

PARSONS ENGINEERING SCIENCE, INC.

Prudential Center • Boston, Massachusetts 02199-7697 • (617) 859-2000 • Fax: (617) 859-2043

April 4, 1995
725980-01004

Mr. Randall Battaglia
ATTN: SDSSE-HE
Seneca Army Depot Activity
Romulus, New York 14541-5001

01006
61



SUBJECT: First Quarter Groundwater Monitoring for 1995
OB/OD Grounds, Seneca Army Depot Activity, Romulus, New York

Dear Mr. Battaglia:


Enclosed are the analytical results for the first quarter 1995 groundwater monitoring for selected monitoring wells at the Open Burning (OB) and Open Detonation (OD) grounds at the Seneca Army Depot Activity (SEDA). The analytical results are divided into two major groups: indicator parameters and QA/QC data (Sections 1 and 2 in the attached document). This is the fourth quarter of groundwater monitoring that has been performed under the Scope of Work issued as Annex AC, Delivery Order 0029, to the current contract DACA87-92-D-0022.

During this quarter, only the two newly-designated background wells were scheduled for sampling: MW-13 at the OB Grounds and MW45-4 at the OD Grounds. Four replicate groundwater samples from each well were obtained and analyzed for the four RCRA indicator parameters.

Please do not hesitate to call me at (617) 859-2492 if you have any questions.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.


Michael Duchesneau
Project Manager

MD/sb/D#12

Enclosure

cc: Ms. L. Percifield, MRD-Lab, 1 copy
Ms. D. Richards, USACE, 2 copies
Mr. A. Struzeki, DESCOM, 1 copy

**GROUNDWATER MONITORING
VALIDATED ANALYTICAL RESULTS FOR THE FIRST QUARTER 1995
OB/OD GROUNDS, SENECA ARMY DEPOT**

PREPARED FOR:
U.S. Army Corps of Engineers
Huntsville, Alabama

PREPARED BY:
Parsons Engineering Science, Inc.
Boston, Massachusetts

April 1995
D#12

TABLE OF CONTENTS

- 1.0 Indicator Parameters
 - 1.1 Tabulated Indicator Parameters Results

- 2.0 QA/QC Data
 - 2.1 Indicator Parameter Laboratory Report
 - 2.2 Laboratory Control Samples and Blanks for Indicator Parameters

Section 1.0
Indicator Parameters

1.1 Tabulated Indicator Parameters Results

1.1

Tabulated Indicator Parameters Results

**OB GROUNDS FIRST QUARTER 1995 MONITORING
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX SITE DATE SAMPLED ES ID LAB ID UNITS	WATER OB 3/15/95 MW-13A 251006	WATER OB 3/15/95 MW-13B 251007	WATER OB 3/15/95 MW-13C 251008	WATER OB 3/15/95 MW-13D 251009 & 251093
pH	std. units	7.13	7.15	7.09	7.08
Conductivity	umhos/cm	924	867	937	935
Total Organic Carbon	mg/L	0.7	0.5	0.9	0.6
Total Organic Halides	mg/L	0.02 U	0.02 U	0.02 U	0.02 U

**OD GROUNDS FIRST QUARTER 1995 MONITORING
INDICATOR ANALYSIS RESULTS**

	MATRIX SITE DATE SAMPLED ES ID LAB ID UNITS	WATER OD 3/15/95 MW45-4A 251012	WATER OD 3/15/95 MW45-4B 251013	WATER OD 3/15/95 MW45-4C 251014	WATER OD 3/15/95 MW45-4D 251015
PARAMETER					
pH	std. units	7.27	7.24	7.25	7.23
Conductivity	umhos/cm	840	823	821	810
Total Organic Carbon	mg/L	0.9	0.9	1	0.9
Total Organic Halides	mg/L	0.02 U	0.02 U	0.02 U	0.02 U

Section 2.0
QA/QC Data

- 2.1 Indicator Parameter Laboratory Report
- 2.2 Laboratory Control Samples and Blanks
for Indicator Parameters

