

**SENECA ARMY DEPOT**  
ROMULUS, NEW YORK

**SENECA ASH LANDFILL**  
VALIDATED DATA TABLES  
**PHASE I AND II**

OCTOBER 1993

00557

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**ENGINEERING-SCIENCE, INC.**  
BOSTON, MASSACHUSETTS

October 29, 1993  
720446-01023

Mr. Gary East  
CEHND-PM-E  
U.S. Army Corps of Engineers  
Huntsville Division  
106 Wynn Drive  
Huntsville, AL 35805

**Subject: Field Sampling Letter Report (Ash Landfill)**

Dear Mr. East:

Enclosed with this field sampling letter report are the validated data tables for the Phase I and Phase II Remedial Investigation at the Ash Landfill at the Seneca Army Depot (SEAD).

At the completion of the Phase II field sampling activities all data was combined into one set of sampling results and was divided by the four media categories: soil, groundwater, surface water, and sediment. The enclosed appendix provides the data in summary form. For data points for which no sampling was conducted an "NS" appears in the table.

The data were validated in compliance with EPA Region II functional guidelines as described in Standard Operating Procedures HW-6 (Rev. No.8) for organics and HW-2 (Rev. No. 11) for inorganics. The analyses for these samples were performed in accordance with NYSDEC Analytical Services Protocols (ASP) with 12/91 updates. Also attached are the case narratives received from the laboratory (Aquatec) which identify and describe the quality control issues associated with each Sample Delivery Group.

Upon review of the data, it was found that a substantial number of compounds were not detected in any of the samples that were collected. The number that were detected varied by the media sampled. For example, of some 162 compounds for which analyses were conducted, 79 were detected in soil, 21 in surface water, 58 in sediment and 47 of 191 compounds were detected in groundwater.

**Table 1A** provides a summary of the soil sampling program. The table identifies the number of samples taken within the Ash Landfill for each compound. The frequency of detection for each compound was calculated. This statistic is a good indication of the extent of occurrence of a particular compound. Of the 79 detected compounds, 23 (20%) were detected in less than 5 percent of the samples. The maximum detected value has also been included. Preliminary review of the soil data indicates that elevated concentrations of volatile organic compounds, semivolatiles and certain metals, were found at the site.

Dr. Becker  
October 29, 1993  
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**Table 1B** provides a summary of the groundwater sampling program. Fewer compounds, (47) were detected in the groundwater samples. Of these 47, almost half (21) the compounds were detected in less than 5% of the samples that were taken. Maximum detected values are also provided in the table. A plume of chlorinated volatile organics has been defined in the groundwater extending from the area of the bend in the road at the Ash Landfill approximately 1100' in a westerly direction.

**Table 1C** summarizes the sediment samples that were collected. There were 58 compounds detected in the sediment samples of which 52 were found in more than 5% of the samples. Chlorinated organics were detected in Wetland B.

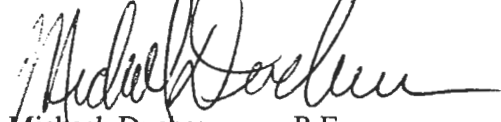
**Table 1D** provides a summary of the surface water samples which were collected. Of the four media, the fewest number of compounds (21) were detected in the surface water. All but one of the compounds that were detected were metals.

The functional guidelines used for data validation and the quality control issues identified by the laboratory were forwarded to Dr. Becker, Missouri River Division ACOE with his copy of the Field Sampling Letter Report.

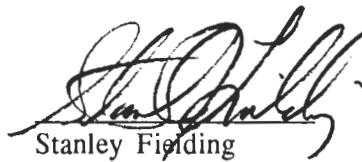
Please feel free to call me at (617) 859-2492, if you have any questions.

Sincerely,

ENGINEERING SCIENCE, INC.



Michael Duchesneau, P.E.  
Project Manager



Stanley Fielding  
Data Validator

MD/cmf/D#10

Attachments

TABLE 1A (Page 1 of 2)

Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Soil

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Volatile Organic Compounds</u></b>				
Vinyl Chloride	154	6.4%	1000	ug/Kg
Chloroethane	154	0.5%	3	ug/Kg
Acetone	154	8.0%	680	ug/Kg
Carbon Disulfide	154	1.1%	120	ug/Kg
1,1-Dichloroethene	154	5.9%	140	ug/Kg
1,2-Dichloroethene (total)	154	38.5%	79000	ug/Kg
Chloroform	154	7.0%	32	ug/Kg
1,2-Dichloroethane	154	1.1%	210	ug/Kg
2-Butanone	154	6.4%	22	ug/Kg
1,1,1-Trichloroethane	154	0.5%	3	ug/Kg
Trichloroethene	154	54.0%	540000	ug/Kg
Benzene	154	2.1%	6	ug/Kg
Tetrachloroethene	154	2.1%	7	ug/Kg
Toluene	154	25.1%	5700	ug/Kg
Chlorobenzene	154	1.1%	620	ug/Kg
Ethylbenzene	154	7.0%	2000	ug/Kg
Xylene (total)	154	12.3%	17000	ug/Kg
<b><u>Semivolatiles</u></b>				
Phenol	154	1.0%	14000	ug/Kg
bis(2-Chloroethyl) ether	154	0.5%	9	ug/Kg
2-Nitrophenol	154	0.5%	1300	ug/Kg
Benzoic acid	154	4.0%	1500	ug/Kg
Naphthalene	154	19.7%	2500	ug/Kg
2-Methylnaphthalene	154	18.7%	3600	ug/Kg
Acenaphthylene	154	8.3%	510	ug/Kg
Acenaphthene	154	16.1%	14000	ug/Kg
4-Nitrophenol	154	1.0%	1600	ug/Kg
Dibenzofuran	154	11.9%	7000	ug/Kg
2,4-Dinitrotoluene	154	1.0%	2000	ug/Kg
Fluorene	154	17.6%	12000	ug/Kg
N-Nitrosodiphenylamine (1)	154	0.5%	450	ug/Kg
Phenanthrene	154	42.0%	43000	ug/Kg
Anthracene	154	23.8%	15000	ug/Kg
Di-n-butylphthalate	154	27.5%	25000	ug/Kg
Fluoranthene	154	44.0%	29000	ug/Kg
Pyrene	154	46.1%	24000	ug/Kg
Butylbenzylphthalate	154	3.1%	300	ug/Kg
Benzo(a)anthracene	154	36.3%	9600	ug/Kg
Chrysene	154	38.3%	9900	ug/Kg
bis(2-Ethylhexyl)phthalate	154	50.8%	230000	ug/Kg
Di-n-octylphthalate	154	3.6%	430	ug/Kg
Benzo(b)fluoranthene	154	34.2%	9500	ug/Kg
Benzo(k)fluoranthene	154	34.2%	6700	ug/Kg
Benzo(a)pyrene	154	33.2%	9000	ug/Kg
Indeno(1,2,3-cd)pyrene	154	28.0%	48000	ug/Kg
Dibenz(a,h)anthracene	154	13.5%	2100	ug/Kg
Benzo(g,h,i)perylene	154	24.9%	5000	ug/Kg

TABLE 1A (Page 2 of 2)

**Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Soil**

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Pesticides/PCBs</u></b>				
Heptachlor	154	0.6%	14	ug/Kg
Dieldrin	154	0.6%	46	ug/Kg
4,4' - DDE	154	28.9%	290	ug/Kg
4,4' - DDD	154	16.7%	350	ug/Kg
4,4' - DDT	154	19.4%	260	ug/Kg
Aroclor - 1242	154	3.5%	260	ug/Kg
Aroclor - 1260	154	11.7%	770	ug/Kg
<b><u>Herbicides</u></b>				
2,4 - DB	154	4.3%	410	ug/Kg
2,4,5 - TP (Silvex)	154	0.6%	10	ug/Kg
MCPP	154	3.0%	24000	ug/Kg
<b><u>Metals</u></b>				
Aluminum	154	100.0%	2550	mg/Kg
Antimony	154	8.6%	78.3	mg/Kg
Arsenic	154	99.4%	66.3	mg/Kg
Barium	154	100.0%	1010	mg/Kg
Beryllium	154	96.5%	1.4	mg/Kg
Cadmium	154	69.9%	43.1	mg/Kg
Calcium	154	100.0%	172000	mg/Kg
Chromium	154	100.0%	62	mg/Kg
Cobalt	154	100.0%	25.1	mg/Kg
Copper	154	100.0%	836	mg/Kg
Iron	154	100.0%	642000	mg/Kg
Lead	154	100.0%	2890	mg/Kg
Magnesium	154	100.0%	24900	mg/Kg
Manganese	154	100.0%	2740	mg/Kg
Mercury	154	61.7%	1.2	mg/Kg
Nickel	154	100.0%	2520	mg/Kg
Potassium	154	100.0%	19000	mg/Kg
Selenium	154	30.1%	2.1	mg/Kg
Silver	154	14.7%	10.5	mg/Kg
Sodium	154	65.1%	1010	mg/Kg
Vanadium	154	100.0%	36.8	mg/Kg
Zinc	154	99.4%	55700	mg/Kg
Cyanide	154	3.7%	2.2	mg/Kg

TABLE 1B (Page 1 of 2)

Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Groundwater

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Volatile Organic Compounds</u></b>				
Vinyl Chloride	78	7.0%	23000	ug/L
1,1-Dichloroethene	78	4.7%	200	ug/L
1,1-Dichloroethane	78	2.3%	160	ug/L
1,2-Dichloroethene (total)	78	31.4%	74000	ug/L
Chloroform	78	4.7%	210	ug/L
1,2-Dichloroethane	78	2.3%	6	ug/L
1,1,1-Trichloroethane	78	2.3%	72	ug/L
Trichloroethene	78	32.6%	37000	ug/L
Benzene	78	5.8%	170	ug/L
4-Methyl-2-Pentanone	78	1.2%	77	ug/L
Tetrachloroethene	78	1.2%	2	ug/L
Toluene	78	3.5%	900	ug/L
Ethylbenzene	78	2.3%	130	ug/L
Xylene (total)	78	3.5%	590	ug/L
<b><u>Semivolatiles</u></b>				
Phenol	78	1.1%	5	ug/L
bis(2-Chloroethyl) ether	78	1.1%	0.6	ug/L
4-Methylphenol	78	3.4%	6	ug/L
Naphthalene	78	2.3%	66	ug/L
2-Methylnaphthalene	78	2.3%	13	ug/L
Diethylphthalate	78	2.3%	2	ug/L
Pentachlorophenol	78	2.3%	74	ug/L
Di-n-butylphthalate	78	26.1%	18	ug/L

TABLE 1B (Page 2 of 2)

**Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Groundwater**

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Herbicides</u></b>				
Dalapon	78	3.8%	6.4	ug/L
Dicamba	78	1.3%	0.18	ug/L
<b><u>Metals</u></b>				
Aluminum	78	65.0%	306000	ug/L
Antimony	78	3.8%	191	ug/L
Arsenic	78	17.9%	8.6	ug/L
Barium	78	100.0%	1600	ug/L
Beryllium	78	23.8%	11.7	ug/L
Cadmium	78	13.7%	64.6	ug/L
Calcium	78	100.0%	1790000	ug/L
Chromium	78	47.0%	418	ug/L
Cobalt	78	19.7%	201	ug/L
Copper	78	39.3%	412	ug/L
Iron	78	71.7%	610000	ug/L
Lead	78	42.9%	147	ug/L
Magnesium	78	100.0%	267000	ug/L
Manganese	78	85.5%	11400	ug/L
Mercury	78	14.9%	2.3	ug/L
Nickel	78	35.0%	622	ug/L
Potassium	78	93.2%	24800	ug/L
Selenium	78	9.4%	2.9	ug/L
Silver	78	1.8%	7.2	ug/L
Sodium	78	100.0%	149000	ug/L
Vanadium	78	35.0%	358	ug/L
Zinc	78	73.4%	1750	ug/L
Cyanide	78	17.3%	11.2	ug/L

TABLE 1C (Page 1 of 2)

**Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Sediments**

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Volatile Organic Compounds</u></b>				
Acetone	18	17.6%	19	ug/Kg
1,1-Dichloroethene	18	11.8%	18	ug/Kg
1,2-Dichloroethene (total)	18	11.8%	640	ug/Kg
Chloroform	18	11.8%	6	ug/Kg
Trichloroethene	18	11.8%	11	ug/Kg
<b><u>Semivolatiles</u></b>				
4-Methylphenol	18	4.2%	100	ug/Kg
Naphthalene	18	4.2%	22	ug/Kg
2-Methylnaphthalene	18	4.2%	30	ug/Kg
Acenaphthylene	18	20.8%	170	ug/Kg
2,4-Dinitrotoluene	18	4.2%	100	ug/Kg
Fluorene	18	4.2%	20	ug/Kg
N-Nitrosodiphenylamine (1)	18	4.2%	55	ug/Kg
Phenanthrene	18	54.2%	1200	ug/Kg
Anthracene	18	33.3%	270	ug/Kg
Carbazole	18	36.4%	97	ug/Kg
Di-n-butylphthalate	18	8.3%	21	ug/Kg
Fluoranthene	18	75.0%	7400	ug/Kg
Pyrene	18	75.0%	6700	ug/Kg
Benzo(a)anthracene	18	62.5%	4900	ug/Kg
Chrysene	18	62.5%	5300	ug/Kg
bis(2-Ethylhexyl)phthalate	18	20.8%	4300	ug/Kg
Benzo(b)fluoranthene	18	58.3%	4500	ug/Kg
Benzo(k)fluoranthene	18	58.3%	3700	ug/Kg
Benzo(a)pyrene	18	65.2%	3900	ug/Kg
Indeno(1,2,3-cd)pyrene	18	50.0%	2400	ug/Kg
Dibenz(a,h)anthracene	18	16.7%	1300	ug/Kg
Benzo(g,h,i)perylene	18	45.8%	2300	ug/Kg



TABLE 1C (Page 2 of 2)

**Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Sediments**

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Pesticides / PCBs</u></b>				
4,4' – DDE	18	31.6%	63	ug/Kg
Endrin	18	5.3%	2	ug/Kg
4,4' – DDD	18	5.3%	2	ug/Kg
Endosulfan sulfate	18	10.5%	3	ug/Kg
4,4' – DDT	18	5.3%	2	ug/Kg
alpha – Chlordane	18	15.8%	4	ug/Kg
Aroclor – 1260	18	5.3%	54	ug/Kg
<b><u>Metals</u></b>				
Aluminum	18	100.0%	20900	mg/Kg
Antimony	18	5.6%	11	mg/Kg
Arsenic	18	100.0%	12	mg/Kg
Barium	18	100.0%	227	mg/Kg
Beryllium	18	100.0%	1	mg/Kg
Cadmium	18	66.7%	4	mg/Kg
Calcium	18	100.0%	229000	mg/Kg
Chromium	18	100.0%	33	mg/Kg
Cobalt	18	94.4%	17	mg/Kg
Copper	18	100.0%	59	mg/Kg
Iron	18	100.0%	36800	mg/Kg
Lead	18	100.0%	219	mg/Kg
Magnesium	18	100.0%	14900	mg/Kg
Manganese	18	100.0%	1050	mg/Kg
Mercury	18	77.8%	1	mg/Kg
Nickel	18	100.0%	46	mg/Kg
Potassium	18	100.0%	2510	mg/Kg
Selenium	18	50.0%	1	mg/Kg
Silver	18	16.7%	1	mg/Kg
Sodium	18	55.6%	195	mg/Kg
Thallium	18	5.6%	1	mg/Kg
Vanadium	18	100.0%	31	mg/Kg
Zinc	18	100.0%	834	mg/Kg
Cyanide	18	11.1%	1	mg/Kg

TABLE 1D

Seneca Army Depot Ash Landfill RI/FS  
Field Sampling Report  
Summary of Chemicals Detected in Surface Water

Compound	Number of Samples	Freq. of Detection	Maximum Detected Value	Units
<b><u>Volatile Organic Compounds</u></b>				
Chloroform	14	14.3%	2.0	ug/L
<b><u>Metals</u></b>				
Aluminum	14	57.1%	2410.0	ug/L
Antimony	14	35.7%	141.0	ug/L
Arsenic	14	21.4%	2.9	ug/L
Barium	14	64.3%	113.0	ug/L
Beryllium	14	57.1%	1.20	ug/L
Calcium	14	57.1%	165000.0	ug/L
Chromium	14	71.4%	7.6	ug/L
Cobalt	14	28.6%	6.9	ug/L
Copper	14	23.1%	21.7	ug/L
Iron	14	46.2%	8750.0	ug/L
Lead	14	46.2%	42.3	ug/L
Magnesium	14	61.5%	16700.0	ug/L
Manganese	14	71.4%	941.0	ug/L
Mercury	14	35.7%	0.15	ug/L
Nickel	14	14.3%	11.2	ug/L
Potassium	14	57.1%	4690.0	ug/L
Selenium	14	64.3%	3.40	ug/L
Sodium	14	64.3%	2180000.0	ug/L
Vanadium	14	64.3%	16.3	ug/L
Zinc	14	30.8%	187.0	ug/L

SENECA ARMY DEPOT, ASH LANDFILL  
 SOIL ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-1	B-1	B-1	B-2	B-2	B-2	B-2	B-2	B-2
DATE	0-2	2-4	4-6	0-2	0-2	0-2	2-4	2-4	2-4
ES ID	10/30/91	10/30/91	10/30/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91
LAB ID	S1030-1	S1030-2	S1030-3	S1031-4	S1031-4DL(5)	S1031-5	S1031-5	S1031-5RE(4)	S1031-6
UNITS	147824	147825	147826	147827	147827	147828	147828	147828	147829
<b>VOCs</b>									
Chloromethane	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Bromomethane	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Vinyl Chloride	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Chloroethane	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	920 J
Methylene Chloride	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	150000 U R	1500 U	1600 U
Acetone	µg/Kg	12 U	12 U	NS	1500 U J	5000 U R	7300 U R	730 U	780 U
Carbon Disulfide	µg/Kg	6 U	6 U	NS	740 U J	9900 U R	150000 U R	1500 U	1600 U
1,1-Dichloroethene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,1-Dichloroethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,2-Dichloroethene (total)	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Chloroform	µg/Kg	6 U	6 U	NS	12000 J	10000 U R	73000 U R	1900	21000
1,2-Dichloroethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
2-Butanone	µg/Kg	12 U	12 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,1,1-Trichloroethane	µg/Kg	6 U	6 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Carbon Tetrachloride	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Vinyl Acetate	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Bromodichloromethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,2-Dichloropropane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
cis-1,3-Dichloropropene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Trichloroethene	µg/Kg	6 U	6 U	NS	3900 R	28000	73000 U R	4400	17000 R
Dibromochloromethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,1,2-Trichloroethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Benzene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
trans-1,3-Dichloropropene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Bromoform	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
4-Methyl-2-Pentanone	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
2-Hexanone	µg/Kg	12 U	12 U	NS	1500 U J	9900 U R	150000 U R	1500 U	1600 U
Tetrachloroethene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Toluene	µg/Kg	6 U	6 U	NS	560 J	5000 U R	73000 U R	220 J	280 J
Chlorobenzene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Ethylbenzene	µg/Kg	6 U	6 U	NS	580 J	5000 U R	73000 U R	250 J	780 U
Styrene	µg/Kg	6 U	6 U	NS	740 U J	5000 U R	73000 U R	730 U	780 U
Xylene (total)	µg/Kg	6 U	6 U	NS	2900 J	1300 U R	73000 U R	1200	400 J

