5	UJ		25.5	U		17.3	U		51.6	J	+/-45.5	3.2	J	+/-2.2
Lead-211	pCi/g	20.1	55%	35	64	8.2	J	+/-3.4	5.6	J	+/-2.5	4.1	J	+/-3.6	11.6	J	+/-3.5	2.2	U	
Lead-214	pCi/g	2.9	95%	62	65	1.4		+/-0.4	1.3	J	+/-0.3	1	J	+/-0.2	1.6		+/-0.4	2		+/-0.4
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.4	UJ	+/-0.2	0.1		+/-0.1	0.1		+/-0.1	0.5	UJ	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.4	UJ		0.4	U		0.4	U		1.2	J	+/-0.5	0.5	J	+/-0.4
Radium-226	pCi/g	3	89%	57	64	1.8	J	+/-0.6	1.8	J	+/-0.3	1.4	J	+/-0.4	1.5	J	+/-0.5	1.7		+/-0.4
Radium-228	pCi/g	3.6	88%	56	64	2.5	J	+/-0.6	1.9		+/-0.5	1.9		+/-0.5	1.7	J	+/-0.5	2.2		+/-0.6
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	2.2	J	+/-1.1	1.5		+/-0.6	0.9		+/-0.3	1	UJ	+/-0.4	1.4	J	+/-0.5
Thorium-232	pCi/g	1.8	98%	63	64	1.4	J	+/-0.8	1.8	J	+/-0.6	1.4	J	+/-0.4	1.2		+/-0.5	1.7		+/-0.6
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	0.1	J	+/-0.1	62.4	J	+/-0.4	19	J	+/-0.2	0.3	J	+/-0.1	3.8	J	+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	1.2	J	+/-0.4	1		+/-0.3	0.8		+/-0.3	0.5	J	+/-0.2	1		+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	1.2		+/-0.4	0.7		+/-0.3	0.9		+/-0.3	0.7		+/-0.2	1		+/-0.3

TABLE G-34
CLASS III RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						SS12-62			SS12-63			SS12-66			SS12-67			SS12-68		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123258			123259			123260			123108			123213		
DEPTH TO TOP OF SAMPLE						0			0			0			0			0		
DEPTH TO BOTTOM OF SAMPLE						0.2			0.2			0.2			0.2			0.2		
SAMPLE DATE						11-Nov-98			10-Nov-98			11-Nov-98			12-Oct-98			03-Nov-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMTER	UNIT	MAXIMU	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.78	100%	1	1															
Bismuth-214	pCi/g	3	94%	61	65	2.4	J	+/-0.6	0.6		+/-0.5	1.1	J	+/-0.3	1.9	J	+/-0.4	1.9	J	+/-0.4
Cesium-137	pCi/g	1.5	92%	59	64	0.9		+/-0.2	0.1	J	+/-0.1	0.4		+/-0.1	0.4	J	+/-0.2	0.3		+/-0.2
Cobalt-57	pCi/g	0.2	39%	25	64	0.1	U		0.1		+/-0.1	0.1		+/-0.1	0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	69%	44	64	0.4		+/-0.1	0.2	U		0.3		+/-0.1	0.2	J	+/-0.1	0.5	J	+/-0.1
Gross Alpha	pCi/g	13	100%	1	1															
Gross Beta	pCi/g	27	100%	1	1															
Lead-210	pCi/g	72.3	63%	40	64	4.6		+/-2.3	25.4	UJ		44.4	J	+/-26	2.9	J	+/-1.6	5.5	J	+/-3.1
Lead-211	pCi/g	20.1	55%	35	64	2.7	UJ		2.3	U		9.8	J	+/-3.7	3.3	J	+/-2.1	12.3	J	+/-9.5
Lead-214	pCi/g	2.9	95%	62	65	2.2	J	+/-0.6	0.4		+/-0.2	1.5		+/-0.4	1.8		+/-0.3	2		+/-0.5
Plutonium-239/240	pCi/g	0.2	31%	20	64	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.2	0.2	U	+/-0.1	0.1	J	+/-0.1
Promethium-147	pCi/g	0	0%	0	2															
Radium-223	pCi/g	1.7	13%	8	64	0.5	U		0.5	UJ		0.4	UJ		0.6	U	+/-0.3	0.5	U	
Radium-226	pCi/g	3	89%	57	64	2.4	J	+/-0.6	0.6		+/-0.5	1.1	J	+/-0.3	1.9	J	+/-0.4	1.9	J	+/-0.4