2.1

Indicator Parameter Laboratory Report



Inchcape Testing Services

Aquatec Laboratories

Laboratory Locations

55 South Park Drive
Colchester, VT 05446

75 Green Mountain Drive
South Burlington, VT 05403

150 Herman Melville Boulevard
New Bedford, MA 02740

Analytical Report

Parsons Engineering Science
Prudential Center
Boston, MA 02199

Attention : Mike Duchesneau

Date : 03/23/95
ETR Number : 49994
Project No.: 93206
No. Samples: 10
Arrived : 03/16/95
P.O. Number: 725980-013

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Case:93206 SDG:49994

Standard analyses were performed in accordance with Methods for Analysis of Water and Wastes, EPA-600/4/79-020, Test Methods for Evaluating Solid Waste, SW-846, or Standard Methods for the Examination of Water and Wastewater. All results are in mg/l unless otherwise noted.

Lab No./ Method No.	Sample Description/ Parameter	Result
251006	MW-13A:03/15/95 @1515(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.7
9050	Conductivity (umhos/cm)	924
9040	pH (std. units)	7.13
251007	MW-13B:03/15/95 @1515(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.5
9050	Conductivity (umhos/cm)	867
9040	pH (std. units)	7.15
251008	MW-13C:03/15/95 @1515(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	937
9040	pH (std. units)	7.09
251009	MW-13D:03/15/95 @1515(Water)	
9060	Total Organic Carbon	0.6
9050	Conductivity (umhos/cm)	935
9040	pH (std. units)	7.08
251010	MW-13R:03/15/95 @0745(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	<0.5
9050	Conductivity (umhos/cm)	5.0
9040	pH (std. units)	8.08

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Lab No./ Method No.	Sample Description/ Parameter	Result
251011	MW45-3R:03/15/95 @0730(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	<0.5
9050	Conductivity (umhos/cm)	4.0
9040	pH (std. units)	8.03
251012	MW45-4A:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	840
9040	pH (std. units)	7.27
251013	MW45-4B:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	823
9040	pH (std. units)	7.24
251014	MW45-4C:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	1.0
9050	Conductivity (umhos/cm)	821
9040	pH (std. units)	7.25
251015	MW45-4D:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	810
9040	pH (std. units)	7.23

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Submitted By :

Aquatec Inc.

2.2

Laboratory Control Samples and Blanks for Indicator Parameters

Quality Control Summary
Project No 93206 ETR No 49994
SDG No 49994

Method Preparation Blank
Units: mg/L

<u>Parameter</u>	<u>Found Result</u>
Total Organic Halides	<0.02
Total Organic Carbon	<0.5

Laboratory Control Sample
Units: mg/L

<u>Parameter</u>	<u>Found Value</u>	<u>True Value</u>	<u>% Recovery</u>
Total Organic Halides	5.00	5.00	100.0
Total Organic Carbon	9.32	9.96	93.6
Conductivity			
(umhos/cm)	1424	1413	100.8
PH (std units)	5.97	6.00	99.5

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Tabulated Indicator Parameters Results

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INDICATOR ANALYSIS RESULTS**

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Conductivity	umhos/cm	924	867	937	935
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Total Organic Halides	mg/L	0.02 U	0.02 U	0.02 U	0.02 U

**OD GROUNDS FIRST QUARTER 1995 MONITORING
INDICATOR ANALYSIS RESULTS**

PARAMETER	MATRIX SITE DATE SAMPLED ES ID LAB ID UNITS	WATER OD 3/15/95 MW45-4A 251012	WATER OD 3/15/95 MW45-4B 251013	WATER OD 3/15/95 MW45-4C 251014	WATER OD 3/15/95 MW45-4D 251015
pH	stnd. units	7.27	7.24	7.25	7.23
Conductivity	umhos/cm	840	823	821	810
Total Organic Carbon	mg/L	0.9	0.9	1	0.9
Total Organic Halides	mg/L	0.02 U	0.02 U	0.02 U	0.02 U

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QA/QC Data

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Indicator Parameter Laboratory Report



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Boston, MA 02199

Date : 03/23/95
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Arrived : 03/16/95
P.O. Number: 725980-013