NOTE: \*NS\* = NOT SAMPLED

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH	B-1	B-1	B-1	B-2	B-2	B-2	B-2	B-2
	DATE	10/30/91	10/30/91	10/30/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91
	ES ID	S1030-1	S1030-2	S1030-3	S1031-4	S1031-5	S1031-5	S1031-5	S1031-5
	LAB ID	S1030-1	S1030-2	S1030-3	S1031-4	S1031-5	S1031-5	S1031-5	S1031-5
	UNITS	147824	147825	147826	147827	147827	147828	147828	147829
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
bis(2-Chloroethyl) ether	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2-Chlorophenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
1,3-Dichlorobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
1,4-Dichlorobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzyl Alcohol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
1,2-Dichlorobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2-Methylphenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
bis(2-Chloroisopropyl) ether	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
4-Methylphenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
N-Nitroso-dl-n-propylamine	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Hexachloroethane	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Nitrobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Isophorone	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2-Nitrophenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4-Dimethylphenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzoic acid	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
bis(2-Chloroethoxy) methane	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4-Dichlorophenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
1,2,4-Trichlorobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Naphthalene	µg/Kg	720 U	730 U	690 U	270 J	NS	210 J	NS	360 J
4-Chloroaniline	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Hexachlorobutadiene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
4-Chloro-3-methylphenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2-Methylnaphthalene	µg/Kg	720 U	730 U	690 U	280 J	NS	730 U	NS	240 J
Hexachlorocyclopentadiene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4,6-Trichlorophenol	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4,5-Trichlorophenol	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
2-Chloronaphthalene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2-Nitroaniline	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
Dimethylphthalate	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Acenaphthylene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,6-Dinitrotoluene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
3-Nitroaniline	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
Acenaphthene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4-Dinitrophenol	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
4-Nitrophenol	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
Dibenzofuran	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
2,4-Dinitrotoluene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Diethylphthalate	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
4-Chlorophenyl-phenylether	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Fluorene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
4-Nitroaniline	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
4,6-Dinitro-2-methylphenol	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
N-Nitrosodiphenylamine (1)	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
4-Bromophenyl-phenylether	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Hexachlorobenzene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Pentachlorophenol	µg/Kg	3500 U	3500 U	3300 U	3400 U	NS	3600 U	NS	3500 U
Phenanthrene	µg/Kg	720 U	730 U	690 U	170 J	NS	62 J	NS	3500 U
Anthracene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	730 U	NS	720 U
Di-n-butylphthalate	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Fluoranthene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Pyrene	µg/Kg	720 U	730 U	690 U	130 J	NS	730 U	NS	720 U
Butylbenzylphthalate	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
3,3'-Dichlorobenzidine	µg/Kg	1400 U	1500 U	1400 U	1400 U	NS	1500 U	NS	1400 U
Benzo(a)anthracene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Chrysene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
bis(2-Ethylhexyl)phthalate	µg/Kg	720 U	730 U	690 U	530 J	NS	730 U	NS	720 U
Di-n-octylphthalate	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzo(b)fluoranthene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzo(k)fluoranthene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzo(a)pyrene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Indeno(1,2,3-cd)pyrene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Dibenz(a,h)anthracene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U
Benzo(g,h,i)perylene	µg/Kg	720 U	730 U	690 U	710 U	NS	730 U	NS	720 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL B-1	SOIL B-1	SOIL B-1	SOIL B-2	SOIL B-2	SOIL B-2	SOIL B-2	SOIL B-2
	DEPTH	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
	ES ID	S1030-1	S1030-2	S1030-3	S1031-4	S1031-4DL(5)	S1031-5	S1031-5FRE(4)	S1031-6
	LAB ID	147824	147825	147826	147827	147827	147828	147828	147829
	UNITS								
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	17 U	16 U	17 U	17 U	NS	18 U	NS	17 U
beta-BHC	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
delta-BHC	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
gamma-BHC (Lindane)	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
Heptachlor	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
Aldrin	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
Heptachlor epoxide	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
Endosulfan I	µg/Kg	17 U	18 U	17 U	17 U	NS	18 U	NS	17 U
Dieldrin	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
4,4'-DDE	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
Endrin	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
Endosulfan II	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
4,4'-DDD	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
Endosulfan sulfate	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
4,4'-DDT	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
Methoxychlor	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Endrin ketone	µg/Kg	35 U	35 U	33 U	34 U	NS	36 U	NS	35 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
gamma-Chlordane	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Toxaphene	µg/Kg	350 U	350 U	330 U	340 U	NS	360 U	NS	350 U
Aroclor-1016	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Aroclor-1221	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Aroclor-1232	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Aroclor-1242	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Aroclor-1248	µg/Kg	170 U	180 U	170 U	170 U	NS	180 U	NS	170 U
Aroclor-1254	µg/Kg	350 U	350 U	330 U	340 U	NS	360 U	NS	350 U
Aroclor-1260	µg/Kg	350 U	350 U	330 U	340	NS	190 J	NS	390
<b>HERBICIDES</b>									
2,4-D	µg/Kg	54 U J	55 U J	53 U J	54 U J	NS	56 U J	NS	55 U J
2,4-DB	µg/Kg	54 U J	350 J	53 U J	250 J	NS	56 U J	NS	55 U J
2,4,5-T	µg/Kg	5.4 U J	5.5 U J	5.3 U J	5.4 U J	NS	5.6 U J	NS	5.5 U J
2,4,5-TP (Silvex)	µg/Kg	5.4 U J	5.5 U J	5.3 U J	5.4 U J	NS	5.6 U J	NS	5.5 U J
Dalapon	µg/Kg	130 U J	130 U J	130 U J	130 U J	NS	130 U J	NS	130 U J
Dicamba	µg/Kg	5.4 U J	5.5 U J	5.3 U J	5.4 U J	NS	5.6 U J	NS	5.5 U J
Dichloroprop	µg/Kg	54 U J	55 U J	53 U J	54 U J	NS	56 U J	NS	55 U J
Dinoseb	µg/Kg	27 U J	27 U J	26 U J	27 U J	NS	28 U J	NS	27 U J
MCPA	µg/Kg	5400 U J	5500 U J	5300 U J	5400 U J	NS	5600 U J	NS	5500 U J
MCPP	µg/Kg	5400 U J	5500 U J	5300 U J	5400 U J	NS	5600 U J	NS	5500 U J
<b>METALS</b>									
Aluminum	mg/kg	17600	17600	13200	15800	NS	17400	NS	18100
Antimony	mg/kg	10 U J	9.5 U J	6 U J	11.1 U J	NS	7.9 U J	NS	8.1 U J
Arsenic	mg/kg	6.1	4.4	3.7	4.9	NS	4.1	NS	4
Barium	mg/kg	102	64.8	42.2	58	NS	72.3	NS	58.7
Beryllium	mg/kg	0.9 J	0.93	0.67 J	0.84 J	NS	0.79	NS	0.83
Cadmium	mg/kg	2.4	2.8	1.9	2.3	NS	2.3	NS	2.9
Calcium	mg/kg	22900	55200	71000	31500	NS	32500	NS	22300
Chromium	mg/kg	27.8	27.5	22	26.1	NS	27.8	NS	28.4
Cobalt	mg/kg	12.7	11.7	11.9	12.1	NS	11.3	NS	14.6
Copper	mg/kg	36.3 J	21.9 J	13.9 J	33.1 J	NS	24.7 J	NS	18.9 J
Iron	mg/kg	37500	34400	27800	35000	NS	32900	NS	36500
Lead	mg/kg	28.7	7.5	6.9	52.4	NS	23	NS	11.9 J
Magnesium	mg/kg	6870	7690	6900	7510	NS	8440	NS	8130
Manganese	mg/kg	748	943	802	403	NS	673	NS	505
Mercury	mg/kg	0.06 J	0.04 U	0.04 U	0.04 J	NS	0.06 J	NS	0.04 U
Nickel	mg/kg	44.6	42.4	33.3	43.1	NS	40.3	NS	46.9
Potassium	mg/kg	2420	1810	1410	1950	NS	2280	NS	2150
Selenium	mg/kg	0.93 U	0.59 U	0.9 U	0.21 U	NS	0.17 U	NS	0.18 U
Silver	mg/kg	1.5 U	1.4 U	1.2 U	1.7 U	NS	1.2 U	NS	1.2 U
Sodium	mg/kg	424 J	72.6 U J	151 J	84.9 U J	NS	60.4 U J	NS	62.2 U J
Thallium	mg/kg	0.52 U	0.33 U	0.5 U	0.6 U	NS	0.48 U	NS	0.5 U
Vanadium	mg/kg	23.9	22.8	15.8	17.8	NS	22.1	NS	20.3
Zinc	mg/kg	104	77.6	60.2	58.6	NS	85.5	NS	88.1
Cyanide	mg/kg	0.6 U	0.6 U	0.59 U	0.62 U	NS	0.67 U	NS	0.66 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-2	B-2	B-2	B-3	B-3	B-3	B-3	B-3	B-3
DATE	6-8	8-10	6-10	0-2	0-2	0-2	2-4	4-6	6-8
ES ID	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91
LAB ID	S1031-6DL(5)	S1031-7	S1031-7DL(5)	S1031-8	S1031-8RE(4)	S1031-9	S1031-10	S1031-11	S1031-11
COMPOUND	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID
	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
Chloromethane	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Bromomethane	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Vinyl Chloride	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Chloroethane	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Methylene Chloride	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Acetone	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Carbon Disulfide	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,1-Dichloroethene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,1-Dichloroethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,2-Dichloroethene (total)	µg/Kg	20000 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Chloroform	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,2-Dichloroethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
2-Butanone	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
1,1,1-Trichloroethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Carbon Tetrachloride	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Vinyl Acetate	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Bromodichloromethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,2-Dichloropropane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
cis-1,3-Dichloropropene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Trichloroethene	µg/Kg	120000	83000 R	69000	23 J	11 J	6 U	6 U	5 J
Dibromochloromethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,1,2-Trichloroethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Benzene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
trans-1,3-Dichloropropene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Bromoform	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
4-Methyl-2-Pentanone	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
2-Hexanone	µg/Kg	6200 U R	2800 U	5500 U R	13 U J	13 U J	12 U	11 U	10 U J
Tetrachloroethene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
1,1,2,2-Tetrachloroethane	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Toluene	µg/Kg	3100 U R	1400 U	2800 U R	4 J	3 J	2 J	1 J	4 J
Chlorobenzene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Ethylbenzene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Styrene	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J
Xylene (total)	µg/Kg	3100 U R	1400 U	2800 U R	6 U J	6 U J	6 U	6 U	5 U J

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-2	B-2	B-2	B-3	B-3	B-3	B-3	B-3
UNITS	DEPTH	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
	ES ID	S1031-8DL(5)	S1031-7	S1031-7DL(5)	S1031-8	S1031-8RE(4)	S1031-9	S1031-10	S1031-11
	LAB ID	147829	147830	147830	147831	147831	147832	147833	147834
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
bis(2-Chloroethyl) ether	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2-Chlorophenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
1,3-Dichlorobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
1,4-Dichlorobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Benzyl Alcohol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
1,2-Dichlorobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2-Methylphenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
bis(2-Chloroisopropyl) ether	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Methylphenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
N-Nitroso-di-n-propylamine	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Hexachloroethane	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Nitrobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Isophorone	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2-Nitrophenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4-Dimethylphenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Benzic acid	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
bis(2-Chloroethoxy) methane	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4-Dichlorophenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
1,2,4-Trichlorobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Naphthalene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Chloroaniline	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Hexachlorobutadiene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Chloro-3-methylphenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2-Methylnaphthalene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Hexachlorocyclopentadiene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4,6-Trichlorophenol	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4,5-Trichlorophenol	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
2-Chloronaphthalene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2-Nitroaniline	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
Dimethylphthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Acenaphthylene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,6-Dinitrotoluene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
3-Nitroaniline	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
Acenaphthene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4-Dinitrophenol	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
4-Nitrophenol	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
Dibenzofuran	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
2,4-Dinitrotoluene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Diethylphthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Chlorophenyl-phenylether	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Fluorene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Nitroaniline	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
4,6-Dinitro-2-methylphenol	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
N-Nitrosodiphenylamine (1)	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
4-Bromophenyl-phenylether	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Hexachlorobenzene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Pentachlorophenol	µg/Kg	NS	NS	NS	4300 U	NS	NS	3500 U	NS
Phenanthrene	µg/Kg	NS	NS	NS	420 J	NS	NS	730 U	NS
Anthracene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Fluoranthene	µg/Kg	NS	NS	NS	750 J	NS	NS	730 U	NS
Pyrene	µg/Kg	NS	NS	NS	550 J	NS	NS	730 U	NS
Butylbenzylphthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
3,3'-Dichlorobenzidine	µg/Kg	NS	NS	NS	1800 U	NS	NS	1500 U	NS
Benzo(a)anthracene	µg/Kg	NS	NS	NS	290 J	NS	NS	730 U	NS
Chrysene	µg/Kg	NS	NS	NS	350 J	NS	NS	730 U	NS
bis(2-Ethylhexyl)phthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Di-n-octylphthalate	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Benzo(b)fluoranthene	µg/Kg	NS	NS	NS	220 J	NS	NS	730 U	NS
Benzo(k)fluoranthene	µg/Kg	NS	NS	NS	180 J	NS	NS	730 U	NS
Benzo(a)pyrene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Indeno(1,2,3-cd)pyrene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Dibenz(a,h)anthracene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS
Benzo(g,h,i)perylene	µg/Kg	NS	NS	NS	890 U	NS	NS	730 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-2	SOIL B-2	SOIL B-2	SOIL B-3	SOIL B-3	SOIL B-3	SOIL B-3	SOIL B-3	SOIL B-3
DEPTH	6-8	8-10	8-10	0-2	0-2	0-2	2-4	2-4	4-6
DATE	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91	10/31/91
ES ID	S1031-6DL(5)	S1031-7	S1031-7DL(5)	S1031-8	S1031-8RE(4)	S1031-9	S1031-10	S1031-11	S1031-11
LAB ID	147829	147830	147830	147831	147831	147832	147833	147834	147834
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
beta-BHC	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
delta-BHC	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
gamma-BHC (Lindane)	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
Heptachlor	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
Aldrin	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
Heptachlor epoxide	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
Endosulfan I	µg/Kg	NS	NS	NS	22 U	NS	NS	18 U	NS
Dieldrin	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
4,4'-DDE	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
Endrin	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
Endosulfan II	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
4,4'-DDD	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
Endosulfan sulfate	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
4,4'-DDT	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
Methoxychlor	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Endrin ketone	µg/Kg	NS	NS	NS	43 U	NS	NS	35 U	NS
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
gamma-Chlordane	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Toxaphene	µg/Kg	NS	NS	NS	430 U	NS	NS	350 U	NS
Aroclor-1016	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Aroclor-1221	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Aroclor-1232	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Aroclor-1242	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Aroclor-1248	µg/Kg	NS	NS	NS	220 U	NS	NS	180 U	NS
Aroclor-1254	µg/Kg	NS	NS	NS	430 U	NS	NS	350 U	NS
Aroclor-1260	µg/Kg	NS	NS	NS	430 U	NS	NS	350 U	NS
<b>HERBICIDES</b>									
2,4-D	µg/Kg	NS	NS	NS	68 U J	NS	NS	56 U J	NS
2,4-DB	µg/Kg	NS	NS	NS	68 U J	NS	NS	100 J	NS
2,4,5-T	µg/Kg	NS	NS	NS	6.8 U J	NS	NS	5.6 U J	NS
2,4,5-TP (Silvex)	µg/Kg	NS	NS	NS	6.8 U J	NS	NS	5.6 U J	NS
Dalapon	µg/Kg	NS	NS	NS	160 U J	NS	NS	130 U J	NS
Dicamba	µg/Kg	NS	NS	NS	6.8 U J	NS	NS	5.6 U J	NS
Dichloroprop	µg/Kg	NS	NS	NS	68 U J	NS	NS	56 U J	NS
Dinoseb	µg/Kg	NS	NS	NS	34 U J	NS	NS	28 U J	NS
MCPA	µg/Kg	NS	NS	NS	6800 U J	NS	NS	5600 U J	NS
MCPP	µg/Kg	NS	NS	NS	7500 J	NS	NS	5800 U J	NS
<b>METALS</b>									
Aluminum	mg/kg	NS	NS	NS	11700	NS	NS	15100	NS
Antimony	mg/kg	NS	NS	NS	78.3 J	NS	NS	6.5 U J	NS
Arsenic	mg/kg	NS	NS	NS	66.3	NS	NS	3.6	NS
Barium	mg/kg	NS	NS	NS	1010	NS	NS	56.9	NS
Beryllium	mg/kg	NS	NS	NS	0.78 U	NS	NS	0.69	NS
Cadmium	mg/kg	NS	NS	NS	43.1	NS	NS	2.2	NS
Calcium	mg/kg	NS	NS	NS	15800	NS	NS	65800	NS
Chromium	mg/kg	NS	NS	NS	57.9	NS	NS	22.5	NS
Cobalt	mg/kg	NS	NS	NS	13.6	NS	NS	11	NS
Copper	mg/kg	NS	NS	NS	936	NS	NS	14.8 J	NS
Iron	mg/kg	NS	NS	NS	55600	NS	NS	30000	NS
Lead	mg/kg	NS	NS	NS	1630	NS	NS	8.4	NS
Magnesium	mg/kg	NS	NS	NS	3930	NS	NS	8120	NS
Manganese	mg/kg	NS	NS	NS	615	NS	NS	547	NS
Mercury	mg/kg	NS	NS	NS	0.86	NS	NS	0.04 U	NS
Nickel	mg/kg	NS	NS	NS	65.4	NS	NS	34.5	NS
Potassium	mg/kg	NS	NS	NS	1380	NS	NS	1490	NS
Selenium	mg/kg	NS	NS	NS	1.1 U	NS	NS	0.17 U	NS
Silver	mg/kg	NS	NS	NS	1.8 U	NS	NS	0.88 U	NS
Sodium	mg/kg	NS	NS	NS	143 J	NS	NS	79.1 J	NS
Thallium	mg/kg	NS	NS	NS	0.59 U	NS	NS	0.47 U	NS
Vanadium	mg/kg	NS	NS	NS	18.1	NS	NS	17.6	NS
Zinc	mg/kg	NS	NS	NS	55700	NS	NS	213	NS
Cyanide	mg/kg	NS	NS	NS	1.6	NS	NS	0.86 U	NS