Radium-228	pCi/g	3.6	88%	56	64	1.9		+/-0.5	0.2	U		1.4	J	+/-0.4	1.2		+/-0.3	3	J	+/-0.9
Thallium-208	pCi/g	0.26	100%	1	1															
Thorium-230	pCi/g	2.2	48%	31	64	1.4		+/-0.5	1	UJ	+/-0.6	1.4	J	+/-0.6	1.1	U	+/-0.4	1.4	J	+/-0.6
Thorium-232	pCi/g	1.8	98%	63	64	0.8	J	+/-0.3	1.3	J	+/-0.6	1	J	+/-0.5	0.4	UJ	+/-0.2	1.3	J	+/-0.6
Thorium-234	pCi/g	0.76	100%	1	1															
Tritium	pCi/g	418	84%	54	64	31.2	J	+/-0.3	0.9	J	+/-0.1	0.2	J	+/-0.1	0.1	UJ	+/-0.1	0.2		+/-0.1
Uranium-234	pCi/g	1.9	81%	52	64	0.9		+/-0.3	0.9		+/-0.3	1	J	+/-0.3	0.6	UJ	+/-0.2	0.9	J	+/-0.3
Uranium-235	pCi/g	0.2	28%	18	64	0.1		+/-0.1	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1
Uranium-238	pCi/g	1.8	98%	63	64	0.8		+/-0.3	0.9		+/-0.3	1		+/-0.3	0.2	UJ	+/-0.1	1.1	J	+/-0.3

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-37			MW12-38			MW12-38			MW12-39			MW12-40		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123203			123204			123206			123207			123122		
DEPTH TO TOP OF SAMPLE						2			1			3			1.5			2		
DEPTH TO BOTTOM OF SAMPLE						4			1.2			4			2.4			4		
SAMPLE DATE						01-Nov-98			01-Nov-98			01-Nov-98			01-Nov-98			14-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	1.8		+/-0.3	1		+/-0.3	1.7		+/-0.5	2.3		+/-0.5	1.8		+/-0.4
Cesium-137	pCi/g	1.1	69%	25	36	0.7	UJ	+/-0.2	0.1	UJ		0.4	UJ	+/-0.1	0.1	UJ		0.3		+/-0.2
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U		0.1		+/-0.1	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.7	81%	29	36	0.4	UJ	+/-0.1	0.2	UJ	+/-0.1	0.1	UJ		0.1	UJ		0.4	J	+/-0.1
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	3.9	J	+/-2.4	3.1	J	+/-2	2.5	J	+/-1.9	2.9	J	+/-2.3	3	J	+/-1.9
Lead-211	pCi/g	18.6	58%	21	36	1.1	UJ		0.9	UJ		2.4	UJ		4.5	J	+/-2.6	4.6	J	+/-2.3
Lead-214	pCi/g	2.5	89%	34	38	1.8	UJ	+/-0.4	0.7	UJ	+/-0.3	2.1	UJ	+/-0.4	1.8	UJ	+/-0.5	1.5		+/-0.5
Plutonium-239/240	pCi/g	0	0%	0	36	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3													4.1	UJ	+/-5.1
Radium-223	pCi/g	1.6	8%	3	36	0.5	UJ		0.3	UJ		0.5	UJ		0.4	UJ		0.5	U	
Radium-226	pCi/g	2.3	92%	33	36	1.8		+/-0.3	1	U	+/-0.3	1.7		+/-0.5	2.3		+/-0.5	1.8		+/-0.4
Radium-228	pCi/g	3.5	100%	36	36	1.8		+/-0.6	0.9		+/-0.3	2.3		+/-0.5	1.7		+/-0.5	2.4	J	+/-0.7
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	2.3	J	+/-1.1	0.7	J	+/-0.4	1.6	J	+/-0.6	0.9	J	+/-0.6	1.1	U	+/-0.4
Thorium-232	pCi/g	1.9	78%	28	36	1.8	J	+/-0.9	0.5	J	+/-0.3	1.3	J	+/-0.5	0.8	J	+/-0.5	1.4		+/-0.5
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.9	J	+/-0.4	0.8	J	+/-0.4	0.7	J	+/-0.3	0.5	UJ	+/-0.3	1		+/-0.3
Uranium-235	pCi/g	0.4	53%	19	36	0.1	U	+/-0.1	0.1	UJ	+/-0.2	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	0.9		+/-0.4	0.6	J	+/-0.4	0.6		+/-0.3	0.5		+/-0.2	0.6		+/-0.3

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-40			MW12A-1			MW12A-1			TP12-10A			TP12-10A		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123123			MW12A-1-03			MW12A-1-05			123067			123055		