Attention : Mike Duchesneau

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Case:93206 SDG:49994

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9060	Total Organic Carbon	0.7
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9040	pH (std. units)	7.13
251007	MW-13B:03/15/95 @1515(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.5
9050	Conductivity (umhos/cm)	867
9040	pH (std. units)	7.15
251008	MW-13C:03/15/95 @1515(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	937
9040	pH (std. units)	7.09
251009	MW-13D:03/15/95 @1515(Water)	
9060	Total Organic Carbon	0.6
9050	Conductivity (umhos/cm)	935
9040	pH (std. units)	7.08
251010	MW-13R:03/15/95 @0745(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	<0.5
9050	Conductivity (umhos/cm)	5.0
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Lab No./ Method No.	Sample Description/ Parameter	Result
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9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	<0.5
9050	Conductivity (umhos/cm)	4.0
9040	pH (std. units)	8.03
251012	MW45-4A:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	840
9040	pH (std. units)	7.27
251013	MW45-4B:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	823
9040	pH (std. units)	7.24
251014	MW45-4C:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	1.0
9050	Conductivity (umhos/cm)	821
9040	pH (std. units)	7.25
251015	MW45-4D:03/15/95 @1045(Water)	
9020	Total Organic Halides	<0.02
9060	Total Organic Carbon	0.9
9050	Conductivity (umhos/cm)	810
9040	pH (std. units)	7.23

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Submitted By :

Aquatec Inc.

2.2
Laboratory Control Samples and Blanks
for Indicator Parameters

Quality Control Summary
Project No 93206 ETR No 49994
SDG No 49994

Method Preparation Blank
Units: mg/L

<u>Parameter</u>	<u>Found Result</u>
Total Organic Halides	<0.02
Total Organic Carbon	<0.5

Laboratory Control Sample
Units: mg/L

<u>Parameter</u>	<u>Found Value</u>	<u>True Value</u>	<u>% Recovery</u>
Total Organic Halides	5.00	5.00	100.0
Total Organic Carbon	9.32	9.96	93.6
Conductivity (umhos/cm)	1424	1413	100.8
PH (std units)	5.97	6.00	99.5

**ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
VALIDATED VOLATILE 524.2 ANALYSIS RESULTS**

COMPOUND	MATRIX LOCATION SAMPLE DATE ES ID LAB ID UNITS	WATER ASH 12/8/94 BN-S 243988	WATER ASH 12/8/94 MW-64 243998 BN-S DUP	WATER ASH 12/8/94 FH-D 243989	WATER ASH 12/8/94 FH-S 243990	WATER ASH 12/8/94 MW-30 243991	WATER ASH 12/8/94 BN-S-R 243987 RINSATE
1,2,3-Trichloropropane	ug/L	1U	1U	1U	1U	1U	1U
Bromobenzene	ug/L	1U	1U	1U	1U	1U	1U
n-Propylbenzene	ug/L	1U	1U	1U	1U	1U	1U
2-Chlorotoluene	ug/L	1U	1U	1U	1U	1U	1U
1,3,5-Trimethylbenzene	ug/L	1U	1U	1U	1U	1U	1U
4-Chlorotoluene	ug/L	1U	1U	1U	1U	1U	1U
tert-Butylbenzene	ug/L	1U	1U	1U	1U	1U	1U
1,2,4-Trimethylbenzene	ug/L	1U	1U	1U	1U	1U	1U
sec-Butylbenzene	ug/L	1U	1U	1U	1U	1U	1U
p-Isopropyltoluene	ug/L	1U	1U	1U	1U	1U	1U
1,3-Dichlorobenzene	ug/L	1U	1U	1U	1U	1U	1U
1,4-Dichlorobenzene	ug/L	1U	1U	1U	1U	1U	1U
n-Butylbenzene	ug/L	1U	1U	1U	1U	1U	1U
1,2-Dichlorobenzene	ug/L	1U	1U	1U	1U	1U	1U
1,2-Dibromo-3-Chloropropane	ug/L	1U	1U	1U	1U	1U	1U
1,2,4-Trichlorobenzene	ug/L	1U	1U	1U	1U	1U	1U
Hexachlorobutadiene	ug/L	1U	1U	1U	1U	1U	1U
Naphthalene	ug/L	1U	1U	1U	1U	1U	1U
1,2,3-Trichlorobenzene	ug/L	1U	1U	1U	1U	1U	1U