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-3	B-4	B-4	B-4	B-5	B-5	B-5	B-5
	DEPTH	6-8	0-2	2-4	4-6	0-2	2-4	2-4	4-6
	DATE	10/31/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91
	ES ID	S1031-11RE (4)	S1101-12	S1101-13	S1101-14	S1101-15	S1101-15RE (4)	S1101-16	S1101-17
	LAB ID	147834	147885	147886	147887	147888	147888	147889	147890
UNITS									
<b>VOCs</b>									
Chloromethane	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Bromomethane	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Vinyl Chloride	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Chloroethane	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Methylene Chloride	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Acetone	µg/Kg	12 U	13 U	11 U	11 U	15 U J	16 U J	11 U	11 U
Carbon Disulfide	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,1-Dichloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,1-Dichloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,2-Dichloroethane (total)	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Chloroform	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,2-Dichloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
2-Butanone	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
1,1,1-Trichloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Carbon Tetrachloride	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Vinyl Acetate	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Bromodichloromethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,2-Dichloropropane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
cis-1,3-Dichloropropene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Trichloroethene	µg/Kg	4 J	130	6 U	2 J	7 U J	7 U J	5 U	6 U
Dibromochloromethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,1,2-Trichloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Benzene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
trans-1,3-Dichloropropene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Bromoform	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
4-Methyl-2-Pentanone	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
2-Hexanone	µg/Kg	10 U	13 U	11 U	11 U	15 U J	14 U J	11 U	11 U
Tetrachloroethene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Toluene	µg/Kg	3 J	6 U	2 J	3 J	9 J	9 J	1 J	2 J
Chlorobenzene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Ethylbenzene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Styrene	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U
Xylene (total)	µg/Kg	5 U	6 U	6 U	5 U	7 U J	7 U J	5 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-3	B-4	B-4	B-4	B-4	B-5	B-5	B-5	B-5
DATE	10/31/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91
ES ID	S1031-11RE(4)	S1101-12	S1101-13	S1101-14	S1101-15	S1101-15RE(4)	S1101-16	S1101-17	S1101-17
LAB ID	147834	147885	147888	147887	147888	147888	147889	147890	147890
UNITS									
COMPOUND									
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
bis(2-Chloroethyl) ether	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2-Chlorophenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
1,3-Dichlorobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
1,4-Dichlorobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Benzyl Alcohol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
1,2-Dichlorobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2-Methylphenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
bis(2-Chloroisopropyl) ether	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
4-Methylphenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
N-Nitroso-di-n-propylamine	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Hexachloroethane	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Nitrobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Isophorone	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2-Nitrophenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2,4-Dimethylphenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Benzoic acid	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
bis(2-Chloroethoxy) methane	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2,4-Dichlorophenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
1,2,4-Trichlorobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Naphthalene	µg/Kg	NS	2400	720 U	710 U	210 J	NS	730 U	760 U
4-Chloroaniline	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Hexachlorobutadiene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
4-Chloro-3-methylphenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2-Methylnaphthalene	µg/Kg	NS	810 J	720 U	710 U	120 J	NS	730 U	760 U
Hexachlorocyclopentadiene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2,4,6-Trichlorophenol	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2,4,5-Trichlorophenol	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
2-Chloronaphthalene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
2-Nitroaniline	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
Dimethylphthalate	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Acenaphthylene	µg/Kg	NS	1300 U	720 U	710 U	310 J	NS	730 U	760 U
2,6-Dinitrotoluene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
3-Nitroaniline	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
Acenaphthene	µg/Kg	NS	2200	720 U	710 U	190 J	NS	730 U	760 U
2,4-Dinitrophenol	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
4-Nitrophenol	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
Dibenzofuran	µg/Kg	NS	1400	720 U	710 U	160 J	NS	730 U	760 U
2,4-Dinitrotoluene	µg/Kg	NS	2000	720 U	710 U	320 J	NS	730 U	760 U
Diethylphthalate	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
4-Chlorophenyl-phenylether	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Fluorene	µg/Kg	NS	2000	720 U	710 U	310 J	NS	730 U	760 U
4-Nitroaniline	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
4,6-Dinitro-2-methylphenol	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
N-Nitrosodiphenylamine (1)	µg/Kg	NS	450 J	720 U	710 U	840 U	NS	730 U	760 U
4-Bromophenyl-phenylether	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Hexachlorobenzene	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Pentachlorophenol	µg/Kg	NS	6300 U	3500 U	3400 U	4100 U	NS	3500 U	3700 U
Phenanthrene	µg/Kg	NS	13000	130 J	120 J	3900	NS	730 U	760 U
Anthracene	µg/Kg	NS	4200	720 U	710 U	790 J	NS	730 U	760 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Fluoranthene	µg/Kg	NS	14000	160 J	150 J	6200	NS	73 J	89 J
Pyrene	µg/Kg	NS	12000	140 J	120 J	5100	NS	69 J	73 J
Butylbenzylphthalate	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
3,3'-Dichlorobenzidine	µg/Kg	NS	2800 U	1400 U	1400 U	1700 U	NS	1500 U	1500 U
Benzo(a)anthracene	µg/Kg	NS	8800	110 J	88 J	3000	NS	730 U	75 J
Chrysene	µg/Kg	NS	8000	110 J	90 J	3100	NS	730 U	76 J
bis(2-Ethylhexyl)phthalate	µg/Kg	NS	180 J	720 U	710 U	840 U	NS	3600	760 U
Di-n-octylphthalate	µg/Kg	NS	1300 U	720 U	710 U	840 U	NS	730 U	760 U
Benzo(b)fluoranthene	µg/Kg	NS	8800	91 J	710 U	2600	NS	730 U	74 J
Benzo(k)fluoranthene	µg/Kg	NS	6700	85 J	710 U	2300	NS	730 U	70 J
Benzo(a)pyrene	µg/Kg	NS	9000	110 J	78 J	2100	NS	730 U	81 J
Indeno(1,2,3-cd)pyrene	µg/Kg	NS	4800	720 U	710 U	1300	NS	730 U	760 U
Dibenz(a,h)anthracene	µg/Kg	NS	2000	720 U	710 U	840 J	NS	730 U	760 U
Benzo(g,h,i)perylene	µg/Kg	NS	5000	720 U	710 U	1400	NS	730 U	760 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-3	SOIL B-4	SOIL B-4	SOIL B-4	SOIL B-5	SOIL B-5	SOIL B-5	SOIL B-5	SOIL B-5
DEPTH	6-8	0-2	2-4	4-6	0-2	0-2	0-2	2-4	4-6
DATE	10/31/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91	11/01/91
ES ID	S1031-11RE (4)	S1101-12	S1101-13	S1101-14	S1101-15	S1101-15RE (4)	S1101-16	S1101-17	S1101-18
LAB ID	147834	147885	147886	147887	147888	147888	147888	147889	147890
COMPOUND	UNITS								
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
beta-BHC	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
delta-BHC	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
gamma-BHC (Lindane)	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
Heptachlor	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
Aldrin	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
Heptachlor epoxide	µg/Kg	NS	19 U	17 U	17 U	20 U	NS	18 U	18 U
Endosulfan I	µg/Kg	NS	18 U	17 U	17 U	20 U	NS	18 U	18 U
Dieldrin	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
4,4'-DDE	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
Endrin	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
Endosulfan II	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
4,4'-DDD	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
Endosulfan sulfate	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
4,4'-DDT	µg/Kg	NS	38 U	35 U	34 U	41 U	NS	35 U	37 U
Methoxychlor	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Endrin ketone	µg/Kg	NS	35 U	35 U	34 U	41 U	NS	35 U	37 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
gamma-Chlordane	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Toxaphene	µg/Kg	NS	380 U	350 U	340 U	410 U	NS	350 U	370 U
Aroclor-1016	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Aroclor-1221	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Aroclor-1232	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Aroclor-1242	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Aroclor-1248	µg/Kg	NS	190 U	170 U	170 U	200 U	NS	180 U	180 U
Aroclor-1254	µg/Kg	NS	380 U	350 U	340 U	410 U	NS	350 U	370 U
Aroclor-1260	µg/Kg	NS	380 U	350 U	340 U	410 U	NS	350 U	370 U
<b>HERBICIDES</b>									
2,4-D	µg/Kg	NS	59 U J	55 U J	54 U J	64 U J	NS	55 U J	58 U J
2,4-DB	µg/Kg	NS	59 U J	140 J	230 J	64 U J	NS	55 U J	180 J
2,4,5-T	µg/Kg	NS	5.9 U J	5.5 U J	5.4 U J	6.4 U J	NS	5.5 U J	5.8 U J
2,4,5-TP (Silvex)	µg/Kg	NS	5.9 U J	5.5 U J	5.4 U J	6.4 U J	NS	5.5 U J	5.8 U J
Dalapon	µg/Kg	NS	140 U J	130 U J	130 U J	150 U J	NS	130 U J	140 U J
Dicamba	µg/Kg	NS	5.9 U J	5.5 U J	5.4 U J	6.4 U J	NS	5.5 U J	5.8 U J
Dichloroprop	µg/Kg	NS	59 U J	55 U J	54 U J	64 U J	NS	55 U J	58 U J
Dinoseb	µg/Kg	NS	30 U J	27 U J	27 U J	32 U J	NS	27 U J	29 U J
MCPA	µg/Kg	NS	5900 U J	5500 U J	5400 U J	6400 U J	NS	5500 U J	5800 U J
MCPP	µg/Kg	NS	5900 U J	5500 U J	5400 U J	6400 U J	NS	5500 U J	5800 U J
<b>METALS</b>									
Aluminum	mg/kg	NS	16400	11500	16100	8610	NS	14000	14900
Antimony	mg/kg	NS	18.3 J	8.3 J	10.4 U J	12 U J	NS	8.5 U J	8.7 U J
Arsenic	mg/kg	NS	11.4	5.6	8.5	17.3	NS	5.1	5.3
Barium	mg/kg	NS	455	62.9	58.5	399	NS	61.3	78.7
Beryllium	mg/kg	NS	0.75 U	0.59 J	0.87 J	0.79 U	NS	0.7 J	0.82
Cadmium	mg/kg	NS	7.9	1.7	2.4	10.4	NS	2	2.4
Calcium	mg/kg	NS	27500	134000	42200	104000	NS	89100	29700
Chromium	mg/kg	NS	62	16.6	24.2	57	NS	20.2	21.6
Cobalt	mg/kg	NS	15.7	8.2	14.5	10.9 J	NS	12.5	17.3
Copper	mg/kg	NS	311	19.6 J	21.5 J	498	NS	26.5 J	27.7 J
Iron	mg/kg	NS	83800	23200	37200	81400	NS	30900	84200
Lead	mg/kg	NS	2890	10.1	10.5	1750	NS	248	16.2 J
Magnesium	mg/kg	NS	6990	13100	8050	4090	NS	8450	5460
Manganese	mg/kg	NS	806	485	549	964	NS	796	1000
Mercury	mg/kg	NS	1.1	0.04 U	0.04 J	1	NS	0.07 J	0.08 J
Nickel	mg/kg	NS	67.2	26.1	39	74.8	NS	32	39.8
Potassium	mg/kg	NS	2350	1720	1740	1780	NS	1750	1780
Selenium	mg/kg	NS	0.19 U	0.7 U	0.2 U	0.25 U	NS	0.17 U	0.91 U
Silver	mg/kg	NS	2.8	1.1 U	1.6 U	1.8 U	NS	1.3 U	1.3 U
Sodium	mg/kg	NS	285 J	83 J	79.6 U J	198 J	NS	85.4 U J	86.2 U J
Thallium	mg/kg	NS	0.54 U	0.39 U	0.57 U	0.7 U	NS	0.47 U	0.51 U
Vanadium	mg/kg	NS	24.9	15.3	18.1	14.5	NS	20.2	20.1
Zinc	mg/kg	NS	3050	74.4	92.7	27600	NS	513	841
Cyanide	mg/kg	NS	0.69 U	0.83 U	0.6 U	0.61 U	NS	0.64 U	0.68 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH DATE ES ID LAB ID UNITS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		B-5 8-10 11/01/91 S1101-18 147891	B-5 8-10 11/01/91 S1101-18RE (4) 147891	B-6 0-2 11/04/91 S1104-19 148021	B-6 2-4 11/04/91 S1104-20 148022	B-7 8-7 0-2 11/04/91 S1104-21 148023	B-7 8-7 2-4 11/04/91 S1104-22 148024	B-7 8-7 10-12 11/04/91 S1104-23 148025	B-8 0-2 11/05/91 S1105-24 148026	
<b>VOCs</b>										
Chloromethane	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	11 U	13 U	12 U
Bromomethane	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	11 U	13 U	12 U
Vinyl Chloride	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	11 U	13 U	12 U
Chloroethene	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	11 U	13 U	12 U
Methylene Chloride	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Acetone	µg/Kg	24 U J	29 U J	12 U	11 U	13 U	11 U	11 U	29 U	13 U
Carbon Disulfide	µg/Kg	3 U J	3 J	6 U	6 U	6 U	5 U	5 U	7 U	6 U
1,1-Dichloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
1,1-Dichloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
1,2-Dichloroethane (total)	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	5 U	5 U	7 U	6 U
Chloroform	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	12	8	8	6 U
1,2-Dichloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	5 U	5 U	7 U	2 J
2-Butanone	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	5 U	7 U	6 U
1,1,1-Trichloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	11 U	11 U	13 U	12 U
Carbon Tetrachloride	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Vinyl Acetate	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	5 U	7 U	6 U
Bromodichloromethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	12 U
1,2-Dichloropropane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
cis-1,3-Dichloropropene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Trichloroethene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 J	4 J	6 U
Dibromochloromethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
1,1,2-Trichloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Benzene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
trans-1,3-Dichloropropene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Bromoform	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
4-Methyl-2-Pentanone	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	13 U	7 U	12 U
2-Hexanone	µg/Kg	10 U J	10 U J	12 U	11 U	11 U	11 U	13 U	7 U	12 U
Tetrachloroethene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Toluene	µg/Kg	6 J	6 J	6 U	6 U	6 U	6 U	5 J	7 U	6 U
Chlorobenzene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	2 J
Ethylbenzene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	6 U	5 U	7 U	6 U
Styrene	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	2 J	7 U	7 U	6 U
Xylene (total)	µg/Kg	5 U J	5 U J	6 U	6 U	6 U	5 U	7 U	7 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-5	B-5	B-6	B-6	B-7	B-7	B-7	B-7	B-8
DATE	8-10	8-10	0-2	0-2	0-2	0-2	0-2	0-2	0-2
ES ID	11/01/91	11/01/91	11/04/91	11/04/91	11/04/91	11/04/91	11/04/91	11/04/91	11/05/91
LAB ID	S1101-18	S1101-18RE(4)	S1104-19	S1104-20	S1104-21	S1104-22	S1104-23	S1104-22	S1105-24
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOCs									
SEMIVOLATILES									
Phenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
bis(2-Chloroethyl) ether	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2-Chlorophenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
1,3-Dichlorobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
1,4-Dichlorobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Benzyl Alcohol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
1,2-Dichlorobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2-Methylphenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
bis(2-Chloroisopropyl) ether	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
4-Methylphenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
N-Nitroso-d-n-propylamine	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Hexachloroethane	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Nitrobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Isophorone	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2-Nitrophenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2,4-Dimethylphenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Benzoic acid	µg/Kg	NS	NS	3800 U	3800 U	9000 U	500 J	4200 U	3700 U
bis(2-Chloroethoxy) methane	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2,4-Dichlorophenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
1,2,4-Trichlorobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Naphthalene	µg/Kg	NS	NS	780 U	740 U	830 J	440 J	870 U	760 U
4-Chloroaniline	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Hexachlorobutadiene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
4-Chloro-3-methylphenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2-Methylnaphthalene	µg/Kg	NS	NS	780 U	740 U	430 J	360 J	870 U	760 U
Hexachlorocyclopentadiene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2,4,6-Trichlorophenol	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2,4,5-Trichlorophenol	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
2-Chloronaphthalene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2-Nitroaniline	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
Dimethylphthalate	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Acenaphthylene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
2,6-Dinitrotoluene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
3-Nitroaniline	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
Acenaphthene	µg/Kg	NS	NS	780 U	740 U	2200	1000	870 U	760 U
2,4-Dinitrophenol	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
4-Nitrophenol	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
Dibenzofuran	µg/Kg	NS	NS	780 U	740 U	960 J	400 J	870 U	760 U
2,4-Dinitrotoluene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Diethylphthalate	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
4-Chlorophenyl-phenyl ether	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Fluorene	µg/Kg	NS	NS	780 U	740 U	2000	880	870 U	760 U
4-Nitroaniline	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
4,6-Dinitro-2-methylphenol	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
N-Nitrosodiphenylamine (1)	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
4-Bromophenyl-phenyl ether	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Hexachlorobenzene	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Pentachlorophenol	µg/Kg	NS	NS	3800 U	3800 U	9000 U	3500 U	4200 U	3700 U
Phenanthrene	µg/Kg	NS	NS	780 U	740 U	15000	5200	870 U	760 U
Anthracene	µg/Kg	NS	NS	780 U	740 U	3500	1300	870 U	760 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	NS	NS	780 U	740 U	1900 U	630 J	870 U	760 U
Fluoranthene	µg/Kg	NS	NS	780 U	740 U	22000	6700	870 U	760 U
Pyrene	µg/Kg	NS	NS	780 U	740 U	16000	4800	870 U	760 U
Butylbenzylphthalate	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
3,3'-Dichlorobenzidine	µg/Kg	NS	NS	1600 U	1500 U	3700 U	1400 U	1700 U	1500 U
Benzo(a)anthracene	µg/Kg	NS	NS	780 U	740 U	9600	3000	870 U	760 U
Chrysene	µg/Kg	NS	NS	780 U	740 U	9900	3200	870 U	760 U
bis(2-Ethylhexyl)phthalate	µg/Kg	NS	NS	760 U	740 U	1900 U	720 U	870 U	760 U
Di-n-octylphthalate	µg/Kg	NS	NS	780 U	740 U	1900 U	720 U	870 U	760 U
Benzo(b)fluoranthene	µg/Kg	NS	NS	780 U	740 U	9500	2900	870 U	760 U
Benzo(k)fluoranthene	µg/Kg	NS	NS	780 U	740 U	6100	1700	870 U	760 U
Benzo(a)pyrene	µg/Kg	NS	NS	780 U	740 U	8400	2500	870 U	760 U
Indeno(1,2,3-cd)pyrene	µg/Kg	NS	NS	780 U	740 U	4800	1200	870 U	760 U
Dibenz(a,h)anthracene	µg/Kg	NS	NS	780 U	740 U	1800 J	620 J	870 U	760 U
Benzo(g,h,i)perylene	µg/Kg	NS	NS	780 U	740 U	4000	1200	870 U	760 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-5	SOIL B-5	SOIL B-6	SOIL B-6	SOIL B-7	SOIL B-7	SOIL B-7	SOIL B-8	
DEPTH	8-10	8-10	0-2	2-4	0-2	2-4	2-4	0-2	
DATE	11/01/91	11/01/91	11/04/91	11/04/91	11/04/91	11/04/91	11/04/91	11/05/91	
ES ID	S1101-18	S1101-18RE(4)	S1104-19	S1104-20	S1104-21	S1104-22	S1104-23	S1105-24	
LAB ID	147891	147891	148021	148022	148023	148024	148025	148026	
UNITS									
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
beta-BHC	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
delta-BHC	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
gamma-BHC (Lindane)	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
Heptachlor	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
Aldrin	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
Heptachlor epoxide	µg/Kg	NS	NS	19 U	18 U	18 U	17 U	21 U	18 U
Endosulfan I	µg/Kg	NS	NS	19 U	16 U	18 U	17 U	21 U	18 U
Dieldrin	µg/Kg	NS	NS	36 U	36 U	36 U	35 U	42 U	37 U
4,4'-DDE	µg/Kg	NS	NS	38 U	36 U	27 J	18 J	42 U	37 U
Endrin	µg/Kg	NS	NS	38 U	38 U	36 U	35 U	42 U	37 U
Endosulfan II	µg/Kg	NS	NS	38 U	38 U	36 U	35 U	42 U	37 U
4,4'-DDD	µg/Kg	NS	NS	38 U	38 U	27 J	29 J	42 U	37 U
Endosulfan sulfate	µg/Kg	NS	NS	38 U	36 U	36 U	35 U	42 U	37 U
4,4'-DDT	µg/Kg	NS	NS	38 U	38 U	36 U	19 J	42 U	37 U
Methoxychlor	µg/Kg	NS	NS	190 U	180 U	180 U	170 U	210 U	180 U
Endrin ketone	µg/Kg	NS	NS	36 U	36 U	36 U	35 U	42 U	37 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	NS	NS	190 U	180 U	180 U	170 U	210 U	180 U
gamma-Chlordane	µg/Kg	NS	NS	190 U	160 U	180 U	170 U	210 U	180 U
Toxaphene	µg/Kg	NS	NS	380 U	360 U	360 U	350 U	420 U	370 U
Aroclor-1016	µg/Kg	NS	NS	190 U	180 U	180 U	170 U	210 U	180 U
Aroclor-1221	µg/Kg	NS	NS	190 U	160 U	180 U	170 U	210 U	180 U
Aroclor-1232	µg/Kg	NS	NS	190 U	180 U	180 U	170 U	210 U	180 U
Aroclor-1242	µg/Kg	NS	NS	190 U	180 U	180 U	170 U	210 U	180 U
Aroclor-1248	µg/Kg	NS	NS	190 U	160 U	180 U	170 U	210 U	180 U
Aroclor-1254	µg/Kg	NS	NS	360 U	360 U	360 U	350 U	420 U	370 U
Aroclor-1260	µg/Kg	NS	NS	380 U	360 U	360 U	350 U	420 U	370 U
<b>HERBICIDES</b>									
2,4-D	µg/Kg	NS	NS	59 U J	56 U J	56 U J	54 U J	66 U J	58 U J
2,4-DB	µg/Kg	NS	NS	91 U	56 U J	56 U J	54 U J	66 U J	58 U J
2,4,5-T	µg/Kg	NS	NS	5.9 U J	5.6 U J	6 U J	5 U J	7 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	NS	NS	5.9 U J	5.8 U J	6 U J	5 U J	7 U J	6 U J
Dalapon	µg/Kg	NS	NS	140 U J	130 U J	130 U J	130 U J	160 U J	140 U J
Dicamba	µg/Kg	NS	NS	5.9 U J	5.8 U J	6 U J	5 U J	7 U J	6 U J
Dichloroprop	µg/Kg	NS	NS	5.9 U J	5.6 U J	5.6 U J	5.4 U J	6.6 U J	5.8 U J
Dinoseb	µg/Kg	NS	NS	29 U J	28 U J	28 U J	27 U J	33 U J	29 U J
MCPA	µg/Kg	NS	NS	5900 U J	5600 U J	5600 U J	5400 U J	6600 U J	5800 U J
MCPP	µg/Kg	NS	NS	5900 U J	5600 U J	5600 U J	5400 U J	6600 U J	5800 U J
<b>METALS</b>									
Aluminum	mg/kg	NS	NS	20800	22500	15200		21600	19200
Antimony	mg/kg	NS	NS	7.7 U J	11.2 J	11.8 U J		10.8 U J	10.3 U J
Arsenic	mg/kg	NS	NS	6.7	6.1	7.1 J		6.1 J	5.1 J
Barium	mg/kg	NS	NS	123	108	181 J		119 J	136 J
Beryllium	mg/kg	NS	NS	1.2	1.4	1.2		1.4	1.4
Cadmium	mg/kg	NS	NS	2.5	2.7	3.2		3.1	2.6
Calcium	mg/kg	NS	NS	2710	9730	47000		4760	5390
Chromium	mg/kg	NS	NS	27.9	31.5	33.7 J		29.3 J	27.4 J
Cobalt	mg/kg	NS	NS	14.5	18.7	12.9		17.3	13.8
Copper	mg/kg	NS	NS	33.7 J	33.5 J	46.4		23.9	22.3
Iron	mg/kg	NS	NS	31000	37900	34100		38500	37200
Lead	mg/kg	NS	NS	12	10.8	85.9		14.3	14.5
Magnesium	mg/kg	NS	NS	5380	8910	9900		5620	5850
Manganese	mg/kg	NS	NS	917	739	688		1240	1130
Mercury	mg/kg	NS	NS	0.05 J	0.06 J	0.29		0.09 J	0.09
Nickel	mg/kg	NS	NS	37.4	50.4	43		33.9	42.3
Potassium	mg/kg	NS	NS	2060	3030	2300		2270	1910
Selenium	mg/kg	NS	NS	0.16 J	0.13 U	0.18 U J		0.22 U J	0.17 U J
Silver	mg/kg	NS	NS	1.2 U	1.7 U	2.2		2.2	1.6 U
Sodium	mg/kg	NS	NS	58.9 U J	85.5 U J	127 J		83.6 J	79.2 U
Thallium	mg/kg	NS	NS	0.43 U	0.37 U	0.5 U		0.61 U	0.47 U
Vanadium	mg/kg	NS	NS	32.7	31.3	36.8		29.2	32.2
Zinc	mg/kg	NS	NS	89.6	108	252 J		94.9 J	85.1 J
Cyanide	mg/kg	NS	NS	0.68 U	0.68 U	0.67 U		0.77 U	0.6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-8	B-8	B-8	B-9	B-9	B-9	B-9	B-10
	DEPTH	2-4	2-4	6-8	0-2	2-4	6-8	6-8	0-2
	DATE	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/06/91
	ES ID	S1105-25	S1105-26 (1)	S1105-27	S1105-28	S1105-29	S1105-30	S1105-30RE (4)	S1106-31
	LAB ID	148027	148028	148029	148030	148031	148032	148032RI	148457
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Bromomethane	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Vinyl Chloride	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Chloroethane	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Methylene Chloride	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Acetone	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Carbon Disulfide	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,1-Dichloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,1-Dichloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,2-Dichloroethane (total)	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Chloroform	µg/Kg	5 U	4 J	5 U	6 U	4 J	1 J	NS	NS
1,2-Dichloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
2-Butanone	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
1,1,1-Trichloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Carbon Tetrachloride	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Vinyl Acetate	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Bromodichloromethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,2-Dichloropropane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
cis-1,3-Dichloropropene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Trichloroethene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Dibromochloromethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,1,2-Trichloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Benzene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
trans-1,3-Dichloropropene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Bromoform	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
4-Methyl-2-Pentanone	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
2-Hexanone	µg/Kg	11 U	11 U	11 U	11 U	11 U	11 U	NS	NS
Tetrachloroethene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
1,1,2,2-Tetrachloroethane	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Toluene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Chlorobenzene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Ethylbenzene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Styrene	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS
Xylene (total)	µg/Kg	5 U	6 U	5 U	6 U	6 U	5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-8	SOIL B-8	SOIL B-8	SOIL B-9	SOIL B-9	SOIL B-9	SOIL B-9	SOIL B-10	
DEPTH	2-4	2-4	6-8	0-2	2-4	6-8	6-8	0-2	
DATE	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/06/91	
ES ID	S1105-25	S1105-26 (1)	S1105-27	S1105-28	S1105-29	S1105-30	S1105-30RE (4)	S1106-31	
LAB ID	148027	148028	148029	148030	148031	148032	148032RI	148457	
COMPOUND UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
bis(2-Chloroethyl) ether	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2-Chlorophenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
1,3-Dichlorobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
1,4-Dichlorobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Benzyl Alcohol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
1,2-Dichlorobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2-Methylphenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
bis(2-Chloroisopropyl) ether	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
4-Methylphenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
N-Nitroso-d-n-propylamine	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Hexachloroethane	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Nitrobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Isophorone	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2-Nitrophenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2,4-Dimethylphenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Benzolc acid	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
bis(2-Chloroethoxy) methane	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2,4-Dichlorophenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
1,2,4-Trichlorobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Naphthalene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	310 J
4-Chloroaniline	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Hexachlorobutadiene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
4-Chloro-3-methylphenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2-Methylnaphthalene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	140 J
Hexachlorocyclopentadiene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2,4,6-Trichlorophenol	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2,4,5-Trichlorophenol	µg/Kg	3800 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
2-Chloronaphthalene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2-Nitroaniline	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
Dimethylphthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Acenaphthylene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
2,6-Dinitrotoluene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
3-Nitroaniline	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
Acenaphthene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	640 J
2,4-Dinitrophenol	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
4-Nitrophenol	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
Dibenzofuran	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	310 J
2,4-Dinitrotoluene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	640 U
Diethylphthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
4-Chlorophenyl-phenylether	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Fluorene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	570 J
4-Nitroaniline	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
4,6-Dinitro-2-methylphenol	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
N-Nitrosodiphenylamine (1)	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
4-Bromophenyl-phenylether	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Hexachlorobenzene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Pentachlorophenol	µg/Kg	3600 U	3500 U	3400 U	3800 U	3500 U J	3400 U	NS	3600 U
Phenanthrene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	4400
Anthracene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	1200
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Fluoranthene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	5400
Pyrene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	5000
Butylbenzylphthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
3,3'-Dichlorobenzidine	µg/Kg	1500 U	1400 U	1400 U	1600 U	1500 U J	1400 U	NS	1500 U
Benzo(a)anthracene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	2700
Chrysene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	2200
bis(2-Ethylhexyl)phthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	600 J
Di-n-octylphthalate	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	740 U
Benzo(b)fluoranthene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	2500
Benzo(k)fluoranthene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	1400
Benzo(a)pyrene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	2200
Indeno(1,2,3-cd)pyrene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	1200
Dibenz(a,h)anthracene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	830 J
Benzo(g,h,i)perylene	µg/Kg	750 U	720 U	700 U	780 U	730 U J	710 U	NS	1200