DEPTH TO TOP OF SAMPLE						4			4			8			1			1		
DEPTH TO BOTTOM OF SAMPLE						6			6			9.5			1			1		
SAMPLE DATE						14-Oct-98			10-Jun-94			10-Jun-94			04-Oct-98			04-Oct-98		
QC CODE						SA			SA			SA			DU			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			ESI			ESI			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.84	100%	2	2				0.68	+/-0.3		0.84	+/-0.28							
Bismuth-214	pCi/g	2.5	100%	38	38	1.7		+/-0.5	0.69	+/-0.11		0.88	+/-0.27		1.5		+/-0.4	1.9		+/-0.4
Cesium-137	pCi/g	1.1	69%	25	36	0.1	U								0.2	UJ		0.6	J	+/-0.2
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U								0.3	J	+/-0.2	0.1		+/-0.1
Cobalt-60	pCi/g	0.7	81%	29	36	0.2	J	+/-0.1							0.3	J	+/-0.1	0.3	J	+/-0.1
Gross Alpha	pCi/g	8	100%	2	2				8	+/-4		6	+/-4							
Gross Beta	pCi/g	24	100%	2	2				21	+/-5		24	+/-6							
Lead-210	pCi/g	57.8	67%	24	36	3.6	J	+/-2.4							2.3		+/-1.4	56.9	J	+/-48.3
Lead-211	pCi/g	18.6	58%	21	36	1.8	UJ								9.9		+/-5	4.5	J	+/-3.3
Lead-214	pCi/g	2.5	89%	34	38	1.6		+/-0.4	0.78	+/-0.1		0.84	+/-0.14		1.9		+/-0.4	1.4		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	36	0.1	U	+/-0.1							0.2	UJ	+/-0.2	0.1	U	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3	4.7	UJ	+/-5.1												
Radium-223	pCi/g	1.6	8%	3	36	0.5	U								0.6	U		0.5	UJ	
Radium-226	pCi/g	2.3	92%	33	36	1.7		+/-0.5							1.5		+/-0.4	1.9		+/-0.4
Radium-228	pCi/g	3.5	100%	36	36	2.4	J	+/-0.5							1.5		+/-0.4	2.8		+/-0.7
Thallium-208	pCi/g	0.41	100%	2	2				0.39	+/-0.23		0.41	+/-0.22							
Thorium-230	pCi/g	2.3	58%	21	36	1.3		+/-0.5							1.5		+/-0.6	1.2		+/-0.4
Thorium-232	pCi/g	1.9	78%	28	36	1.1		+/-0.4							1.5		+/-0.6	1.1		+/-0.4
Thorium-234	pCi/g	0.38	100%	2	2				0.38	+/-0.39		0.3	+/-0.22							
Tritium	pCi/g	0.7	6%	2	36	0.1	UJ	+/-0.1							0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.8		+/-0.3							1.2	J	+/-0.4	1.1	UJ	+/-0.5
Uranium-235	pCi/g	0.4	53%	19	36	0.1		+/-0.1							0.1	UJ	+/-0.1	0.2	J	+/-0.2
Uranium-238	pCi/g	1.4	97%	35	36	0.9		+/-0.3							1.1	J	+/-0.4	0.8	J	+/-0.4

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-10B			TP12-10C			TP12-13A			TP12-13B			TP12-13C		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123056			123057			123052			123053			123054		
DEPTH TO TOP OF SAMPLE						2			5.5			0.8			5.5			1.5		
DEPTH TO BOTTOM OF SAMPLE						2			5.5			0.8			5.5			1.5		
SAMPLE DATE						04-Oct-98			04-Oct-98			03-Oct-98			03-Oct-98			03-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES															
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	1.4		+/-0.5	1.8		+/-0.5	1.5	J	+/-0.5	1.9	J	+/-0.5	1.2	J	+/-0.3
Cesium-137	pCi/g	1.1	69%	25	36	0.7	J	+/-0.3	0.6	J	+/-0.2	0.1	J	+/-0.1	0.4		+/-0.2	0.3		+/-0.1