NOTES:

ug/L = micrograms/liter

U = Not detected above the concentration shown

J = The concentration shown is an estimate of the actual concentration

**ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
VALIDATED VOLATILE 524.2 ANALYSIS RESULTS**

COMPOUND	MATRIX LOCATION SAMPLE DATE ES ID LAB ID UNITS	WATER ASH 12/8/94 BN-S 243988	WATER ASH 12/8/94 MW-64 243998 BN-S DUP	WATER ASH 12/8/94 FH-D 243989	WATER ASH 12/8/94 FH-S 243990	WATER ASH 12/8/94 MW-30 243991	WATER ASH 12/8/94 BN-S-R 243987 RINSATE
Dichlorodifluoromethane	ug/L	1U	1U	1U	1U	1U	1U
Chloromethane	ug/L	1U	1U	1U	1U	1U	1U
Vinyl Chloride	ug/L	1U	1U	1U	1U	1U	1U
Bromomethane	ug/L	1U	1U	1U	1U	1U	1U
Chloroethane	ug/L	1U	1U	1U	1U	1U	1U
Trichlorofluoromethane	ug/L	1U	1U	1U	1U	1U	1U
Acetone	ug/L	5U	5U	5U	5U	5U	4J
1,1-Dichloroethene	ug/L	1U	1U	1U	1U	1U	1U
trans-1,2-Dichloroethene	ug/L	1U	1U	1U	1U	1U	1U
Carbon Disulfide	ug/L	1U	1U	1U	1U	1U	1U
Methylene Chloride	ug/L	1U	1U	1U	1U	1U	1U
Methyl-t-Butyl Ether	ug/L	1U	1U	1U	1U	1U	1U
1,1-Dichloroethane	ug/L	1U	1U	1U	1U	1U	1U
cis-1,2-Dichloroethene	ug/L	1U	1U	1U	1U	1U	1U
2-Butanone	ug/L	5U	5U	5U	5U	5U	2J
2,2-Dichloropropane	ug/L	1U	1U	1U	1U	1U	1U
Chloroform	ug/L	1U	1U	1U	1U	1U	1U
Bromochloromethane	ug/L	1U	1U	1U	1U	1U	1U
1,1,1-Trichloroethane	ug/L	1U	1U	1U	1U	1U	1U
1,1-Dichloropropene	ug/L	1U	1U	1U	1U	1U	1U
Carbon Tetrachloride	ug/L	1U	1U	1U	1U	1U	1U
1,2-Dichloroethane	ug/L	1U	1U	1U	1U	1U	1U
Benzene	ug/L	1U	1U	1U	1U	1U	1U
Trichloroethene	ug/L	1U	1U	1U	1U	2	1U
1,2-Dichloropropane	ug/L	1U	1U	1U	1U	1U	1U
Bromodichloromethane	ug/L	1U	1U	1U	1U	1U	1U
Dibromomethane	ug/L	1U	1U	1U	1U	1U	1U
4-Methyl-2-Pentanone	ug/L	5U	5U	5U	5U	5U	5U
cis-1,3-Dichloropropene	ug/L	1U	1U	1U	1U	1U	1U
Toluene	ug/L	1U	1U	1U	1U	1U	1U
trans-1,3-Dichloropropene	ug/L	1U	1U	1U	1U	1U	1U
1,1,2-Trichloroethane	ug/L	1U	1U	1U	1U	1U	1U
2-Hexanone	ug/L	5U	5U	5U	5U	5U	5U
1,3-Dichloropropane	ug/L	1U	1U	1U	1U	1U	1U
Tetrachloroethene	ug/L	1U	1U	1U	1U	1U	1U
Dibromochloromethane	ug/L	1U	1U	1U	1U	1U	1U
1,2-Dibromoethane	ug/L	1U	1U	1U	1U	1U	1U
Chlorobenzene	ug/L	1U	1U	1U	1U	1U	1U
1,1,1,2-Tetrachloroethane	ug/L	1U	1U	1U	1U	1U	1U
Ethylbenzene	ug/L	1U	1U	1U	1U	1U	1U
Xylene (Total)	ug/L	1U	1U	1U	1U	1U	1U
Styrene	ug/L	1U	1U	1U	1U	1U	1U
Bromoform	ug/L	1U	1U	1U	1U	1U	1U
Isopropylbenzene	ug/L	1U	1U	1U	1U	1U	1U
1,1,2,2-Tetrachloroethane	ug/L	1U	1U	1U	1U	1U	1U

**ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
SUMMARY OF VALIDATED VOLATILE ANALYSIS RESULTS (TCL AND 524.2)**

MONITORING WELL	COMPOUND									TOTAL VOCs (ug/l)	
	1,2-DCE (ug/l)	1,1-DCE (ug/l)	TCE (ug/l)	Vinyl Chloride (ug/l)	Chloroform (ug/l)	1,2-DCA (ug/l)	Methylene Chloride (ug/l)	Styrene (ug/l)	Benzene (ug/l)		
MW-36	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-63(MW-40 DUP)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-47	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-56	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-30	1 U	1 U	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2
FH-S	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
FH-D	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
BN-S	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
MW-64(BN-S DUP)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND

Notes:

1,2-DCE = 1,2-Dichloroethene (total)
TCE = Trichloroethene
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

U = Not detected above the concentration shown

ND = Not Detected

ug/l = micrograms per liter

**ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
VALIDATED VOLATILE 524.2 ANALYSIS RESULTS**

COMPOUND	MATRIX LOCATION SAMPLE DATE ES ID LAB ID UNITS	WATER ASH 12/8/94 BN-S 243988	WATER ASH 12/8/94 MW-64 243998 BN-S DUP	WATER ASH 12/8/94 FH-D 243980	WATER ASH 12/8/94 FH-S 243990	WATER ASH 12/8/94 MW-30 243991	WATER ASH 12/8/94 BN-S-R 243987 RINSATE
1,2,3-Trichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
2-Chlorotoluene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
4-Chlorotoluene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Naphthalene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U

NOTES:

ug/L = micrograms/liter

U = Not detected above the concentration shown

J = The concentration shown is an estimate of the actual concentration

ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
VALIDATED VOLATILE 524.2 ANALYSIS RESULTS

COMPOUND	MATRIX LOCATION SAMPLE DATE ES ID LAB ID UNITS	WATER ASH 12/8/94 BN-S 243988	WATER ASH 12/8/94 MW-64 243998 BN-S DUP	WATER ASH 12/8/94 FH-D 243989	WATER ASH 12/8/94 FH-S 243992	WATER ASH 12/8/94 MW-30 243991	WATER ASH 12/8/94 BN-S-R 243987 RINSATE
VOLATILE ORGANICS							
Dichlorodifluoromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Acetone	ug/L	5 U	5 U	5 U	5 U	5 U	4 J
1,1-Dichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-Butyl Ether	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	ug/L	5 U	5 U	5 U	5 U	5 U	2 J
2,2-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	ug/L	1 U	1 U	1 U	1 U	2	1 U
1,2-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromomethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-Pentanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
2-Hexanone	ug/L	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (Total)	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U

**ASH LANDFILL FOURTH QUARTER 1994 GROUNDWATER MONITORING
SUMMARY OF VALIDATED VOLATILE ANALYSIS RESULTS (TCL AND 524.2)**

MONITORING WELL	COMPOUND									TOTAL VOCs (ug/l)	
	1,2-DCE (ug/l)	1,1-DCE (ug/l)	TCE (ug/l)	Vinyl Chloride (ug/l)	Chloroform (ug/l)	1,2-DCA (ug/l)	Methylene Chloride (ug/l)	Styrene (ug/l)	Benzene (ug/l)		
MW-36	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-63(MW-40 DUP)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-47	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-56	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	ND
MW-30	1 U	1 U	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2
FH-S	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
FH-D	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
BN-S	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND
MW-84(BN-S DUP)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	ND

Notes:

1,2-DCE = 1,2-Dichloroethene (total)
TCE = Trichloroethene
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

U = Not detected above the concentration shown
ND = Not Detected
ug/l = micrograms per liter