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-8	SOIL B-8	SOIL B-8	SOIL B-9	SOIL B-9	SOIL B-9	SOIL B-9	SOIL B-9	SOIL B-10
DEPTH	2-4	2-4	6-8	0-2	2-4	6-8	6-8	6-8	0-2
DATE	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/05/91	11/06/91
ES ID	S1105-25	S1105-26(1)	S1105-27	S1105-28	S1105-29	S1105-30	S1105-30RE(4)	S1105-30RE(4)	S1106-31
LAB ID	148027	148028	148029	148030	148031	148032	148032R1	148032R1	148457
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
beta-BHC	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
delta-BHC	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
gamma-BHC (Lindane)	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
Heptachlor	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
Aldrin	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
Heptachlor epoxide	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
Endosulfan I	µg/Kg	18 U	18 U	17 U	19 U	17 U J	17 U J	NS	18 U
Dieldrin	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
4,4'-DDE	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
Endrin	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
Endosulfan II	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
4,4'-DDD	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
Endosulfan sulfate	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
4,4'-DDT	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
Methoxychlor	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Endrin ketone	µg/Kg	36 U	35 U	34 U	38 U	35 U J	34 U J	NS	36 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
gamma-Chlordane	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Toxaphene	µg/Kg	360 U	350 U	340 U	380 U	350 U J	340 U J	NS	360 U
Aroclor-1016	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Aroclor-1221	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Aroclor-1232	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Aroclor-1242	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Aroclor-1248	µg/Kg	180 U	180 U	170 U	190 U	170 U J	170 U J	NS	180 U
Aroclor-1254	µg/Kg	360 U	350 U	340 U	380 U	350 U J	340 U J	NS	360 U
Aroclor-1260	µg/Kg	360 U	350 U	340 U	380 U	350 U J	340 U J	NS	360 U
<b>HERBICIDES</b>									
2,4-D	µg/Kg	56 U J	56 U J	53 U J	60 U J	56 U J	NS	54 U J	57 U J
2,4-DB	µg/Kg	56 U J	56 U J	53 U J	60 U J	56 U J	NS	54 U J	57 U J
2,4,5-T	µg/Kg	6 U J	6 U J	5 U J	6 U J	6 U J	NS	5 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	6 U J	6 U J	5 U J	6 U J	6 U J	NS	5 U J	10 J
Delapone	µg/Kg	130 U J	130 U J	130 U J	140 U J	130 U J	NS	130 U J	140 U J
Dicamba	µg/Kg	6 U J	6 U J	5 U J	6 U J	6 U J	NS	5 U J	6 U J
Dichloroprop	µg/Kg	56 U J	56 U J	53 U J	60 U J	56 U J	NS	54 U J	57 U J
Dinoseb	µg/Kg	28 U J	28 U J	27 U J	30 U J	28 U J	NS	27 U J	29 U J
MCPA	µg/Kg	5600 U J	5600 U J	5300 U J	6000 U J	5600 U J	NS	5400 U J	5700 U J
MCPP	µg/Kg	5600 U J	5600 U J	5300 U J	6000 U J	5600 U J	NS	5400 U J	13000 J
<b>METALS</b>									
Aluminum	mg/kg	20500	17700	12700	14800	8880	7160	NS	18600
Antimony	mg/kg	8.8 U J	8.2 U J	8.4 U J	9.9 U J	9.9 U J	7 U J	NS	8 U J
Arsenic	mg/kg	6.1 J	6 J	4.2 J	4.3 J	3.8 J	4.4 J	NS	9.8 J
Barium	mg/kg	98.9 J	86.7 J	56.2 J	101 J	110 J	39.9 J	NS	170 J
Beryllium	mg/kg	1.2	1	0.78 J	1.1	0.76	0.52 J	NS	0.87 J
Cadmium	mg/kg	2.9	2.4	1.9	2.3	1.7	1.5	NS	5.6
Calcium	mg/kg	4870	3560	85900	45600	104000	101000	NS	48500
Chromium	mg/kg	30.1 J	26.9 J	19.8 J	22.5 J	13.8 J	11.2 J	NS	38.5 J
Cobalt	mg/kg	18.4	14	14.2	13.7	10.7	8.1	NS	14.7
Copper	mg/kg	27.6	26	16.2	22.6	21.6	19.3	NS	105
Iron	mg/kg	38100	32500	27400	31000	19600	17300	NS	71100
Lead	mg/kg	11.4	13.6	10.1	10.8	10.1	7.8	NS	191
Magnesium	mg/kg	7300	6490	6720	8880	17000	12600	NS	13300
Manganese	mg/kg	956	832	926	903	532	514	NS	670
Mercury	mg/kg	0.06 J	0.06 J	0.05 J	0.08 J	0.04 J	0.05 J	NS	0.24
Nickel	mg/kg	48.7	44.4	30.4	38.4	23.8	19	NS	43.3
Potassium	mg/kg	2110	1780	1430	1320	1080	1050	NS	1730
Selenium	mg/kg	0.21 U J	0.2 U J	0.61 U J	0.21 U J	0.65 U J	0.21 U J	NS	0.17 U J
Silver	mg/kg	1.3 U	1.2 U	1.3 U	1.5 U	1.5 U	1.1 U	NS	1.8
Sodium	mg/kg	67.5 U	62.6 U	75.3 J	84.2 J	112 J	116 J	NS	708 R
Thallium	mg/kg	0.58 U	0.57 U	0.34 U	0.59 U	0.36 U	0.6 U	NS	4.7 U
Vanadium	mg/kg	25.4	26.4	15.7	19.7	19.5	12.9	NS	22.1
Zinc	mg/kg	94.2 J	85 J	75 J	126 J	84.3 J	74.8 J	NS	1940 U
Cyanide	mg/kg	0.63 U	0.67 U	0.58 U	0.7 U	0.63 U	0.62 U	NS	0.66