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U		0.1	U		0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.7	81%	29	36	0.2	J	+/-0.1	0.4	J	+/-0.2	0.2		+/-0.1	0.1	U		0.1	U	
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	1.9	UJ		57.8	J	+/-39.2	27.4	UJ		1.6	UJ		19.6	UJ	
Lead-211	pCi/g	18.6	58%	21	36	12.4	J	+/-7.2	2.2	UJ		0.7	UJ		3.1	J	+/-1.9	4.1	J	+/-2.4
Lead-214	pCi/g	2.5	89%	34	38	1.9		+/-0.5	1.6		+/-0.5	1.4		+/-0.3	1.4		+/-0.5	1		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3															
Radium-223	pCi/g	1.6	8%	3	36	0.6	UJ		0.5	UJ		0.3	U		0.5	U		0.4	U	
Radium-226	pCi/g	2.3	92%	33	36	1.4		+/-0.5	1.8		+/-0.5	1.5	J	+/-0.5	1.9	J	+/-0.5	1.2	J	+/-0.3
Radium-228	pCi/g	3.5	100%	36	36	2.5		+/-0.5	2.2		+/-0.6	1.3		+/-0.4	2.4		+/-0.6	1.8		+/-0.4
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	1		+/-0.4	1.3		+/-0.5	0.8	U	+/-0.7	1.1	U	+/-0.6	1.5		+/-0.8
Thorium-232	pCi/g	1.9	78%	28	36	1.2		+/-0.4	1.2		+/-0.4	0.9		+/-0.7	0.9		+/-0.5	1.6		+/-0.8
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.5	J	+/-0.1	0.1	UJ	+/-0.1	0.1	ND	+/-180	0.1	ND	+/-175	0.1	ND	+/-183
Uranium-234	pCi/g	1.6	69%	25	36	1.6		+/-0.5	1	U	+/-0.4	0.4	U	+/-0.4	0.7		+/-0.5	0.5	U	+/-0.4
Uranium-235	pCi/g	0.4	53%	19	36	0.1		+/-0.1	0.2		+/-0.2	0.4		+/-0.4	0.2		+/-0.2	0.1		+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	0.9	J	+/-0.3	0.9	J	+/-0.4	0.3	UJ	+/-0.1	0.3	J	+/-0.3	0.5	J	+/-0.3

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-14A			TP12-14B			TP12-14C			TP12-22AA			TP12-22BA		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123004			123005			123006			123058			123059		
DEPTH TO TOP OF SAMPLE						0.5			1.5			2			0.5			0.5		
DEPTH TO BOTTOM OF SAMPLE						0.5			1.5			2			0.5			0.5		
SAMPLE DATE						30-Sep-98			30-Sep-98			30-Sep-98			04-Oct-98			04-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES															
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	2		+/-0.6	2.2		+/-0.4	1.7		+/-0.6	2.1		+/-0.6	1.9		+/-0.4
Cesium-137	pCi/g	1.1	69%	25	36	0.1	J	+/-0.1	0.4	J	+/-0.1	0.3	J	+/-0.2	0.5	J	+/-0.3	0.2	J	+/-0.1
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	81%	29	36	0.3		+/-0.1	0.4		+/-0.2	0.3		+/-0.1	0.4	J	+/-0.1	0.2	J	+/-0.1
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	3.4		+/-1.9	33.5	U		1.9		+/-1.7	5.5	J	+/-2.8	33.8	UJ	
Lead-211	pCi/g	18.6	58%	21	36	3.4	U		13.6		+/-5.8	3.1		+/-2.7	10.4	J	+/-4.5	8.2	J	+/-2.9
Lead-214	pCi/g	2.5	89%	34	38	2.2		+/-0.5	2		+/-0.5	1.7		+/-0.4	1.8		+/-0.4	1.6		+/-0.3
Plutonium-239/240	pCi/g	0	0%	0	36	0.3	UJ	+/-0.2	0.3	UJ	+/-0.4	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3															
Radium-223	pCi/g	1.6	8%	3	36	0.8	J	+/-0.5	0.5	UJ		0.6	UJ		0.5	UJ		0.5	UJ	
Radium-226	pCi/g	2.3	92%	33	36	2		+/-0.6	2.2		+/-0.4	1.7		+/-0.6	2.1		+/-0.6	1.9		+/-0.4
Radium-228	pCi/g	3.5	100%	36	36	2.5		+/-0.8	1.9		+/-0.6	1.8		+/-0.5	1.7		+/-0.5	1.6		+/-0.6
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	2.1	UJ	+/-0.8	1.6	U	+/-0.5	1.3	U	+/-0.5	1.1	J	+/-0.5	1.1		+/-0.4
Thorium-232	pCi/g	1.9	78%	28	36	2	UJ	+/-0.7	1.2	U	+/-0.4	1.4	U	+/-0.5	1.3	J	+/-0.5	0.7		+/-0.3
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.8	J	+/-0.2	0.6	J	+/-0.2	0.7		+/-0.3	1.6	J	+/-0.7	0.8	UJ	+/-0.4
Uranium-235	pCi/g	0.4	53%	19	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.3	J	+/-0.3	0.2	J	+/-0.2
Uranium-238	pCi/g	1.4	97%	35	36	0.9	J	+/-0.3	0.7	J	+/-0.2	0.8		+/-0.3	1.2	J	+/-0.5	0.9	J	+/-0.4

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-22BB			TP12-9A			TP12-9B			TP12-9C			MW12-27		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123060			123124			123125			123126			123062		
DEPTH TO TOP OF SAMPLE						1.5			0.5			1			2.5			2		
DEPTH TO BOTTOM OF SAMPLE						1.5			0.5			1			2.5			4		
SAMPLE DATE						04-Oct-98			15-Oct-98			15-Oct-98			15-Oct-98			10/4/1998		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
			OF	OF	OF															
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES				N			N			N			N		
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	1.6		+/-0.6	1.9		+/-0.6	1.6		+/-0.5	1.4		+/-0.4	1.7		+/-0.3
Cesium-137	pCi/g	1.1	69%	25	36	0.1	UJ		1.1		+/-0.2	0.1	UJ		0.4	J	+/-0.1	0.4	J	+/-0.1
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U		0.1	U		0.1		+/-0.1	0.1	U		0.1	UJ	
Cobalt-60	pCi/g	0.7	81%	29	36	0.2	J	+/-0.1	0.4	J	+/-0.1	0.2		+/-0.1	0.5		+/-0.2	0.2	J	+/-0.1
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	3.2	J	+/-1.5	6.1	J	+/-3.9	1.9	J	+/-1.3	23.4	UJ		17.5	U	
Lead-211	pCi/g	18.6	58%	21	36	18.6	J	+/-7.2	2.6	UJ		1.6	UJ		0.9	UJ		0.7	U	
Lead-214	pCi/g	2.5	89%	34	38	1.8		+/-0.4	1.6		+/-0.5	1.7	J	+/-0.4	1.1	J	+/-0.3	2		+/-0.5
Plutonium-239/240	pCi/g	0	0%	0	36	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.2
Promethium-147	pCi/g	16.5	33%	1	3				16.5	J	+/-5.4									
Radium-223	pCi/g	1.6	8%	3	36	0.5	UJ		0.6	U		0.8	J	+/-0.5	0.5	UJ		0.4	U	
Radium-226	pCi/g	2.3	92%	33	36	1.6		+/-0.6	1.9		+/-0.6	1.6		+/-0.5	1.4		+/-0.4	1.7		+/-0.3
Radium-228	pCi/g	3.5	100%	36	36	2.2		+/-0.5	2	J	+/-0.5	2.6		+/-0.8	2.2		+/-0.6	1.9		+/-0.6
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	1.4		+/-0.5	0.7	U	+/-0.3	1.1	U	+/-0.4	1.5	J	+/-0.5	1.5		+/-0.5
Thorium-232	pCi/g	1.9	78%	28	36	0.8		+/-0.4	0.7		+/-0.3	0.7		+/-0.3	1.3	J	+/-0.5	1.2		+/-0.4
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.2	U	+/-0.1	0.1	U	+/-0.1	0.1	UJ	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	1.1	UJ	+/-0.5	0.6	U	+/-0.3	0.8		+/-0.3	1		+/-0.3	0.9	J	+/-0.3
Uranium-235	pCi/g	0.4	53%	19	36	0.3	J	+/-0.2	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.2	U	+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	1.1	J	+/-0.5	0.5		+/-0.2	1.1		+/-0.3	1		+/-0.3	0.7		+/-0.3