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-10	B-10	B-10	B-10	B-11	B-11	B-11	B-12
	DEPTH	2-4	2-4	6-8	6-8	0-2	2-4	6-8	0-2
	DATE	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/07/91
	ES ID	S1106-32	S1106-33 (1)	S1106-34	S1106-34DL(5)	S1106-36	S1106-37	S1106-38	S1107-39
	LAB ID	148458	148459	148460	148460	148462	148463	148464	148704
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	11 U	12 U
Bromomethane	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	11 U	12 U
Vinyl Chloride	µg/Kg	12 U	11 U	92	71 R	11 U	10 U	11 U	12 U
Chloroethane	µg/Kg	12 U	11 U	3 J	52 U R	11 U	10 U	11 U	12 U
Methylene Chloride	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Acetone	µg/Kg	43	11 U	11 U	52 U R	11 U	10 U	36 U	12 U
Carbon Disulfide	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	6 U	1 J	26 U R	6 U	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,2-Dichloroethane (total)	µg/Kg	6 U	6 U	1400 R	1300	6 U	5 U	6 U	6 U
Chloroform	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,2-Dichloroethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
2-Butanone	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	6 J	12 U
1,1,1-Trichloroethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Carbon Tetrachloride	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Vinyl Acetate	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	11 U	12 U
Bromodichloromethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,2-Dichloropropane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
cis-1,3-Dichloropropene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Trichloroethene	µg/Kg	4 J	6 U	220	230 R	6 U	5 U	6 U	6 U
Dibromochloromethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,1,2-Trichloroethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Benzene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
trans-1,3-Dichloropropene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Bromoform	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
4-Methyl-2-Pentanone	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	11 U	12 U
2-Hexanone	µg/Kg	12 U	11 U	11 U	52 U R	11 U	10 U	11 U	12 U
Tetrachloroethene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Toluene	µg/Kg	2 J	2 J	6 U	26 U R	6 U	5 U	6 U	6 U
Chlorobenzene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Ethylbenzene	µg/Kg	6 U	3 J	6 U	26 U R	6 U	5 U	6 U	6 U
Styrene	µg/Kg	6 U	6 U	6 U	26 U R	6 U	5 U	6 U	6 U
Xylene (total)	µg/Kg	5 J	20 J	6 U	26 U R	6 U	5 U	6 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-10	SOIL B-10	SOIL B-10	SOIL B-10	SOIL B-11	SOIL B-11	SOIL B-11	SOIL B-12
DEPTH	2-4	2-4	6-8	6-8	0-2	2-4	6-8	0-2
DATE	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/06/91	11/07/91
ES ID	S1106-32	S1106-33 (1)	S1106-34	S1106-34DL(5)	S1106-36	S1106-37	S1106-38	S1107-39
LAB ID	148458	148459	148460	148460	148462	148463	148464	148704
UNITS								
<b>VOCs</b>								
<b>SEMIVOLATILES</b>								
Phenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
bis(2-Chloroethyl) ether	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2-Chlorophenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
1,3-Dichlorobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
1,4-Dichlorobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Benzyl Alcohol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
1,2-Dichlorobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2-Methylphenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
bis(2-Chloroisopropyl) ether	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Methylphenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
N-Nitroso-d-n-propylamine	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Hexachloroethane	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Nitrobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Isophorone	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2-Nitrophenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4-Dimethylphenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Benzole acid	3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
bis(2-Chloroethoxy) methane	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4-Dichlorophenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
1,2,4-Trichlorobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Naphthalene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Chloroaniline	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Hexachlorobutadiene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Chloro-3-methylphenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2-Methylnaphthalene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Hexachlorocyclopentadiene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4,6-Trichlorophenol	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4,5-Trichlorophenol	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
2-Chloronaphthalene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2-Nitroaniline	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
Dimethylphthalate	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Acenaphthylene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,6-Dinitrotoluene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
3-Nitroaniline	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
Acenaphthene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4-Dinitrophenol	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
4-Nitrophenol	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
Dibenzofuran	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
2,4-Dinitrotoluene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Diethylphthalate	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Chlorophenyl-phenyl ether	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Fluorene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Nitroaniline	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
4,6-Dinitro-2-methylphenol	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
N-Nitrosodiphenylamine (1)	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
4-Bromophenyl-phenyl ether	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Hexachlorobenzene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Pentachlorophenol	µg/Kg 3600 U	3700 U	3600 U	NS	3800 U	3400 U	3500 U	3700 U
Phenanthrene	µg/Kg 180 J	180 J	750 U	NS	87 J	710 U	720 U	760 U
Anthracene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Carbazole	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg 77 J	760 U	750 U	NS	780 U	710 U	720 U	760 U
Fluoranthene	µg/Kg 280 J	300 J	750 U	NS	110 J	710 U	720 U	760 U
Pyrene	µg/Kg 250 J	240 J	750 U	NS	91 J	710 U	720 U	760 U
Butylbenzyl phthalate	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
3,3'-Dichlorobenzidine	µg/Kg 1500 U	1500 U	1500 U	NS	1600 U	1400 U	1400 U	1500 U
Benzo(a)anthracene	µg/Kg 180 J	150 J	750 U	NS	76 J	710 U	720 U	760 U
Chrysene	µg/Kg 180 J	160 J	750 U	NS	79 J	710 U	720 U	760 U
bis(2-Ethylhexyl)phthalate	µg/Kg 100 J	380 J	100 J	NS	780 U	710 U	720 U	760 U
Di-n-octylphthalate	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Benzo(b)fluoranthene	µg/Kg 180 J	140 J	750 U	NS	780 U	710 U	720 U	760 U
Benzo(k)fluoranthene	µg/Kg 110 J	140 J	750 U	NS	780 U	710 U	720 U	760 U
Benzo(a)pyrene	µg/Kg 170 J	150 J	750 U	NS	780 U	710 U	720 U	760 U
Indeno(1,2,3-cd)pyrene	µg/Kg 110 J	98 J	750 U	NS	780 U	710 U	720 U	760 U
Dibenz(a,h)anthracene	µg/Kg 730 U	760 U	750 U	NS	780 U	710 U	720 U	760 U
Benzo(g,h,i)perylene	µg/Kg 120 J	99 J	750 U	NS	780 U	710 U	720 U	760 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH DATE ES ID LAB ID	SOIL B-10 2-4 11/06/91 S1106-32 148458	SOIL B-10 2-4 11/06/91 S1106-33 (1) 148459	SOIL B-10 6-8 11/06/91 S1106-34 148460	SOIL B-10 6-8 11/06/91 S1106-34DL(5) 148460	SOIL B-11 0-2 11/06/91 S1106-38 148462	SOIL B-11 0-2 11/06/91 S1106-37 148463	SOIL B-11 6-8 11/06/91 S1106-38 148464	SOIL B-12 0-2 11/07/91 S1107-39 148704
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>								
<b>PESTICIDES/PCBs</b>								
alpha-BHC	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
beta-BHC	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
delta-BHC	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
gamma-BHC (Lindane)	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
Heptachlor	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
Aldrin	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	14 J
Heptachlor epoxide	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
Endosulfan I	µg/Kg	18 U	18 U	18 U	NS	19 U	17 U	18 U
Dieldrin	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
4,4'-DDE	µg/Kg	28 J	30 J	36 U	NS	38 U	34 U	35 U
Endrin	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
Endosulfan II	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
4,4'-DDD	µg/Kg	36	34 J	36 U	NS	38 U	34 U	35 U
Endosulfan sulfate	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
4,4'-DDT	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
Methoxychlor	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Endrin ketone	µg/Kg	36 U	37 U	36 U	NS	38 U	34 U	35 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
gamma-Chlordane	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Toxaphene	µg/Kg	360 U	370 U	360 U	NS	380 U	340 U	350 U
Aroclor-1016	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Aroclor-1221	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Aroclor-1232	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Aroclor-1242	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Aroclor-1248	µg/Kg	180 U	180 U	180 U	NS	190 U	170 U	180 U
Aroclor-1254	µg/Kg	360 U	370 U	360 U	NS	380 U	340 U	350 U
Aroclor-1260	µg/Kg	360 U	370 U	360 U	NS	380 U	340 U	350 U
<b>HERBICIDES</b>								
2,4-D	µg/Kg	56 U J	57 U J	57 U J	NS	60 U J	54 U J	55 U J
2,4-DB	µg/Kg	56 U J	57 U J	57 U J	NS	60 U J	54 U J	55 U J
2,4,5-T	µg/Kg	6 U J	6 U J	6 U J	NS	6 U J	5 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	6 U J	6 U J	6 U J	NS	6 U J	5 U J	6 U J
Dalapon	µg/Kg	140 U J	140 U J	140 U J	NS	140 U J	130 U J	140 U J
Dicamba	µg/Kg	6 U J	6 U J	6 U J	NS	6 U J	5 U J	6 U J
Dichloroprop	µg/Kg	56 U J	57 U J	57 U J	NS	60 U J	54 U J	55 U J
Dinoseb	µg/Kg	28 U J	29 U J	28 U J	NS	30 U J	27 U J	29 U J
MCPA	µg/Kg	5600 U J	5700 U J	5700 U J	NS	6000 U J	5400 U J	5500 U J
MCPP	µg/Kg	5600 U J	5700 U J	5700 U J	NS	24000 U J	5400 U J	5500 U J
<b>METALS</b>								
Aluminum	mg/kg	17300	15100	18800	NS	19000	15800	17500
Antimony	mg/kg	8.4 U J	10.3 U J	10.2 U J	NS	12.3 U J	10.9 U J	8 U J
Arsenic	mg/kg	9.7 J	6.1 J	4.9 J	NS	11.4 J	6 J	5 J
Barium	mg/kg	145 J	83 J	58.9 J	NS	190 J	82.8 J	73.6 J
Beryllium	mg/kg	0.94	0.85 J	1	NS	1.1 J	1.1	0.93
Cadmium	mg/kg	3.1	2.8	2.9	NS	4.2	2.8	2.5
Calcium	mg/kg	53600	43900	31000	NS	6440	25400	28800
Chromium	mg/kg	30.4 J	26.5 J	28.3 J	NS	39.3 J	21.8 J	29.9 J
Cobalt	mg/kg	13.8	10.7	15.8	NS	13.4	12.4	13
Copper	mg/kg	58.9	41.2	25.8	NS	109	29.2	34.4
Iron	mg/kg	32200	34900	35400	NS	129000	33000	31500
Lead	mg/kg	83.1	54.8	14.1	NS	244	13.3	41.3
Magnesium	mg/kg	16900	12000	8150	NS	5390	5170	7460
Manganese	mg/kg	732	632	953	NS	975	1050	602
Mercury	mg/kg	0.33	0.47	0.05 J	NS	0.48	0.11	0.09
Nickel	mg/kg	42.2	40.6	44.5	NS	40.6	30.4	41.2
Potassium	mg/kg	2380	2150	2180	NS	2930	19000	2270
Selenium	mg/kg	0.13 U J	0.16 U J	0.18 U J	NS	0.18 U J	0.18 U J	0.18 U J
Silver	mg/kg	5.6	4.3	1.5 U	NS	1.6 U	1.6 U	1.6 U
Sodium	mg/kg	707 R	466 R	115 R	NS	94 U	83.1 U	91.9 R
Thallium	mg/kg	0.36 U	0.46 U	0.44 U	NS	0.49 U	0.5 U	0.51 U
Vanadium	mg/kg	28.6	21.8	26	NS	29.6	20	21.7
Zinc	mg/kg	554	537	114 J	NS	1080 J	121 J	240 J
Cyanide	mg/kg	0.64 U	0.68 U	0.65 U	NS	0.71 U	0.64 U	0.62 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-12	B-12	B-13	B-13	B-13	B-14	B-14	B-14
	DEPTH	2-4	6-8	0-2	2-4	6-8	0-2	2-4	2-4
	DATE	11/07/91	11/07/91	11/07/91	11/07/91	11/07/91	11/08/91	11/08/91	11/08/91
	ES ID	S1107-40	S1107-41	S1107-42	S1107-43	S1107-44	S1108-45	S1108-46	S1108-47
	LAB ID	148705	148706	148707	148708	146709	146710	146711	146712
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Bromomethane	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Vinyl Chloride	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Chloroethane	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Methylene Chloride	µg/Kg	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Acetone	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Carbon Disulfide	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
1,1-Dichloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
1,1-Dichloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
1,2-Dichloroethane (total)	µg/Kg	2 J	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Chloroform	µg/Kg	5 U	5 U	6 U	5 U	5 U	4 J	3 J	16 J
1,2-Dichloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
2-Butanone	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
1,1,1-Trichloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Carbon Tetrachloride	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Vinyl Acetate	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Bromodichloromethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
1,2-Dichloropropane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
cis-1,3-Dichloropropene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Trichloroethane	µg/Kg	2 J	2 J	6 U	5 U	5 U	7	3 J	8 J
Dibromochloromethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
1,1,2-Trichloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Benzene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
trans-1,3-Dichloropropene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Bromoform	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
4-Methyl-2-Pentanone	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
2-Hexanone	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	11 U	11 U
Tetrachloroethane	µg/Kg	5 U	5 J	6 U	5 U	5 U	6 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Toluene	µg/Kg	5 U	5 U	6 U	5 U	5 U	1 J	2 J	5 U
Chlorobenzene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Ethylbenzene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Styrene	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U
Xylene (total)	µg/Kg	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-12	B-12	B-13	B-13	B-13	B-13	B-14	B-14	B-14
DATE	11/07/91	11/07/91	0-2	0-2	11/07/91	11/07/91	0-2	2-4	2-4
ES ID	S1107-40	S1107-41	S1107-42	S1107-43	S1107-44	S1108-45	S1108-46	S1108-47	S1108-47
LAB ID	148705	148706	148707	148708	148709	148710	148711	148712	148712
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
bis(2-Chloroethyl) ether	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2-Chlorophenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
1,3-Dichlorobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
1,4-Dichlorobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Benzyl Alcohol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
1,2-Dichlorobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2-Methylphenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
bis(2-Chloroisopropyl) ether	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Methylphenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
N-Nitroso-di-n-propylamine	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Hexachloroethane	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Nitrobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Isophorone	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2-Nitrophenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4-Dimethylphenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Benzoic acid	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
bis(2-Chloroethoxy) methane	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4-Dichlorophenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
1,2,4-Trichlorobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Naphthalene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Chloroaniline	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Hexachlorobutadiene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Chloro-3-methylphenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2-Methylnaphthalene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Hexachlorocyclopentadiene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4,6-Trichlorophenol	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4,5-Trichlorophenol	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
2-Chloronaphthalene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2-Nitroaniline	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
Dimethylphthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Acenaphthylene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,6-Dinitrotoluene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
3-Nitroaniline	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
Acenaphthene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4-Dinitrophenol	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
4-Nitrophenol	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
Dibenzofuran	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
2,4-Dinitrotoluene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Diethylphthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Chlorophenyl-phenylether	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Fluorene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Nitroaniline	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
4,6-Dinitro-2-methylphenol	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
N-Nitrosodiphenylamine (1)	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
4-Bromophenyl-phenylether	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Hexachlorobenzene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Pentachlorophenol	µg/Kg	3400 U	NS	4000 U	3400 U	3200 U	3700 U	3400 U	3500 U
Phenanthrene	µg/Kg	700 U	NS	250 J	710 U	670 U	310 J	700 U	720 U
Anthracene	µg/Kg	700 U	NS	810 U	710 U	670 U	71 J	700 U	720 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Fluoranthene	µg/Kg	700 U	NS	240 J	710 U	670 U	290 J	700 U	720 U
Pyrene	µg/Kg	700 U	NS	280 J	710 U	670 U	240 J	700 U	720 U
Butylbenzylphthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
3,3'-Dichlorobenzidine	µg/Kg	1400 U	NS	1600 U	1400 U	1300 U	1500 U	1400 U	1400 U
Benzo(a)anthracene	µg/Kg	700 U	NS	130 J	710 U	670 U	160 J	700 U	720 U
Chrysene	µg/Kg	700 U	NS	130 J	710 U	670 U	150 J	700 U	720 U
bis(2-Ethylhexyl)phthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	1300	290 J	2000 J
Di-n-octylphthalate	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Benzo(b)fluoranthene	µg/Kg	700 U	NS	140 J	710 U	670 U	110 J	700 U	720 U
Benzo(k)fluoranthene	µg/Kg	700 U	NS	95 J	710 U	670 U	140 J	700 U	720 U
Benzo(a)pyrene	µg/Kg	700 U	NS	130 J	710 U	670 U	140 J	700 U	720 U
Indeno(1,2,3-cd)pyrene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Dibenz(a,h)anthracene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U
Benzo(g,h,i)perylene	µg/Kg	700 U	NS	810 U	710 U	670 U	780 U	700 U	720 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-12	SOIL B-12	SOIL B-13	SOIL B-13	SOIL B-13	SOIL B-14	SOIL B-14	SOIL B-14
DEPTH	2-4	6-8	0-2	2-4	6-8	0-2	2-4	2-4
DATE	11/07/91	11/07/91	11/07/91	11/07/91	11/07/91	11/08/91	11/08/91	11/08/91
ES ID	S1107-40	S1107-41	S1107-42	S1107-43	S1107-44	S1108-45	S1108-46	S1108-47
LAB ID	148705	148706	148707	148708	148709	148710	148711	148712
COMPOUND	UNITS							
<b>VOCs</b>								
<b>PESTICIDES/PCBs</b>								
alpha-BHC	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
beta-BHC	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
delta-BHC	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
gamma-BHC (Lindane)	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
Heptachlor	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
Aldrin	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
Heptachlor epoxide	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
Endosulfan I	µg/Kg	17 U	NS	20 U	17 U	16 U	18 U	17 U
Dieldrin	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
4,4'-DDE	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
Endrin	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
Endosulfan II	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
4,4'-DDD	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
Endosulfan sulfate	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
4,4'-DDT	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
Methoxychlor	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Endrin ketone	µg/Kg	34 U	NS	40 U	34 U	32 U	37 U	34 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
gamma-Chlordane	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Toxaphene	µg/Kg	340 U	NS	400 U	340 U	320 U	370 U	340 U
Aroclor-1016	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Aroclor-1221	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Aroclor-1232	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Aroclor-1242	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Aroclor-1246	µg/Kg	170 U	NS	200 U	170 U	160 U	180 U	170 U
Aroclor-1254	µg/Kg	340 U	NS	400 U	340 U	320 U	370 U	340 U
Aroclor-1280	µg/Kg	340 U	NS	400 U	340 U	320 U	370 U	340 U
<b>HERBICIDES</b>								
2,4-D	µg/Kg	54 U J	NS	61 U J	55 U J	52 U J	57 U J	54 U J
2,4-DB	µg/Kg	54 U J	NS	61 U J	55 U J	52 U J	57 U J	54 U J
2,4,5-T	µg/Kg	5 U J	NS	6 U J	5 U J	5 U J	6 U J	5 U J
2,4,5-TP (Silvex)	µg/Kg	5 U J	NS	6 U J	5 U J	5 U J	6 U J	5 U J
Dalapon	µg/Kg	130 U J	NS	150 U J	130 U J	120 U J	140 U J	130 U J
Dicamba	µg/Kg	5 U J	NS	6 U J	5 U J	5 U J	6 U J	5 U J
Dichloroprop	µg/Kg	54 U J	NS	61 U J	55 U J	52 U J	57 U J	54 U J
Dinoseb	µg/Kg	27 U J	NS	31 U J	27 U J	26 U J	29 U J	27 U J
MCPA	µg/Kg	5400 U J	NS	6100 U J	5500 U J	5200 U J	5700 U J	5400 U J
MCPP	µg/Kg	5400 U J	NS	6100 U J	5500 U J	5200 U J	5700 U J	5400 U J
<b>METALS</b>								
Aluminum	mg/kg	14200	NS	19900	14400	18200	12600	12600
Antimony	mg/kg	10 U	NS	12.5 U J	10.8 U J	8.4 U J	10.6 U J	9.3 U J
Arsenic	mg/kg	4.2	NS	5.4	4.7	5.6	5	4.6
Barium	mg/kg	54.5	NS	380	78.3	101	86.1	64
Beryllium	mg/kg	0.73 J	NS	1.2	0.77 J	0.88	0.69 U J	0.69 J
Cadmium	mg/kg	3.2 J	NS	4.7 J	3.2 J	4.2 J	3.4 J	2.7
Calcium	mg/kg	53100	NS	11400	61400	26700	49200	87500
Chromium	mg/kg	21	NS	30.9	22.7	27.7	22.1	19
Cobalt	mg/kg	12.2	NS	16.8	10.8	16.3	8.2 J	10.3
Copper	mg/kg	23	NS	55	25.9	23.4	43	22.3
Iron	mg/kg	30900	NS	37000	29500	36000	27000	24600
Lead	mg/kg	6.4 J	NS	65.8	15.8	11.6 J	141	9.3
Magnesium	mg/kg	8410	NS	5740	9940	7670	10300	8500
Manganese	mg/kg	586	NS	2740	572	470	330	557
Mercury	mg/kg	0.04 J	NS	0.09 J	0.04 U	0.04 J	0.07 J	0.04 U
Nickel	mg/kg	34	NS	37.2	38.4	44	20.9	29.3
Potassium	mg/kg	1330	NS	2420	2030	1790	1730	1480
Selenium	mg/kg	1 U J	NS	0.4 U J	1.5 U J	0.31 U J	0.33 U J	1.4 U J
Silver	mg/kg	5.4 J	NS	1.9 U J	1.8 U J	1.3 U J	1.6 U J	1.4 U J
Sodium	mg/kg	264 R	NS	132 R	140 R	116 R	96.4 R	114 R
Thallium	mg/kg	0.34 U	NS	0.68 U	0.51 U	0.51 U	5.4 U	4.7 U
Vanadium	mg/kg	19	NS	31.8	21.8	21.6	22.7	18.1
Zinc	mg/kg	95.3	NS	461	164	118	357	85.7
Cyanide	mg/kg	0.64 U	NS	0.68 U	0.61 U	0.61 U	0.67 U	0.63 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		B-14	B-14	B-15	B-15	B-15	B-15	B-15	B-15
	DEPTH	4-6	4-6	0-2	0-2	2-4	2-4	2-4	2-4
	DATE	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91
	ES ID	S1108-48	S1108-48RE(4)	S1108-49	S1108-49DL(5)	S1108-50	S1108-50DL(5)	S1108-50RE(4)	S1108-51
	LAB ID	148713	148713	148714	148714	148715	148715	148715	148715
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Bromomethane	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Vinyl Chloride	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Chloroethane	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Methylene Chloride	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Acetone	µg/Kg	12 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	8400 U J
Carbon Disulfide	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,1-Dichloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,1-Dichloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,2-Dichloroethane (total)	µg/Kg	6 J	3 J	6600 R	29000	40000 J	36000 U R	NS	79000 J
Chloroform	µg/Kg	5 U J	5 U J	18 J	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,2-Dichloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
2-Butanone	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
1,1,1-Trichloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Carbon Tetrachloride	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Vinyl Acetate	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Bromodichloromethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,2-Dichloropropane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
cis-1,3-Dichloropropene	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Trichloroethane	µg/Kg	6 J	5 J	13000 R	110000	580000 R	470000 J	NS	740000 R
Dibromochloromethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,1,2-Trichloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Benzene	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
trans-1,3-Dichloropropene	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Bromoform	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
4-Methyl-2-Pentanone	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
2-Hexanone	µg/Kg	10 U J	10 U J	38 U	6300 U R	2200 U J	27000 U R	NS	29000 U J
Tetrachloroethane	µg/Kg	5 U J	5 U J	7 J	3100 U R	1100 U J	14000 U R	NS	14000 U J
1,1,2,2-Tetrachloroethane	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Toluene	µg/Kg	3 U J	2 J	4 J	570 R	3700 J	4800 R	NS	5700 J
Chlorobenzene	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Ethylbenzene	µg/Kg	5 U J	5 U J	19 U	3100 U R	2000 J	14000 U R	NS	2800 U J
Styrene	µg/Kg	5 U J	5 U J	19 U	3100 U R	1100 U J	14000 U R	NS	14000 U J
Xylene (total)	µg/Kg	5 U J	5 U J	19 U	3100 U R	14000 J	15000 U R	NS	17000 J



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL B-14	SOIL B-14	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15			
										DEPTH	DATE	ES ID
		11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91			
		S1108-48	S1108-48RE(4)	S1108-49	S1108-49DL(5)	S1108-50	S1108-50DL(5)	S1108-50RE(4)	S1108-51			
		148713	148713	148714	148714	148715	148715	148715	148716			
VOCs												
SEMIVOLATILES												
Phenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
bis(2-Chloroethyl) ether	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2-Chlorophenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
1,3-Dichlorobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
1,4-Dichlorobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzyl Alcohol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
1,2-Dichlorobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2-Methylphenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
bis(2-Chloroisopropyl) ether	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Methylphenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
N-Nitroso-di-n-propylamine	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Hexachloroethane	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Nitrobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Isophorone	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2-Nitrophenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4-Dimethyl phenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzoic acid	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
bis(2-Chloroethoxy) methane	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4-Dichlorophenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
1,2,4-Trichlorobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Naphthalene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Chloroaniline	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Hexachlorobutadiene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Chloro-3-methylphenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2-Methylnaphthalene	µg/Kg	690 U	NS	700 U	NS	2000 U	J	NS	2000 U	J	2700 U	J
Hexachlorocyclopentadiene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4,6-Trichlorophenol	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4,5-Trichlorophenol	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
2-Chloronaphthalene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2-Nitroaniline	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
Dimethylphthalate	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Acenaphthylene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,6-Dinitrotoluene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
3-Nitroaniline	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
Acenaphthene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4-Dinitrophenol	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
4-Nitrophenol	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
Dibenzofuran	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
2,4-Dinitrotoluene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Diethylphthalate	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Chlorophenyl-phenylether	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Fluorene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Nitroaniline	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
4,6-Dinitro-2-methylphenol	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
N-Nitrosodiphenylamine (1)	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
4-Bromophenyl-phenylether	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Hexachlorobenzene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Pentachlorophenol	µg/Kg	3300 U	NS	3400 U	NS	7700 U	J	NS	7700 U	J	9500 U	J
Phenanthrene	µg/Kg	690 U	NS	700 U	NS	300 J	NS	NS	290 J	NS	420 J	NS
Anthracene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Fluoranthene	µg/Kg	690 U	NS	96 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Pyrene	µg/Kg	690 U	NS	100 J	NS	180 J	NS	NS	180 J	NS	230 J	NS
Butylbenzylphthalate	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
3,3'-Dichlorobenzidine	µg/Kg	1400 U	NS	1400 U	NS	3200 U	J	NS	3200 U	J	3900 U	J
Benzo(a)anthracene	µg/Kg	690 U	NS	97 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Chrysene	µg/Kg	690 U	NS	120 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
bis(2-Ethylhexyl)phthalate	µg/Kg	690 U	NS	480 J	NS	450 J	NS	NS	360 J	NS	940 J	NS
Di-n-octylphthalate	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzo(b)fluoranthene	µg/Kg	690 U	NS	140 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzo(k)fluoranthene	µg/Kg	690 U	NS	140 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzo(a)pyrene	µg/Kg	690 U	NS	150 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Indeno(1,2,3-cd)pyrene	µg/Kg	690 U	NS	180 J	NS	1600 U	J	NS	1600 U	J	2000 U	J
Dibenz(a,h)anthracene	µg/Kg	690 U	NS	700 U	NS	1600 U	J	NS	1600 U	J	2000 U	J
Benzo(g,h,i)perylene	µg/Kg	690 U	NS	190 J	NS	1600 U	J	NS	1600 U	J	2000 U	J