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-27			TP12-21A			TP12-21B			TP12-21C			MW12-31		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123063			123001			123002			123003			123174		
DEPTH TO TOP OF SAMPLE						4			0.7			3			5.5			2		
DEPTH TO BOTTOM OF SAMPLE						6			0.7			3			5.5			4		
SAMPLE DATE						10/4/1998			9/29/1998			9/29/1998			9/29/1998			26-Oct-98		
QC CODE						SA			SA			SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	N			N			N			N			N		
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	2.1		+/-0.6	1.2		+/-0.3	1.6		+/-0.4	2.1		+/-0.4	2.2		+/-0.5
Cesium-137	pCi/g	1.1	69%	25	36	0.3	J	+/-0.1	0.3	J	+/-0.1	0.5	J	+/-0.1	0.6	J	+/-0.2	0.1	UJ	
Cobalt-57	pCi/g	0.3	25%	9	36	0.3	J	+/-0.2	0.1		+/-0.1	0.1	U		0.1	U		0.1	UJ	
Cobalt-60	pCi/g	0.7	81%	29	36	0.2	J	+/-0.1	0.4		+/-0.2	0.4		+/-0.1	0.4		+/-0.2	0.1		+/-0.1
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	4.4		+/-2.4	23.2	U		1.9	U		37.2	U		3.6	J	+/-2.2
Lead-211	pCi/g	18.6	58%	21	36	6.5		+/-4.3	11		+/-5	12.5		+/-4	3.7		+/-2.1	14.5	J	+/-7.8
Lead-214	pCi/g	2.5	89%	34	38	2.5		+/-0.4	1.3		+/-0.3	1.9		+/-0.4	1.8		+/-0.4	2.1		+/-0.4
Plutonium-239/240	pCi/g	0	0%	0	36	0.4	UJ	+/-0.1	0.2	UJ	+/-0.2	0.2	UJ	+/-0.2	0.2	U	+/-0.1	0.1	U	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3															
Radium-223	pCi/g	1.6	8%	3	36	0.5	U		0.5	UJ		0.4	UJ		0.5	UJ		0.5	U	
Radium-226	pCi/g	2.3	92%	33	36	2.1		+/-0.6	1.2		+/-0.3	1.6		+/-0.4	2.1		+/-0.4	2.2	U	+/-0.5
Radium-228	pCi/g	3.5	100%	36	36	1.6		+/-0.5	2.3		+/-0.4	2.8		+/-0.9	3.2		+/-0.8	1.9		+/-0.5
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	1.3		+/-0.5	1.3	UJ	+/-0.5	1.6	UJ	+/-0.7	1.4	UJ	+/-0.6	1	UJ	+/-0.5
Thorium-232	pCi/g	1.9	78%	28	36	1.6		+/-0.6	1.6	UJ	+/-0.6	1.1	UJ	+/-0.5	1.2	UJ	+/-0.5	1.6	J	+/-0.7
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.1	UJ	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.6	J	+/-0.3	0.9		+/-0.3	0.9		+/-0.3	0.9		+/-0.3	0.8	UJ	+/-0.3
Uranium-235	pCi/g	0.4	53%	19	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	1.1		+/-0.4	1		+/-0.3	1.4		+/-0.4	0.8		+/-0.3	1.1		+/-0.3

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA army DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						MW12-32			TP12-24A			TP12-24B			TP12-24C			TP12-20A		
MATRIX						SOIL			SOIL			SOIL			SOIL			SOIL		
SAMPLE ID						123177			123093			123094			123095			123000		
DEPTH TO TOP OF SAMPLE						2			0.5			0.5			1			0.5		
DEPTH TO BOTTOM OF SAMPLE						3			0.5			0.5			1			0.5		
SAMPLE DATE						26-Oct-98			13-Oct-98			13-Oct-98			13-Oct-98			30-Sep-98		
QC CODE						SA			SA			SA			SA			DU		
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N			N			N		
Actinium-228	pCi/g	0.84	100%	2	2															
Bismuth-214	pCi/g	2.5	100%	38	38	2.5		+/-0.8	1.4	J	+/-0.4	2.1	J	+/-0.4	1.1	J	+/-0.3	1.2		+/-0.4
Cesium-137	pCi/g	1.1	69%	25	36	0.1	UJ		0.1	UJ		0.4	J	+/-0.3	0.3	J	+/-0.3	1	J	+/-0.4
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	UJ		0.1	U		0.1	U		0.1	U		0.1	U	
Cobalt-60	pCi/g	0.7	81%	29	36	0.7		+/-0.4	0.6	J	+/-0.2	0.2	J	+/-0.2	0.3	J	+/-0.1	0.6	J	+/-0.2
Gross Alpha	pCi/g	8	100%	2	2															
Gross Beta	pCi/g	24	100%	2	2															
Lead-210	pCi/g	57.8	67%	24	36	3.6	J	+/-2.2	5.6	J	+/-2.9	4.3	J	+/-2.8	4.9	J	+/-3.6	3.7	J	+/-2.8
Lead-211	pCi/g	18.6	58%	21	36	5.8	J	+/-3.7	1.7	UJ		1.4	UJ		17	J	+/-9	1.9	U	
Lead-214	pCi/g	2.5	89%	34	38	1.8		+/-0.5	1.5		+/-0.4	1.2		+/-0.4	1.3		+/-0.4	1.3		+/-0.4
Plutonium-239/240	pCi/g	0	0%	0	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	UJ	+/-0.2
Promethium-147	pCi/g	16.5	33%	1	3															
Radium-223	pCi/g	1.6	8%	3	36	0.5	U		0.4	U		0.5	U		0.5	U		0.6	UJ	
Radium-226	pCi/g	2.3	92%	33	36	2.5	U	+/-0.8	1.4	J	+/-0.4	2.1	J	+/-0.4	1.1	J	+/-0.3	1.2		+/-0.4
Radium-228	pCi/g	3.5	100%	36	36	2.3		+/-0.6	2.8		+/-0.6	2.8		+/-0.7	3.5		+/-0.6	2.6		+/-0.6
Thallium-208	pCi/g	0.41	100%	2	2															
Thorium-230	pCi/g	2.3	58%	21	36	2	UJ	+/-1	1.2		+/-0.4	1.3		+/-0.5	1.9		+/-0.7	1.7	UJ	+/-0.8
Thorium-232	pCi/g	1.9	78%	28	36	1.6	J	+/-0.8	0.8	J	+/-0.3	0.9	J	+/-0.4	1.9	J	+/-0.7	0.5	UJ	+/-0.4
Thorium-234	pCi/g	0.38	100%	2	2															
Tritium	pCi/g	0.7	6%	2	36	0.1	U	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.1	UJ	+/-0.1	0.7		+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.7	UJ	+/-0.3	1.2	J	+/-0.3	1	J	+/-0.3	1.2	J	+/-0.3	0.7	J	+/-0.2
Uranium-235	pCi/g	0.4	53%	19	36	0.1		+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1	0.1		+/-0.1	0.1	UJ	+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	1		+/-0.3	1	J	+/-0.3	1	J	+/-0.3	1.1	J	+/-0.3	0.8		+/-0.2

TABLE G-35
CLASS III RADIOLOGICAL DATA-SUBSURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12		
LOCATION ID						TP12-20A			TP12-20B			TP12-20C		
MATRIX						SOIL			SOIL			SOIL		
SAMPLE ID						123019			123020			123021		
DEPTH TO TOP OF SAMPLE						0.5			2.5			6		
DEPTH TO BOTTOM OF SAMPLE						0.5			2.5			6		
SAMPLE DATE						30-Sep-98			30-Sep-98			30-Sep-98		
QC CODE						SA			SA			SA		
STUDY ID			FREQUENCY	NUMBER	NUMBER	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1		
PARAMETER	UNIT	MAXIMUM	OF DETECTION	OF DETECTS	OF ANALYSES	N			N			N		
Actinium-228	pCi/g	0.84	100%	2	2									
Bismuth-214	pCi/g	2.5	100%	38	38	1.3		+/-0.4	1.6		+/-0.3	1.8		+/-0.4
Cesium-137	pCi/g	1.1	69%	25	36	0.7	J	+/-0.2	0.3	J	+/-0.1	0.2	J	+/-0.1
Cobalt-57	pCi/g	0.3	25%	9	36	0.1	U		0.1	U		0.1		+/-0.1
Cobalt-60	pCi/g	0.7	81%	29	36	0.1	UJ		0.4		+/-0.2	0.4		+/-0.1
Gross Alpha	pCi/g	8	100%	2	2									
Gross Beta	pCi/g	24	100%	2	2									