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-14	SOIL B-14	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-15
DEPTH	4-6	4-6	0-2	0-2	2-4	2-4	2-4	2-4	2-4
DATE	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91	11/08/91
ES ID	1)	S1108-48	S1108-48RE (4)	S1108-49	S1108-49DL(5)	S1108-50	S1108-50DL(5)	S1108-50RE (4)	S1108-51
LAB ID	148713	148713	148714	148714	148714	148715	148715	148715	148716
UNITS									
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
beta-BHC	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
delta-BHC	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
gamma-BHC (Lindane)	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
Heptachlor	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
Aldrin	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
Heptachlor epoxide	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
Endosulfan I	µg/Kg	17 U	NS	17 U	NS	19 U	NS	NS	19 U
Dieldrin	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	38 U
4,4'-DDE	µg/Kg	33 U	NS	250	NS	39 U	NS	NS	36 U
Endrin	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
Endosulfan II	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
4,4'-DDD	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
Endosulfan sulfate	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
4,4'-DDT	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
Methoxychlor	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Endrin ketone	µg/Kg	33 U	NS	34 U	NS	39 U	NS	NS	36 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
gamma-Chlordane	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Toxaphene	µg/Kg	330 U	NS	340 U	NS	390 U	NS	NS	380 U
Aroclor-1016	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Aroclor-1221	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Aroclor-1232	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Aroclor-1242	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Aroclor-1246	µg/Kg	170 U	NS	170 U	NS	190 U	NS	NS	190 U
Aroclor-1254	µg/Kg	330 U	NS	340 U	NS	390 U	NS	NS	380 U
Aroclor-1260	µg/Kg	330 U	NS	330 J	NS	370 J	NS	NS	430
<b>HERBICIDES</b>									
2,4-D	µg/Kg	53 U J	NS	53 U J	NS	60 U J	NS	NS	59 U J
2,4-DB	µg/Kg	53 U J	NS	53 U J	NS	60 U J	NS	NS	59 U J
2,4,5-T	µg/Kg	5 U J	NS	5 U J	NS	6 U J	NS	NS	6 U J
2,4,5-TP (Silvex)	µg/Kg	5 U J	NS	5 U J	NS	6 U J	NS	NS	6 U J
Dalapon	µg/Kg	130 U J	NS	130 U J	NS	140 U J	NS	NS	140 U J
Dicamba	µg/Kg	5 U J	NS	5 U J	NS	6 U J	NS	NS	6 U J
Dichloroprop	µg/Kg	53 U J	NS	53 U J	NS	60 U J	NS	NS	59 U J
Dinoseb	µg/Kg	26 U J	NS	26 U J	NS	30 U J	NS	NS	30 U J
MCPA	µg/Kg	5300 U J	NS	5300 U J	NS	6000 U J	NS	NS	5900 U J
MCPP	µg/Kg	5300 U J	NS	5300 U J	NS	6000 U J	NS	NS	5900 U J
<b>METALS</b>									
Aluminum	mg/kg	18100	NS	18100	NS	13900	NS	NS	18100
Antimony	mg/kg	10.5 U J	NS	11 U J	NS	10.6 J	NS	NS	12.1 U J
Arsenic	mg/kg	2.7	NS	4.1	NS	5.5 U	NS	NS	5
Barium	mg/kg	55.8	NS	121	NS	75.7	NS	NS	109
Beryllium	mg/kg	0.67 J	NS	0.69 J	NS	0.78 J	NS	NS	1 J
Cadmium	mg/kg	3.7 J	NS	3.4 J	NS	3.2 J	NS	NS	3.4 J
Calcium	mg/kg	29700	NS	30900	NS	50000 J	NS	NS	10500 J
Chromium	mg/kg	28.2	NS	30.5	NS	22	NS	NS	26.5
Cobalt	mg/kg	14.1	NS	14	NS	10.1	NS	NS	13.7
Copper	mg/kg	15.6	NS	36.6	NS	25.4	NS	NS	26.9
Iron	mg/kg	37800	NS	35300	NS	27700	NS	NS	32800
Lead	mg/kg	5.4 J	NS	40.7	NS	27	NS	NS	33.1
Magnesium	mg/kg	7770	NS	8190	NS	6190	NS	NS	5840
Manganese	mg/kg	483	NS	476	NS	653	NS	NS	600
Mercury	mg/kg	0.04 U	NS	0.06 J	NS	0.05 J	NS	NS	0.06 J
Nickel	mg/kg	41	NS	53	NS	37	NS	NS	35.6
Potassium	mg/kg	1770	NS	1910	NS	1280	NS	NS	2200
Selenium	mg/kg	1.6 U J	NS	0.31 U J	NS	1.4 U J	NS	NS	1.5 U J
Silver	mg/kg	1.6 U J	NS	1.7 U J	NS	1.6 U J	NS	NS	1.8 U J
Sodium	mg/kg	116 R	NS	97.3 R	NS	81.1 U	NS	NS	92.4 U
Thallium	mg/kg	0.52 U	NS	0.52 U	NS	0.46 U	NS	NS	0.49 U
Vanadium	mg/kg	21.6	NS	23.3	NS	21	NS	NS	26.6
Zinc	mg/kg	99	NS	117	NS	123	NS	NS	106
Cyanide	mg/kg	0.6 U	NS	0.47 U	NS	0.59 U	NS	NS	0.68 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-15	B-15	B-15	B-16	B-16	B-16	B-17	B-17
	DEPTH	2-4	6-8	6-8	0-2	2-4	6-8	0-2	6-8
	DATE	11/08/91	11/08/91	11/08/91	11/12/91	11/12/91	11/12/91	11/13/91	11/13/91
	ES ID	(1) S1108-51DL(5)	S1108-52	S1108-52DL(5)	S1112-53	S1112-54	S1112-55	S1113-56	S1113-56R
	LAB ID	148718	148717	148717	148925	148926	148927	148928	148928
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Bromomethane	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Vinyl Chloride	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Chloroethane	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Methylene Chloride	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	6 U J
Acetone	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	15 U	27 U	11 U J	16 U J
Carbon Disulfide	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,1-Dichloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,1-Dichloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,2-Dichloroethane (total)	µg/Kg	69000 U R	11000 J	19000 R	6 U	6 U	5 U	5 U J	5 U J
Chloroform	µg/Kg	5300 R	880 U J	1700 U R	6 U	2 J	5 U	5 U J	5 U J
1,2-Dichloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
2-Butanone	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
1,1,1-Trichloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Carbon Tetrachloride	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Vinyl Acetate	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Bromodichloromethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,2-Dichloropropane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
cis-1,3-Dichloropropene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Trichloroethene	µg/Kg	540000 J	29000 R	38000 J	6 U	6 U	7	9 J	9 J
Dibromochloromethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,1,2-Trichloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Benzene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
trans-1,3-Dichloropropene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Bromoform	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
4-Methyl-2-Pentanone	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
2-Hexanone	µg/Kg	48000 U R	1400 U J	3400 U R	12 U	11 U	10 U	11 U J	11 U J
Tetrachloroethene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
1,1,2,2-Tetrachloroethane	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Toluene	µg/Kg	8900 R	850 J	970 R	6 U	6 U	6	5 U J	1 J
Chlorobenzene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Ethylbenzene	µg/Kg	24000 U R	800 J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Styrene	µg/Kg	24000 U R	880 U J	1700 U R	6 U	6 U	5 U	5 U J	5 U J
Xylene (total)	µg/Kg	18000 R	4900 J	12000 R	6 U	6 U	28	5 U J	5 U J

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		
DEPTH	B-15	B-15	B-15	B-16	B-16	B-16	B-16	B-17	B-17		
DATE	11/08/91	11/08/91	11/08/91	0-2	11/12/91	11/12/91	11/12/91	0-2	0-2		
ES ID	(1) S1108-S1DL(5)	S1108-52	S1108-52DL(5)	S1112-53	S1112-54	S1112-54	S1112-55	S1113-56	S1113-56R		
LAB ID	148716	148717	148717	148925	148926	148927	148928	148928	148928		
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS		
<b>VOCs</b>											
<b>SEMIVOLATILES</b>											
Phenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
bis(2-Chloroethyl) ether	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2-Chlorophenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
1,3-Dichlorobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
1,4-Dichlorobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Benzyl Alcohol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
1,2-Dichlorobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2-Methylphenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
bis(2-Chloroisopropyl) ether	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
4-Methylphenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
N-Nitroso-dl-n-propylamine	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Hexachloroethane	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Nitrobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Isophorone	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2-Nitrophenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4-Dimethylphenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Benzic acid	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
bis(2-Chloroethoxy) methane	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4-Dichlorophenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
1,2,4-Trichlorobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Naphthalene	µg/Kg	2400 J		1200 J		NS	800 U	730 U	710 U	740 U	NS
4-Chloroaniline	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Hexachlorobutadiene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
4-Chloro-3-methylphenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2-Methylnaphthalene	µg/Kg	2800 J		950 U	J	NS	800 U	730 U	710 U	740 U	NS
Hexachlorocyclopentadiene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4,6-Trichlorophenol	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4,5-Trichlorophenol	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
2-Chloronaphthalene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2-Nitroaniline	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
Dimethylphthalate	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Acenaphthylene	µg/Kg	2000 U	J	950 U	J	NS	510 J	730 U	710 U	740 U	NS
2,6-Dinitrotoluene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
3-Nitroaniline	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
Acenaphthene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4-Dinitrophenol	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
4-Nitrophenol	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
Dibenzofuran	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
2,4-Dinitrotoluene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Diethylphthalate	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
4-Chlorophenyl-phenyl ether	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Fluorene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
4-Nitroaniline	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
4,6-Dinitro-2-methylphenol	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
N-Nitrosodiphenylamine (1)	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
4-Bromophenyl-phenyl ether	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Hexachlorobenzene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Pentachlorophenol	µg/Kg	9500 U	J	4600 U	J	NS	3900 U	3600 U	3400 U	3600 U	NS
Phenanthrene	µg/Kg	400 J		170 J		NS	170 J	730 U	710 U	740 U	NS
Anthracene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Carbazole	µg/Kg	NS		NS		NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Fluoranthene	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Pyrene	µg/Kg	2000 U	J	150 J		NS	1800 U	730 U	710 U	740 U	NS
Butylbenzyl phthalate	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
3,3'-Dichlorobenzidine	µg/Kg	3900 U	J	1900 U	J	NS	1800 U	1500 U	1400 U	1500 U	NS
Benzo(a)anthracene	µg/Kg	2000 U	J	950 U	J	NS	1300 U	730 U	710 U	740 U	NS
Chrysene	µg/Kg	2000 U	J	950 U	J	NS	1800 U	730 U	710 U	740 U	NS
bis(2-Ethylhexyl) phthalate	µg/Kg	790 J		110 J		NS	600 U	730 U	700 J	740 U	NS
Di-n-octylphthalate	µg/Kg	2000 U	J	950 U	J	NS	800 U	730 U	710 U	740 U	NS
Benzo(b)fluoranthene	µg/Kg	2000 U	J	950 U	J	NS	740 J	730 U	710 U	740 U	NS
Benzo(k)fluoranthene	µg/Kg	2000 U	J	950 U	J	NS	870 U	730 U	710 U	740 U	NS
Benzo(a)pyrene	µg/Kg	2000 U	J	950 U	J	NS	1500 U	730 U	710 U	740 U	NS
Indeno(1,2,3-cd)pyrene	µg/Kg	2000 U	J	950 U	J	NS	660 J	730 U	710 U	740 U	NS
Dibenz(a,h)anthracene	µg/Kg	2000 U	J	950 U	J	NS	330 J	730 U	710 U	740 U	NS
Benzo(g,h,i)perylene	µg/Kg	2000 U	J	950 U	J	NS	880 U	730 U	710 U	740 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-15	SOIL B-15	SOIL B-15	SOIL B-16	SOIL B-16	SOIL B-16	SOIL B-16	SOIL B-17	SOIL B-17
DEPTH	2-4	6-8	6-8	0-2	2-4	6-8	0-2	0-2	0-2
DATE	11/08/91	11/08/91	11/08/91	11/12/91	11/12/91	11/12/91	11/12/91	11/13/91	11/13/91
ES ID	(1) S1108-51DL(5)	S1108-52	S1108-52DL(5)	S1112-53	S1112-54	S1112-55	S1112-55	S1113-56	S1113-56R
LAB ID	148716	148717	148717	148925	148926	148927	148928	148928	148928
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
beta-BHC	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
delta-BHC	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
gamma-BHC (Lindane)	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
Heptachlor	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
Aldrin	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
Heptachlor epoxide	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
Endosulfan I	µg/Kg	NS	17 U J	NS	19 U	18 U	17 U	18 U	NS
Dieldrin	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
4,4'-DDE	µg/Kg	NS	69 U	NS	21 J	38 U	34 U	39	NS
Endrin	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
Endosulfan II	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
4,4'-DDD	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
Endosulfan sulfate	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
4,4'-DDT	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
Methoxychlor	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Endrin ketone	µg/Kg	NS	35 U J	NS	39 U	38 U	34 U	36 U	NS
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
gamma-Chlordane	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Toxaphene	µg/Kg	NS	350 U J	NS	390 U	360 U	340 U	360 U	NS
Aroclor-1016	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Aroclor-1221	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Aroclor-1232	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Aroclor-1242	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Aroclor-1248	µg/Kg	NS	170 U J	NS	190 U	180 U	170 U	180 U	NS
Aroclor-1254	µg/Kg	NS	350 U J	NS	390 U	360 U	340 U	360 U	NS
Aroclor-1260	µg/Kg	NS	230 J	NS	390 U	360 U	340 U	360 U	NS
<b>HERBICIDES</b>									
2,4-D	µg/Kg	NS	54 U J	NS	59 U J	55 U J	54 U J	56 U J	NS
2,4-DB	µg/Kg	NS	54 U J	NS	59 U J	55 U J	54 U J	56 U J	NS
2,4,5-T	µg/Kg	NS	5 U J	NS	6 U J	6 U J	5 U J	6 U J	NS
2,4,5-TP (Silvex)	µg/Kg	NS	5 U J	NS	6 U J	6 U J	5 U J	6 U J	NS
Dalapon	µg/Kg	NS	130 U J	NS	140 U J	130 U J	130 U J	130 U J	NS
Dicamba	µg/Kg	NS	5 U J	NS	6 U J	6 U J	5 U J	6 U J	NS
Dichloroprop	µg/Kg	NS	54 U J	NS	59 U J	55 U J	54 U J	56 U J	NS
Dinoseb	µg/Kg	NS	27 U J	NS	30 U J	28 U J	27 U J	28 U J	NS
MCPA	µg/Kg	NS	5400 U J	NS	5900 U J	5500 U J	5400 U J	5600 U J	NS
MOPP	µg/Kg	NS	5400 U J	NS	5900 U J	5500 U J	5400 U J	5600 U J	NS
<b>METALS</b>									
Aluminum	mg/kg	NS	16600	NS	12700	19800	19300	10900	NS
Antimony	mg/kg	NS	9.3 U J	NS	8.5 U J	10.9 U J	8.4 U J	12.3 J	NS
Arsenic	mg/kg	NS	3.4	NS	5.1	4.4	3.8	7	NS
Barium	mg/kg	NS	49.9	NS	91.1	101	64.8	82.5	NS
Beryllium	mg/kg	NS	0.81 J	NS	0.78 J	1	0.98	0.74 U	NS
Cadmium	mg/kg	NS	3.7 J	NS	1.8	3.2 J	2.9 J	8.2 J	NS
Calcium	mg/kg	NS	12400	NS	26100	27800	43000	74700	NS
Chromium	mg/kg	NS	26.7	NS	15.9	26.8	27.4	28.1	NS
Cobalt	mg/kg	NS	12.8	NS	5.8 J	12.8	13.3	11.2	NS
Copper	mg/kg	NS	16.9	NS	23.4	23.9	19.1	52.1	NS
Iron	mg/kg	NS	31000	NS	18500	32000	31600	88400	NS
Lead	mg/kg	NS	9.8 J	NS	39.8	9.5 J	5.3 J	40.1	NS
Magnesium	mg/kg	NS	8290	NS	10200	8730	11000	24900	NS
Manganese	mg/kg	NS	467	NS	582	634	574	602	NS
Mercury	mg/kg	NS	0.04 U	NS	0.07 J	0.05 J	0.04 U	0.06 J	NS
Nickel	mg/kg	NS	41.8	NS	17.5	35.3	38.6	39.7	NS
Potassium	mg/kg	NS	1310	NS	1960	2970	2540	1610	NS
Selenium	mg/kg	NS	1.8 U J	NS	0.39 U J	0.24 U J	0.35 U J	0.32 U J	NS
Silver	mg/kg	NS	1.4 U J	NS	1.3 U J	1.8 U J	1.3 U J	1.7 U J	NS
Sodium	mg/kg	NS	71.4 U	NS	64.9 U	83.6 U	139 J	99.3 J	NS
Thallium	mg/kg	NS	0.53 U	NS	0.64 U	0.4 U	0.58 U	0.52 U	NS
Vanadium	mg/kg	NS	21	NS	23.8	31	26.4	23.5	NS
Zinc	mg/kg	NS	94.4	NS	58.1	83.3	94.6	244	NS
Cyanide	mg/kg	NS	0.59 U	NS	0.85 U	0.8 U	0.86 U	0.85 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
 SOIL ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH DATE ES ID LAB ID UNITS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		B-17 2-4 11/13/91 S1113-57 148929	B-17 2-4 11/13/91 S1113-57DL(5) 148929	B-17 4-6 11/13/91 S1113-58 148930	B-17 6-8 11/13/91 S1113-59 (2) 148931	B-18 0-2 11/13/91 S1113-60 148932	B-18 2-4 11/13/91 S1113-61 148933	B-18 4-6 11/13/91 S1113-62 148934	B-19 0-2 11/13/91 S1113-63 148935
<b>VOCs</b>									
Chloromethane	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Bromomethane	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Vinyl Chloride	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Chloroethane	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Methylene Chloride	µg/Kg	8 U J	8 U R	6 U	7 U	5 U	5 U	5 U	5 U
Acetone	µg/Kg	12 U J	16 U R	15 U	16 U	12 U	11 U	11 U	12 U
Carbon Disulfide	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
1,1-Dichloroethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
1,1-Dichloroethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
1,2-Dichloroethane (total)	µg/Kg	14 J	13 R	4 J	190	6 U	4 J	5 U	6 U
Chloroform	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	4 J	5 U	6 U
1,2-Dichloroethane	µg/Kg	6 U J	6 U R	6 U	21	6 U	5 U	5 U	6 U
2-Butanone	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
1,1,1-Trichloroethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	3 J	5 U	6 U
Carbon Tetrachloride	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Vinyl Acetate	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Bromodichloromethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
1,2-Dichloropropane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
cis-1,3-Dichloropropene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Trichloroethene	µg/Kg	260 R	210 J	47	540 J	6 U	5 U	5 U	6 U
Dibromochloromethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
1,1,2-Trichloroethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Benzene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
trans-1,3-Dichloropropene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Bromoform	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
4-Methyl-2-Pentanone	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
2-Hexanone	µg/Kg	12 U J	16 U R	12 U	33 U	12 U	11 U	11 U	12 U
Tetrachloroethene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	6	5 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Toluene	µg/Kg	5 J	3 R	6 U	17 U	6 U	5 U	5 U	6 U
Chlorobenzene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Ethylbenzene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Styrene	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U
Xylene (total)	µg/Kg	6 U J	6 U R	6 U	17 U	6 U	5 U	5 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH	B-17	B-17	B-17	B-17	B-18	B-18	B-18	B-19
DATE	2-4	2-4	2-4	2-4	0-2	0-2	0-2	0-2	0-2
ES ID	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91
LAB ID	E(4)	S1113-57	S1113-57DL(5)	S1113-58	S1113-59 (2)	S1113-60	S1113-61	S1113-62	S1113-63
UNITS	148929	148929	148930	148931	148932	148933	148934	148935	148935
<b>VOCs</b>									
<b>SEMI-VOLATILES</b>									
Phenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
bis(2-Chloroethyl) ether	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2-Chlorophenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
1,3-Dichlorobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
1,4-Dichlorobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Benzyl Alcohol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
1,2-Dichlorobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2-Methylphenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
bis(2-Chloroisopropyl) ether	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Methylphenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
N-Nitroso-d-n-propylamine	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Hexachloroethane	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Nitrobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Isophorone	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2-Nitrophenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4-Dimethylphenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Benzoic acid	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
bis(2-Chloroethoxy) methane	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4-Dichlorophenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
1,2,4-Trichlorobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Naphthalene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Chloroaniline	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Hexachlorobutadiene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Chloro-3-methylphenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2-Methylnaphthalene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Hexachlorocyclopentadiene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4,6-Trichlorophenol	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4,5-Trichlorophenol	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
2-Chloronaphthalene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2-Nitroaniline	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
Dimethylphthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Acenaphthylene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,6-Dinitrotoluene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
3-Nitroaniline	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
Acenaphthene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4-Dinitrophenol	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
4-Nitrophenol	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
Dibenzofuran	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
2,4-Dinitrotoluene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Diethylphthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Chlorophenyl-phenylether	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Fluorene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Nitroaniline	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
4,6-Dinitro-2-methylphenol	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
N-Nitrosodiphenylamine (1)	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
4-Bromophenyl-phenylether	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Hexachlorobenzene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Pentachlorophenol	µg/Kg	3900 U	NS	3700 U	3300 U	3600 U	3600 U	3400 U	3800 U
Phenanthrene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Anthracene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Carbazole	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Fluoranthene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Pyrene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Butylbenzylphthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
3,3'-Dichlorobenzidine	µg/Kg	1600 U	NS	1500 U	1400 U	1500 U	1500 U	1400 U	1600 U
Berzo(a)anthracene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Chrysene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
bis(2-Ethylhexyl)phthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	400 J	110 J	780 U
Di-n-octylphthalate	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Berzo(b)fluoranthene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Berzo(k)fluoranthene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Berzo(a)pyrene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Indeno(1,2,3-cd)pyrene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Diberzo(a,h)anthracene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U
Berzo(g,h,i)perylene	µg/Kg	790 U	NS	770 U	680 U	740 U	740 U	700 U	780 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH	B-17	B-17	B-17	B-17	B-18	B-18	B-18	B-19
	DATE	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91	11/13/91
	ES ID	S1113-57	S1113-57DL(5)	S1113-58	S1113-59 (2)	S1113-60	S1113-61	S1113-62	S1113-63
	LAB ID	148929	148929	148930	148931	148932	148933	148934	148935
	UNITS								
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
beta-BHC	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
delta-BHC	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
gamma-BHC (Lindane)	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
Heptachlor	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
Aldrin	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
Heptachlor epoxide	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
Endosulfan I	µg/Kg	19 U	NS	19 U	17 U	18 U	18 U	17 U	19 U
Dieldrin	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
4,4'-DDE	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
Endrin	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
Endosulfan II	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
4,4'-DDD	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
Endosulfan sulfate	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
4,4'-DDT	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
Methoxychlor	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Endrin ketone	µg/Kg	39 U	NS	37 U	33 U	36 U	36 U	34 U	38 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
gamma-Chlordane	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Toxaphene	µg/Kg	390 U	NS	370 U	330 U	360 U	360 U	340 U	380 U
Aroclor-1016	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Aroclor-1221	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Aroclor-1232	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Aroclor-1242	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Aroclor-1248	µg/Kg	190 U	NS	190 U	170 U	180 U	180 U	170 U	190 U
Aroclor-1254	µg/Kg	390 U	NS	370 U	330 U	360 U	360 U	340 U	380 U
Aroclor-1260	µg/Kg	390 U	NS	370 U	330 U	360 U	360 U	340 U	380 U
<b>HERBICIDES</b>									
2,4-D	µg/Kg	60 U J	NS	60 U J	53 U J	56 U J	57 U J	53 U J	60 U J
2,4-DB	µg/Kg	60 U J	NS	60 U J	53 U J	56 U J	57 U J	53 U J	60 U J
2,4,5-T	µg/Kg	6 U J	NS	6 U J	5 U J	6 U J	6 U J	5 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	6 U J	NS	6 U J	5 U J	6 U J	6 U J	5 U J	6 U J
Dalapon	µg/Kg	150 U J	NS	140 U J	130 U J	140 U J	140 U J	130 U J	140 U J
Dicamba	µg/Kg	6 U J	NS	6 U J	5 U J	6 U J	6 U J	5 U J	6 U J
Dichloroprop	µg/Kg	60 U J	NS	60 U J	53 U J	56 U J	57 U J	53 U J	60 U J
Dinoseb	µg/Kg	30 U J	NS	30 U J	26 U J	28 U J	29 U J	26 U J	30 U J
MCPA	µg/Kg	6000 U J	NS	6000 U J	5300 U J	5600 U J	5700 U J	5300 U J	6000 U J
MCPP	µg/Kg	6000 U J	NS	6000 U J	5300 U J	5600 U J	5700 U J	5300 U J	6000 U J
<b>METALS</b>									
Aluminum	mg/kg	18700	NS	16800	15100	22600	21100	22300	16600
Antimony	mg/kg	10.3 U J	NS	6.6 U J	10.6 U J	8 U J	8.8 U J	8.7 J	10.6 U J
Arsenic	mg/kg	5.5	NS	4.6	4.6	5.1	5.6	6.5	5.9
Barium	mg/kg	157	NS	73.5	40.1	85.8	59.9	59.7	89.9
Beryllium	mg/kg	1.1	NS	0.88	0.81 J	1.1	0.95	1	1
Cadmium	mg/kg	3.7 J	NS	2.9 J	3	4	4.1	4.2	3.7
Calcium	mg/kg	20500	NS	13200	58100	6180	3100	30000	3440
Chromium	mg/kg	31.8	NS	26.5	22.4	30.4	30.5	31.9	26
Cobalt	mg/kg	13.1	NS	10.6	11.3	16	15.7	16.3	11
Copper	mg/kg	48.7	NS	20.2	12.9	24.6 J	15.8 J	18.4 J	22.5 J
Iron	mg/kg	34800	NS	30200	26700	34500	36700	37800	33300
Lead	mg/kg	106	NS	12.6	5.2 J	8.9 J	4.6 J	4.9 J	13.7 J
Magnesium	mg/kg	9340	NS	8270	6750	6440	7790	8260	5460
Manganese	mg/kg	1090	NS	400	677	666	522	615	517
Mercury	mg/kg	0.11	NS	0.05 U	0.04 U	0.06 J	0.04 U	0.04 U	0.05 J
Nickel	mg/kg	37.2	NS	39.2	33.7	41.8	46.5	46.5	37.3
Potassium	mg/kg	2750	NS	1610	1830	2670	1850	2450	1240
Selenium	mg/kg	0.34 U J	NS	0.26 U J	0.31 U J	0.29 U J	0.32 U J	0.27 U J	0.29 U J
Silver	mg/kg	1.5 U J	NS	0.99 U J	1.6 U J	1.2 U	1.3 U	1.2 U	1.6 U
Sodium	mg/kg	78.9 U	NS	50.7 U	242 J	105 J	99.9 J	176 J	85.7 J
Thallium	mg/kg	0.56 U	NS	0.43 U	0.51 U	0.48 U	0.52 U	0.44 U	0.48 U
Vanadium	mg/kg	30.8	NS	24.3	19.8	29	24.5	27	25
Zinc	mg/kg	1710	NS	253	87.2	113	98.6	102	90.7
Cyanide	mg/kg	0.64 U	NS	0.59 U	0.52 U	0.66 U	0.65 U	0.64 U	0.66 U