Lead-210	pCi/g	57.8	67%	24	36	44.6	J	+/-40.3	29.1	UJ		6.9	J	+/-3.9
Lead-211	pCi/g	18.6	58%	21	36	1.1	U		3.3	J	+/-3.2	9.1	J	+/-3.9
Lead-214	pCi/g	2.5	89%	34	38	1.3		+/-0.4	1.7		+/-0.4	1.9		+/-0.4
Plutonium-239/240	pCi/g	0	0%	0	36	0.1	U	+/-0.1	0.3	UJ	+/-0.1	0.3	UJ	+/-0.1
Promethium-147	pCi/g	16.5	33%	1	3									
Radium-223	pCi/g	1.6	8%	3	36	1.6	J	+/-0.7	0.5	U		0.5	U	
Radium-226	pCi/g	2.3	92%	33	36	1.3		+/-0.4	1.6		+/-0.3	1.8		+/-0.4
Radium-228	pCi/g	3.5	100%	36	36	2.7		+/-0.6	2.5		+/-0.5	2.2		+/-0.5
Thallium-208	pCi/g	0.41	100%	2	2									
Thorium-230	pCi/g	2.3	58%	21	36	1.1	UJ	+/-0.5	1.8		+/-0.6	1		+/-0.4
Thorium-232	pCi/g	1.9	78%	28	36	0.8	UJ	+/-0.4	1.4		+/-0.5	0.9		+/-0.4
Thorium-234	pCi/g	0.38	100%	2	2									
Tritium	pCi/g	0.7	6%	2	36	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	U	+/-0.1
Uranium-234	pCi/g	1.6	69%	25	36	0.6	UJ	+/-0.2	0.9		+/-0.3	1		+/-0.3
Uranium-235	pCi/g	0.4	53%	19	36	0.1	J	+/-0.1	0.1		+/-0.1	0.1	U	+/-0.1
Uranium-238	pCi/g	1.4	97%	35	36	0.7		+/-0.3	0.9		+/-0.3	0.5		+/-0.2

TABLE G-36
WASTE WATER TREATMENT PLANT OUTFALL RADIOLOGICAL DATA-SURFACE SOIL
SEAD-12 REMEDIAL INVESTIGATION
SENECA ARMY DEPOT ACTIVITY ROMULUS, NY

FACILITY						SEAD-12			SEAD-12			SEAD-12			
LOCATION ID						SS12-64			SS12-64			SS12-65			
MATRIX						SOIL			SOIL			SOIL			
SAMPLE ID						123170			123171			123107			
DEPTH TO TOP OF SAMPLE						0			0			0			
DEPTH TO BOTTOM OF SAMPLE						0.5			0.5			0.2			
SAMPLE DATE						20-Oct-98			20-Oct-98			07-Jan-99			
QC CODE						SA			DU			SA			
STUDY ID			FREQUENCY OF	NUMBER OF	NUMBER OF	RI Phase 1 Step 1			RI Phase 1 Step 1			RI Phase 1 Step 1			
PARAMETER	UNIT	MAXIMUM	DETECTION	DETECTS	ANALYSES	N			N			N			
Bismuth-214	pCi/g	1.9	100%	3	3	1.7		+/-0.5	1.5		+/-0.5	1.9	J	+/-0.5	
Cesium-137	pCi/g	0.5	67%	2	3	0.5	J	+/-0.2	0.5	J	+/-0.3	0.1	UJ		
Cobalt-57	pCi/g	0.2	67%	2	3	0.2	J	+/-0.1	0.1	J	+/-0.1	0.1	UJ		
Cobalt-60	pCi/g	0.3	67%	2	3	0.3		+/-0.1	0.3		+/-0.1	0.1	UJ		
Lead-210	pCi/g	4.4	100%	3	3	4.3	J	+/-1.8	4.2	J	+/-2.1	4.4	J	+/-2.5	
Lead-211	pCi/g	14.3	33%	1	3	2.5	UJ		14.3	J	+/-7.3	3.2	UJ		
Lead-214	pCi/g	2.2	100%	3	3	1.3		+/-0.5	2.2		+/-0.3	1.3	J	+/-0.4	
Plutonium-239/240	pCi/g	0	0%	0	3	0.1	U	+/-0.1	0.1	U	+/-0.1	0.2	UJ	+/-0.1	
Radium-223	pCi/g	0	0%	0	3	0.6	U		0.6	U		0.6	UJ		
Radium-226	pCi/g	1.9	100%	3	3	1.7		+/-0.5	1.5		+/-0.5	1.9	J	+/-0.5	
Radium-228	pCi/g	2.2	100%	3	3	1.7		+/-0.5	2.2		+/-0.5	2	J	+/-0.6	
Thorium-230	pCi/g	1.4	100%	3	3	0.9	J	+/-0.4	1.4	J	+/-0.6	0.9	J	+/-0.4	
Thorium-232	pCi/g	1.6	100%	3	3	0.8	J	+/-0.4	1.6	J	+/-0.7	1	J	+/-0.4	
Tritium	pCi/g	82	100%	3	3	82		+/-0.6	1.4		+/-0.2	4.3	J	+/-0.2	
Uranium-234	pCi/g	1.1	100%	3	3	0.8	J	+/-0.3	0.8	J	+/-0.3	1.1	J	+/-0.3	
Uranium-235	pCi/g	0.1	33%	1	3	0.1	U	+/-0.1	0.1	U	+/-0.1	0.1	J	+/-0.1	
Uranium-238	pCi/g	1.1	100%	3	3	0.8		+/-0.3	1		+/-0.3	1.1	J	+/-0.3	