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-19	B-19	B-20	B-20	B-20	B-20	B-21	B-21
	DEPTH	2-4	4-6	0-2	2-4	2-4	4-6	0-2	0-2
	DATE	11/13/91	11/13/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91
	ES ID	S1113-64	S1113-65	S1114-66	S1114-67	S1114-67D	S1114-68	S1114-69	S1114-70
	LAB ID	148936	148937	149176	149177	149177	149178	149179	149180
	UNITS								
<b>VOCs</b>									
Chloromethane	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Bromomethane	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Vinyl Chloride	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Chloroethane	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Methylene Chloride	µg/Kg	9 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Acetone	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	31 U	12 U
Carbon Disulfide	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,2-Dichloroethane (total)	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Chloroform	µg/Kg	1 J	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,2-Dichloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
2-Butanone	µg/Kg	10 J	11 U	12 U	11 U	NS	11 U	12 U	12 U
1,1,1-Trichloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Carbon Tetrachloride	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Vinyl Acetate	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Bromodichloromethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,2-Dichloropropane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
cis-1,3-Dichloropropene	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Trichloroethane	µg/Kg	1 J	5 U	6 U	2 J	NS	5 U	6 U	6 U
Dibromochloromethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,1,2-Trichloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Benzene	µg/Kg	2 J	5 U	6 U	6 U	NS	5 U	6 U	6 U
trans-1,3-Dichloropropene	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Bromoforn	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
4-Methyl-2-Pentanone	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
2-Hexanone	µg/Kg	12 U	11 U	12 U	11 U	NS	11 U	12 U	12 U
Tetrachloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Toluene	µg/Kg	15	5 U	6 U	6 U	NS	5 U	6 U	6 U
Chlorobenzene	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Ethylbenzene	µg/Kg	4 J	5 U	6 U	6 U	NS	5 U	6 U	6 U
Styrene	µg/Kg	6 U	5 U	6 U	6 U	NS	5 U	6 U	6 U
Xylene (total)	µg/Kg	18	5 U	6 U	6 U	NS	5 U	6 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-19	SOIL B-19	SOIL B-20	SOIL B-20	SOIL B-20	SOIL B-20	SOIL B-20	SOIL B-21	SOIL B-21
DEPTH	2-4	4-6	0-2	2-4	2-4	2-4	4-6	0-2	B-21
DATE	11/13/91	11/13/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91
ES ID	S1113-64	S1113-65	S1114-66	S1114-67	S1114-67D	S1114-68	S1114-68	S1114-69	S1114-70
LAB ID	148936	148937	149176	149177	149177	149178	149178	149179	149180
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	760 U	770 U
bis(2-Chloroethyl) ether	µg/Kg	9 J	760 U	780 U	750 U	NS	740 U	760 U	770 U
2-Chlorophenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
1,3-Dichlorobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
1,4-Dichlorobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Benzyl Alcohol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
1,2-Dichlorobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2-Methylphenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
bis(2-Chloroisopropyl) ether	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
4-Methylphenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
N-Nitroso-d-n-propylamine	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Hexachloroethane	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Nitrobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Isophorone	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2-Nitrophenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,4-Dimethylphenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Benzotic acid	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
bis(2-Chloroethoxy) methane	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,4-Dichlorophenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
1,2,4-Trichlorobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Naphthalene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
4-Chloroaniline	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Hexachlorobutadiene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
4-Chloro-3-methylphenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2-Methylnaphthalene	µg/Kg	88 J	760 U	780 U	750 U	NS	740 U	780 U	770 U
Hexachlorocyclopentadiene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,4,6-Trichlorophenol	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,4,5-Trichlorophenol	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
2-Chloronaphthalene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2-Nitroaniline	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
Dimethylphthalate	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Acenaphthylene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,6-Dinitrotoluene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
3-Nitroaniline	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
Acenaphthene	µg/Kg	6 J	760 U	780 U	750 U	NS	740 U	220 J	770 U
2,4-Dinitrophenol	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
4-Nitrophenol	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
Dibenzofuran	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
2,4-Dinitrotoluene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Diethylphthalate	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
4-Chlorophenyl-phenylether	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Fluorene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	160 J	770 U
4-Nitroaniline	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
4,6-Dinitro-o-2-methylphenol	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
N-Nitrosodiphenylamine (1)	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
4-Bromophenyl-phenylether	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Hexachlorobenzene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Pentachlorophenol	µg/Kg	3500 U	3700 U	3800 U	3600 U	NS	3600 U	3800 U	3700 U
Phenanthrene	µg/Kg	730 U	760 U	290 J	750 U	NS	740 U	1700	770 U
Anthracene	µg/Kg	730 U	760 U	84 J	750 U	NS	740 U	460 J	770 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	730 U	760 U	88 J	750 U	NS	740 U	780 U	770 U
Fluoranthene	µg/Kg	730 U	760 U	270 J	750 U	NS	740 U	2000	770 U
Pyrene	µg/Kg	730 U	760 U	300 J	750 U	NS	740 U	2100	770 U
Butylbenzylphthalate	µg/Kg	730 U	760 U	760 U	750 U	NS	740 U	780 U	770 U
3,3'-Dichlorobenzidine	µg/Kg	1500 U	1500 U	1600 U	1500 U	NS	1500 U	1600 U	1500 U
Benzo(a)anthracene	µg/Kg	730 U	760 U	150 J	750 U	NS	740 U	830	770 U
Chrysene	µg/Kg	730 U	760 U	160 J	750 U	NS	740 U	880	770 U
bis(2-Ethylhexyl)phthalate	µg/Kg	730 U	760 U	88 J	750 U	NS	740 U	630 J	770 U
Di-n-octylphthalate	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Benzo(b)fluoranthene	µg/Kg	730 U	760 U	93 J	750 U	NS	740 U	670 J	770 U
Benzo(k)fluoranthene	µg/Kg	730 U	760 U	160 J	750 U	NS	740 U	700 J	770 U
Benzo(a)pyrene	µg/Kg	730 U	760 U	120 J	750 U	NS	740 U	760 J	770 U
Indeno(1,2,3-cd)pyrene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	350 J	770 U
Dibenz(a,h)anthracene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	780 U	770 U
Benzo(g,h,i)perylene	µg/Kg	730 U	760 U	780 U	750 U	NS	740 U	370 J	770 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-19	SOIL B-19	SOIL B-20	SOIL B-20	SOIL B-20	SOIL B-20	SOIL B-21	SOIL B-21	
DEPTH	2-4	4-6	0-2	2-4	2-4	4-6	0-2	2-4	
DATE	11/13/91	11/13/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91	11/14/91	
ES ID	S1113-64	S1113-65	S1114-66	S1114-67	S1114-67D	S1114-68	S1114-69	S1114-70	
LAB ID	148936	148937	149176	149177	149177	149176	149179	149180	
COMPOUND	UNITS								
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
beta-BHC	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
delta-BHC	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
gamma-BHC (Lindane)	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
Heptachlor	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
Aldrin	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
Heptachlor epoxide	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
Endosulfan I	µg/Kg	18 U	18 U	19 U	18 U	90 U R	18 U	19 U	19 U
Dieldrin	µg/Kg	35 U	37 U	38 U	36 U	180 U R	36 U	37 U	37 U
4,4'-DDE	µg/Kg	35 U	37 U	26 J	190 R	140 J	18 J	36 U	37 U
Endrin	µg/Kg	35 U	37 U	36 U	36 U	180 U R	36 U	36 U	37 U
Endosulfan II	µg/Kg	35 U	37 U	36 U	36 U	180 U R	36 U	36 U	37 U
4,4'-DDD	µg/Kg	35 U	37 U	36 U	36 U	180 U R	36 U	36 U	37 U
Endosulfan sulfate	µg/Kg	35 U	37 U	36 U	36 U	180 U R	36 U	36 U	37 U
4,4'-DDT	µg/Kg	35 U	37 U	36 U	29 J	180 U R	36 U	36 U	37 U
Methoxychlor	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Endrin ketone	µg/Kg	35 U	37 U	36 U	36 U	180 U R	36 U	36 U	37 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
gamma-Chlordane	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Toxaphene	µg/Kg	350 U	370 U	360 U	360 U	1800 U R	360 U	360 U	370 U
Aroclor-1016	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Aroclor-1221	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Aroclor-1232	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Aroclor-1242	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Aroclor-1248	µg/Kg	180 U	180 U	190 U	180 U	900 U R	180 U	190 U	190 U
Aroclor-1254	µg/Kg	350 U	370 U	360 U	360 U	1800 U R	360 U	360 U	370 U
Aroclor-1260	µg/Kg	350 U	370 U	360 U	360 U	1800 U R	360 U	360 U	370 U
<b>HERBICIDES</b>									
2,4-D	µg/Kg	56 U J	59 U J	60 U J	57 U J	NS	56 U J	56 U J	57 U J
2,4-DB	µg/Kg	56 U J	59 U J	60 U J	57 U J	NS	56 U J	56 U J	57 U J
2,4,5-T	µg/Kg	6 U J	6 U J	6 U J	6 U J	NS	6 U J	6 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	6 U J	6 U J	6 U J	6 U J	NS	6 U J	6 U J	6 U J
Dalapon	µg/Kg	140 U J	140 U J	140 U J	140 U J	NS	130 U J	140 U J	140 U J
Dicamba	µg/Kg	6 U J	6 U J	6 U J	6 U J	NS	6 U J	6 U J	6 U J
Dichloroprop	µg/Kg	56 U J	59 U J	60 U J	57 U J	NS	56 U J	56 U J	57 U J
Dinoseb	µg/Kg	28 U J	29 U J	30 U J	29 U J	NS	28 U J	29 U J	29 U J
MCPA	µg/Kg	5600 U J	5900 U J	6000 U J	5700 U J	NS	5600 U J	5800 U J	5700 U J
MCPP	µg/Kg	5600 U J	5900 U J	6000 U J	5700 U J	NS	5600 U J	5800 U J	5700 U J
<b>METALS</b>									
Aluminum	mg/kg	21800	19500	13200	20300	NS	19900	19400	21300
Antimony	mg/kg	11 U J	10.3 U J	10.6 U J	10.8 U J	NS	7.5 U J	9.8 U J	7.6 U J
Arsenic	mg/kg	4.8	5.2	4.9	4.5	NS	4	4.6	4.8
Barium	mg/kg	81.7	90.7	74.5	90.7	NS	62.8	110	75.9
Beryllium	mg/kg	1.1	1	0.8 J	1.1	NS	1	0.99	1.1
Cadmium	mg/kg	4	3.8	2.6	4	NS	4	3.3	4.8
Calcium	mg/kg	9750	18000	123000	32500	NS	35500	38300	7850
Chromium	mg/kg	34.8	29.8	17.5	29.8	NS	29.8	28	33.4
Cobalt	mg/kg	16.9	16.5	6.9 J	15.5	NS	14.3	13.9	17.8
Copper	mg/kg	18.3 J	22.8 J	26.5 J	26.1 J	NS	19.8 J	26 J	21.8 J
Iron	mg/kg	40300	38300	19900	36800	NS	35500	31600	41500
Lead	mg/kg	7.4 J	8.6 J	18.4	26.3	NS	6.2 J	15.7	8.2 J
Magnesium	mg/kg	8050	6890	24100	8010	NS	7890	9500	7720
Manganese	mg/kg	918	947	661	1080	NS	920	1480	924
Mercury	mg/kg	0.04 U	0.07 J	0.05 J	0.04 U	NS	0.05 U	0.31	0.04 U
Nickel	mg/kg	53.2	45.7	20.1	43.8	NS	43.5	41.1	52.2
Potassium	mg/kg	2110	1860	2050	2310	NS	2070	2300	1630
Selenium	mg/kg	0.36 U J	0.29 U J	0.37 U J	0.23 U J	NS	0.28 U J	0.32 U J	0.34 U J
Silver	mg/kg	1.8 U	1.5 U	1.8 U	1.8 U	NS	1.1 U	1.5 U	1.1 U
Sodium	mg/kg	122 J	126 J	150 J	115 J	NS	182 J	133 J	101 J
Thallium	mg/kg	0.8 U	0.48 U	0.81 U	0.38 U	NS	0.45 U	0.53 U	0.56 U
Vanadium	mg/kg	27.2	26.3	22.2	29.3	NS	24.8	27.9	26.4
Zinc	mg/kg	86.1	88.9	130	273	NS	104	335	92.2
Cyanide	mg/kg	0.64 U	0.68 U	0.67 U	0.63	NS	0.63 U	0.58 U	0.67 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH DATE ES ID LAB ID UNITS	SOIL B-21 2-4 11/14/91 S1114-71 (1) 149181	SOIL B-21 4-6 11/14/91 S1114-72 149182	SOIL B-22 0-2 12/02/91 S1202-73 (3) 150016	SOIL B-22 2-4 12/02/91 S1202-74 (4) 150017	SOIL B-22 4-6 12/02/91 S1202-75 (5) 150018	SOIL B-23 0-2 12/02/91 S1202-76 150019	SOIL B-23 2-4 12/02/91 S1202-77 150020	SOIL B-23 4-6 12/02/91 S1202-78 150021	SOIL B-24 0-2 12/03/91 S1203-79 (3) 150022
<b>VOCs</b>										
Chloromethane	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Bromomethane	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Vinyl Chloride	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Chloroethane	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Methylene Chloride	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Acetone	µg/Kg	11 U	11 U	12 U	11 U	11 U	12 U	13 U	12 U	13 U
Carbon Disulfide	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,1-Dichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,2-Dichloroethane (total)	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Chloroform	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,2-Dichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
2-Butanone	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
1,1,1-Trichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Carbon Tetrachloride	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Vinyl Acetate	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Bromodichloromethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,2-Dichloropropane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
cis-1,3-Dichloropropene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Trichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Dibromochloromethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,1,2-Trichloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Benzene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
trans-1,3-Dichloropropene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Bromotoluene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
4-Methyl-2-Pentanone	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
2-Hexanone	µg/Kg	11 U	11 U	12 U	10 U	11 U	12 U	11 U	11 U	13 U
Tetrachloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Toluene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Chlorobenzene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Ethylbenzene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Styrene	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U
Xylene (total)	µg/Kg	6 U	5 U	6 U	5 U	5 U	6 U	5 U	6 U	6 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL B-21	SOIL B-21	SOIL B-22	SOIL B-22	SOIL B-22	SOIL B-23	SOIL B-23	SOIL B-23	SOIL B-24
	DEPTH	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID
	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID
	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOCs										
SEMIVOLATILES										
Phenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
bis(2-Chloroethyl) ether	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2-Chlorophenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
1,3-Dichlorobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
1,4-Dichlorobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzyl Alcohol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
1,2-Dichlorobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2-Methylphenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
bis(2-Chloroisopropyl) ether	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Methylphenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
N-Nitroso-d-n-propylamine	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Hexachloroethane	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Nitrobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Isophorone	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2-Nitrophenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4-Dimethylphenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzoic acid	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
bis(2-Chloroethoxy) methane	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4-Dichlorophenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
1,2,4-Trichlorobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Naphthalene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Chloroaniline	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Hexachlorobutadiene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Chloro-3-methylphenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2-Methylnaphthalene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Hexachlorocyclopentadiene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4,6-Trichlorophenol	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4,5-Trichlorophenol	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
2-Chloronaphthalene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2-Nitroaniline	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
Dimethylphthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Acenaphthylene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,6-Dinitrotoluene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
3-Nitroaniline	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
Acenaphthene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4-Dinitrophenol	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
4-Nitrophenol	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
Dibenzofuran	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
2,4-Dinitrotoluene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Diethylphthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Chlorophenyl-phenylether	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Fluorene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Nitroaniline	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
4,6-Dinitro-2-methylphenol	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
N-Nitrosodiphenylamine (1)	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
4-Bromophenyl-phenylether	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Hexachlorobenzene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Pentachlorophenol	µg/Kg	3600 U	NS	3900 U	3500 U	NS	3600 U	3600 U	3600 U	4400 U
Phenanthrene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Anthracene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Fluoranthene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Pyrene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Butylbenzylphthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
3,3'-Dichlorobenzidine	µg/Kg	1500 U	NS	1600 U	1400 U	NS	1600 U	1500 U	1500 U	1800 U
Benzo(a)anthracene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Chrysene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
bis(2-Ethylhexyl)phthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Di-n-octylphthalate	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzo(b)fluoranthene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzo(k)fluoranthene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzo(a)pyrene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Indeno(1,2,3-cd)pyrene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Dibenz(a,h)anthracene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U
Benzo(g,h,i)perylene	µg/Kg	740 U	NS	800 U	710 U	NS	790 U	740 U	730 U	900 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-21	SOIL B-21	SOIL B-22	SOIL B-22	SOIL B-22	SOIL B-23	SOIL B-23	SOIL B-23	SOIL B-24	
DEPTH	2-4	4-6	0-2	2-4	4-6	0-2	2-4	4-6	0-2	
DATE	11/14/91	11/14/91	12/02/91	12/02/91	12/02/91	12/02/91	12/02/91	12/02/91	12/03/91	
ES ID	S1114-71 (1)	S1114-72	S1202-73 (3)	S1202-74 (4)	S1202-75 (5)	S1202-76	S1202-77	S1202-78	S1203-79 (3)	
LAB ID	149181	149182	150016	150017	150018	150019	150020	150021	150022	
UNITS										
<b>VOCs</b>										
<b>PESTICIDES/PCBs</b>										
alpha-BHC	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
beta-BHC	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
delta-BHC	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
gamma-BHC (Lindane)	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
Heptachlor	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
Aldrin	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
Heptachlor epoxide	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
Endosulfan I	µg/Kg	18 U	NS	19 U	17 U	NS	19 U	18 U	18 U	22 U
Dieldrin	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
4,4'-DDE	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
Endrin	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
Endosulfan II	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
4,4'-DDD	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
Endosulfan sulfate	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
4,4'-DDT	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
Methoxychlor	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Endrin ketone	µg/Kg	36 U	NS	36 U	35 U	NS	36 U	36 U	36 U	44 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
gamma-Chlordane	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Toxaphene	µg/Kg	360 U	NS	360 U	350 U	NS	360 U	360 U	360 U	440 U
Aroclor-1016	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Aroclor-1221	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Aroclor-1232	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Aroclor-1242	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Aroclor-1248	µg/Kg	180 U	NS	190 U	170 U	NS	190 U	180 U	180 U	220 U
Aroclor-1254	µg/Kg	360 U	NS	360 U	350 U	NS	360 U	360 U	360 U	440 U
Aroclor-1260	µg/Kg	360 U	NS	360 U	350 U	NS	360 U	360 U	360 U	440 U
<b>HERBICIDES</b>										
2,4-D	µg/Kg	57 U J	NS	60 U J	54 U J	NS	60 U J	56 U J	56 U J	66 U J
2,4-DB	µg/Kg	57 U J	NS	60 U J	54 U J	NS	60 U J	56 U J	56 U J	66 U J
2,4,5-T	µg/Kg	6 U J	NS	6 U J	5 U J	NS	6 U J	6 U J	6 U J	7 U J
2,4,5-TP (Silvex)	µg/Kg	6 U J	NS	6 U J	5 U J	NS	6 U J	6 U J	6 U J	7 U J
Dalapon	µg/Kg	140 U J	NS	150 U J	130 U J	NS	140 U J	130 U J	130 U J	160 U J
Dicamba	µg/Kg	6 U J	NS	6 U J	5 U J	NS	6 U J	6 U J	6 U J	7 U J
Dichloroprop	µg/Kg	57 U J	NS	60 U J	54 U J	NS	60 U J	56 U J	56 U J	66 U J
Dinoseb	µg/Kg	28 U J	NS	30 U J	27 U J	NS	30 U J	28 U J	28 U J	34 U J
MCPA	µg/Kg	5700 U J	NS	6000 U J	5400 U J	NS	6000 U J	5600 U J	5600 U J	6800 U J
MCPP	µg/Kg	5700 U J	NS	6000 U J	5400 U J	NS	6000 U J	5600 U J	5600 U J	6800 U J
<b>METALS</b>										
Aluminum	mg/kg	21400	NS	18400	16500	NS	15700	18700	18100	21700
Antimony	mg/kg	9 U J	NS	9.2 U J	10.5 U J	NS	10.2 U J	9.8 U J	10.5 U J	12.3 U J
Arsenic	mg/kg	4.9	NS	7.6 J	4.6 J	NS	3.6 J	5.5 J	5.2 J	6.1 J
Barium	mg/kg	74.7	NS	107	70	NS	96.2	69	67	166
Beryllium	mg/kg	1.1	NS	1.1	0.9 J	NS	0.98	1.1	0.98	1.3
Cadmium	mg/kg	4.2	NS	1.8	2.5	NS	2.1	2.4	2.6	2.7
Calcium	mg/kg	9720	NS	3270	10600	NS	1960	6970	11400	5440
Chromium	mg/kg	33.9	NS	27.4	29.4	NS	22.8	31.1	31.7	29.6
Cobalt	mg/kg	19	NS	11.5	16.2	NS	11.5	16.1	16.2	13.9
Copper	mg/kg	20.3 J	NS	21.4	22.8	NS	18.4	22.7	21.3	32
Iron	mg/kg	36900	NS	32000	37300	NS	27800	36000	39400	33500
Lead	mg/kg	7.6 J	NS	13.6 R	4.5 R	NS	8.4 R	8 R	4.1 R	15.5 R
Magnesium	mg/kg	7540	NS	5470	7570	NS	4150	7830	8620	5710
Manganese	mg/kg	834	NS	578	848	NS	632	577	733	1420
Mercury	mg/kg	0.03 U	NS	0.04 U	0.07 J	NS	0.04 U	0.07 J	0.07 J	0.1 J
Nickel	mg/kg	51.3	NS	34.5	46.8	NS	20.9	43.8	48.1	38.5
Potassium	mg/kg	1940	NS	1970	1470	NS	1530	1920	1580	2790
Selenium	mg/kg	0.32 U J	NS	0.21 U J	0.19 U J	NS	0.19 U J	0.15 U J	0.16 U J	0.27 U J
Silver	mg/kg	1.3 U	NS	1.5 U	1.7 U	NS	1.7 U	1.6 U	1.7 U	2 U
Sodium	mg/kg	111 J	NS	53 U	63.2 J	NS	59.3 U	56.9 U	60.7 U	71.1 U
Thallium	mg/kg	0.52 U	NS	0.59 U J	0.53 U J	NS	0.53 U J	0.42 U J	0.46 U J	0.74 U J
Vanadium	mg/kg	28.3	NS	28.2	21	NS	27.4	25.4	27.2	33.8
Zinc	mg/kg	84	NS	78.4	74.5	NS	56	79.6	102	107
Cyanide	mg/kg	0.68 U	NS	0.72 U	0.65 U	NS	0.7 U	0.67 U	0.65 U	0.79 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-24	B-24	B-25	B-25	B-25	B-25	B-27	B-27	
	DEPTH	2-4	4-8	0-2	2-4	4-8	4-8	0-2	2-4	
	DATE	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/04/91	12/04/91	
	ES ID	S1203-80 (3)	S1203-81 (3)	S1203-82	S1203-83	S1203-84	S1203-84RE (4)	S1204-86 (2,3)	S1204-87 (3)	
	LAB ID	150023	150024	150025	150026	150027	150027	150235	150238	
	UNITS									
VOCs										
Chloromethane	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Bromomethane	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Vinyl Chloride	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Chloroethane	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Methylene Chloride	µg/Kg	5 U	5 U	6 U	6 U	5 U	6 U J	6 U	6 U	
Acetone	µg/Kg	11 U	11 U	13 U	12 U	11 U	12 U J	12 U	12 U	
Carbon Disulfide	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
1,1-Dichloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
1,1-Dichloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
1,2-Dichloroethane (total)	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Chloroform	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	100	250	
1,2-Dichloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
2-Butanone	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
1,1,1-Trichloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Carbon Tetrachloride	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Vinyl Acetate	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Bromodichloromethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
1,2-Dichloropropane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
cis-1,3-Dichloropropene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Trichloroethene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Dibromochloromethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	10	13	
1,1,2-Trichloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Benzene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
trans-1,3-Dichloropropene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Bromoform	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
4-Methyl-2-Pentanone	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
2-Hexanone	µg/Kg	11 U	11 U	13 U	12 U	11 U	11 U J	12 U	12 U	
Tetrachloroethene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	4 J	6 U	
1,1,2,2-Tetrachloroethane	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Toluene	µg/Kg	5 U	5 U	6 U	6 U	1 J	1 J	6 U	6 U	
Chlorobenzene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Ethylbenzene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Styrene	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	
Xylene (total)	µg/Kg	5 U	5 U	6 U	6 U	5 U	5 U J	6 U	6 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-24	SOIL B-24	SOIL B-25	SOIL B-25	SOIL B-25	SOIL B-25	SOIL B-27	SOIL B-27
DEPTH	2-4	4-8	0-2	2-4	4-6	4-6	2-4	2-4
DATE	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/04/91	12/04/91
ES ID	S1203-80 (3)	S1203-81 (3)	S1203-82	S1203-83	S1203-84	S1203-84RE (4)	S1204-86 (2,3)	S1204-87 (3)
LAB ID	150023	150024	150025	150026	150027	150027	150235	150238
COMPOUND UNITS								
<b>SEMIVOLATILES</b>								
<b>VOCs</b>								
Phenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
bis(2-Chloroethyl) ether	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2-Chlorophenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
1,3-Dichlorobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
1,4-Dichlorobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzyl Alcohol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
1,2-Dichlorobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2-Methylphenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
bis(2-Chloroisopropyl) ether	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Methylphenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
N-Nitroso-di-n-propylamine	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Hexachloroethane	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Nitrobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Isophorone	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2-Nitrophenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4-Dimethylphenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzoic acid	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
bis(2-Chloroethoxy) methane	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4-Dichlorophenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
1,2,4-Trichlorobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Naphthalene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Chloroaniline	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Hexachlorobutadiene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Chloro-3-methylphenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2-Methylnaphthalene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Hexachlorocyclopentadiene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4,6-Trichlorophenol	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4,5-Trichlorophenol	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
2-Chloronaphthalene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2-Nitroaniline	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
Dimethylphthalate	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Acenaphthylene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,6-Dinitrotoluene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
3-Nitroaniline	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
Acenaphthene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4-Dinitrophenol	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
4-Nitrophenol	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
Dibenzofuran	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
2,4-Dinitrotoluene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Diethylphthalate	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Chlorophenyl-phenyl ether	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Fluorene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Nitroaniline	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
4,6-Dinitro-2-methylphenol	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
N-Nitrosodiphenylamine (1)	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
4-Bromophenyl-phenyl ether	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Hexachlorobenzene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Pentachlorophenol	µg/Kg	3500 U	3400 U	4300 U	3800 U	3400 U	NS	4100 U
Phenanthrene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Anthracene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Fluoranthene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	110 J
Pyrene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	90 J
Butylbenzylphthalate	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
3,3'-Dichlorobenzidine	µg/Kg	1400 U	1400 U	1800 U	1500 U	1400 U	NS	1700 U
Benzo(a)anthracene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Chrysene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
bis(2-Ethylhexyl)phthalate	µg/Kg	720 U	700 U	880 U	730 U	510 J	NS	840 U
Di-n-octylphthalate	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzo(b)fluoranthene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzo(k)fluoranthene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzo(a)pyrene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Indeno(1,2,3-cd)pyrene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Dibenz(a,h)anthracene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U
Benzo(g,h,i)perylene	µg/Kg	720 U	700 U	880 U	730 U	710 U	NS	840 U



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-24	B-24	B-25	B-25	B-25	B-25	B-27	B-27
	DEPTH	2-4	4-6	0-2	2-4	4-6	4-6	0-2	B-27
	DATE	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/03/91	12/04/91	B-27
	ES ID	S1203-80 (3)	S1203-81 (3)	S1203-82	S1203-83	S1203-84	S1203-84RE (4)	S1204-86 (2,3)	S1204-87 (3)
	LAB ID	150023	150024	150025	150026	150027	150027	150235	150236
	UNITS								
VOCs									
PESTICIDES/P CBs									
alpha-BHC	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
beta-BHC	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
delta-BHC	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
gamma-BHC (Lindane)	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
Heptachlor	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
Aldrin	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
Heptachlor epoxide	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
Endosulfan I	µg/Kg	17 U	17 U	21 U	18 U	17 U	NS	20 U	19 U
Dieldrin	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
4,4'-DDE	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
Endrin	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
Endosulfan II	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
4,4'-DDD	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
Endosulfan sulfate	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
4,4'-DDT	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
Methoxychlor	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Endrin ketone	µg/Kg	34 U	34 U	43 U	36 U	34 U	NS	41 U	38 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
gamma-Chlordane	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Toxaphene	µg/Kg	340 U	340 U	430 U	360 U	340 U	NS	410 U	380 U
Aroclor-1018	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Aroclor-1221	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Aroclor-1232	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Aroclor-1242	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Aroclor-1248	µg/Kg	170 U	170 U	210 U	180 U	170 U	NS	200 U	190 U
Aroclor-1254	µg/Kg	340 U	340 U	430 U	360 U	340 U	NS	410 U	380 U
Aroclor-1260	µg/Kg	340 U	340 U	430 U	360 U	340 U	NS	410 U	380 U
HERBICIDES									
2,4-D	µg/Kg	55 U J	53 U J	66 U J	55 U J	53 U J	NS	63 U J	59 U J
2,4-DB	µg/Kg	55 U J	53 U J	66 U J	55 U J	53 U J	NS	63 U J	59 U J
2,4,5-T	µg/Kg	5 U J	5 U J	7 U J	6 U J	5 U J	NS	6 U J	6 U J
2,4,5-TP (Silvex)	µg/Kg	5 U J	5 U J	7 U J	6 U J	5 U J	NS	6 U J	6 U J
Dalapon	µg/Kg	130 U J	130 U J	180 U J	130 U J	130 U J	NS	150 U J	140 U J
Dicamba	µg/Kg	5 U J	5 U J	7 U J	6 U J	5 U J	NS	6 U J	6 U J
Dichloroprop	µg/Kg	55 U J	53 U J	66 U J	55 U J	53 U J	NS	63 U J	59 U J
Dinoseb	µg/Kg	27 U J	27 U J	33 U J	28 U J	27 U J	NS	32 U J	30 U J
MCPA	µg/Kg	5500 U J	5300 U J	6600 U J	5500 U J	5300 U J	NS	6300 U J	5900 U J
MCPP	µg/Kg	5500 U J	5300 U J	6600 U J	5500 U J	5300 U J	NS	6300 U J	5900 U J
METALS									
Aluminum	mg/kg	14200	17200	16300	16200	19800	NS	14600	17800
Antimony	mg/kg	9.2 U J	9.8 U J	12.4 U J	7.5 U J	11.7 U J	NS	12.4 U J	8.4 U J
Arsenic	mg/kg	5.2	3.1 J	5 J	6.2 J	3.5 J	NS	5.5 J	4.6 J
Barium	mg/kg	59.8	67.6	104	68.6	54.9	NS	114	96.7
Beryllium	mg/kg	0.82 J	1	0.99 J	0.88	1.2	NS	0.89 R	1 R
Cadmium	mg/kg	2.1	2.2	2.3	2.3	2.7	NS	1.6	2.4
Calcium	mg/kg	92200	33900	3970	16900	33200	NS	4570	4930
Chromium	mg/kg	24.2	29.3	25.6	28.5	34.5	NS	22.4	28
Cobalt	mg/kg	12	15.4	12.9	16	19.7	NS	8.1 J	18
Copper	mg/kg	19.5	22.5	25.8	26.3	17.5	NS	29.9	19.7
Iron	mg/kg	30800	36100	31200	35600	41100	NS	23200	36100
Lead	mg/kg	6.1 R	3.7 R	14 R	7.4 R	3.5 R	NS	33.2	12 R
Magnesium	mg/kg	8340	8170	5190	6950	9190	NS	4000	6170
Manganese	mg/kg	622	920	653	700	1030	NS	526	1120
Mercury	mg/kg	0.04 U	0.04 J	0.08 J	0.04 U	0.04 U	NS	0.09 J	0.04 J
Nickel	mg/kg	36.1	43.8	31.4	45.6	54.6	NS	25.3	39.5
Potassium	mg/kg	1580	2190	2130	1550	1860	NS	1850	1920
Selenium	mg/kg	0.21 U J	0.18 U J	0.18 U J	0.15 U J	0.18 U J	NS	0.22 U J	0.14 U J
Silver	mg/kg	1.5 U	1.6 U	2 U	1.2 U	1.9 U	NS	2 U	1.4 U
Sodium	mg/kg	104 J	106 J	72 U	55.4 J	106 J	NS	71.7 U	48.5 U
Thallium	mg/kg	0.6 U J	0.51 U J	0.5 U J	0.42 U J	0.5 U J	NS	0.61 U J	0.39 U J
Vanadium	mg/kg	22	24.5	28.8	23.3	26.5	NS	25.6	28
Zinc	mg/kg	69.6	88.6	93.2	99	66.9	NS	284	64.4
Cyanide	mg/kg	0.63 U	0.59 U	0.78 U	0.6 U	0.62 U	NS	0.6 U	0.61 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-28	B-28	B-28	B-28	B-28	B-28	B-28	B-28	
	DEPTH	0-2	2-4	2-4	2-4	2-4	2-4	4-6	4-6	
	DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	
	ES ID	S1204-88 (3)	S1204-89	S1204-89A(1)	S1204-89ARE(4)	S1204-89DL(5)	S1204-90 (3)	S1204-90RE (4)	S1204-91	
	LAB ID	150237	150238	150240	150240	150238	150241	150241	150242	
	UNITS									
VOCs										
Chloromethane	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Bromomethane	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Vinyl Chloride	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Chloroethane	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Methylene Chloride	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Acetone	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Carbon Disulfide	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,1-Dichloroethene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,1-Dichloroethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,2-Dichloroethene (total)	µg/Kg	180	2500 J	1600	NS	440	20000	NS	76	
Chloroform	µg/Kg	6 U	20 U	28 U	NS	32	690 U	NS	6 U	
1,2-Dichloroethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
2-Butanone	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
1,1,1-Trichloroethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Carbon Tetrachloride	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Vinyl Acetate	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Bromodichloromethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,2-Dichloropropane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
cis-1,3-Dichloropropene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Trichloroethane	µg/Kg	18	83	74	NS	31	2800	NS	49	
Dibromochloromethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,1,2-Trichloroethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Benzene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
trans-1,3-Dichloropropene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Bromoform	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
4-Methyl-2-Pentanone	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
2-Hexanone	µg/Kg	12 U	39 U	58 U	NS	59 U	1400 U	NS	12 U	
Tetrachloroethene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Toluene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Chlorobenzene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Ethylbenzene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Styrene	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	
Xylene (total)	µg/Kg	6 U	20 U	28 U	NS	29 U	690 U	NS	6 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-29
DEPTH	0-2	2-4	2-4	2-4	2-4	2-4	2-4	2-4	0-2
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91
ES ID	S1204-88 (3)	S1204-89	S1204-89A (1)	S1204-89ARE (4)	S1204-89DL (5)	S1204-90 (3)	S1204-90RE (4)	S1204-91	S1204-91
LAB ID	150237	150238	150240	150240	150238	150241	150241	150242	150242
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
bis(2-Chloroethyl) ether	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2-Chlorophenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
1,3-Dichlorobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
1,4-Dichlorobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzyl Alcohol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
1,2-Dichlorobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2-Methylphenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
bis(2-Chloroisopropyl) ether	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Methylphenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
N-Nitroso-d-n-propylamine	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Hexachloroethane	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Nitrobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Isophorone	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2-Nitrophenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4-Dimethylphenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzic acid	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
bis(2-Chloroethoxy) methane	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4-Dichlorophenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
1,2,4-Trichlorobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Naphthalene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Chloroaniline	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Hexachlorobutadiene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Chloro-3-methylphenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2-Methylnaphthalene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Hexachlorocyclopentadiene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4,6-Trichlorophenol	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4,5-Trichlorophenol	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
2-Chloronaphthalene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2-Nitroaniline	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
Dimethylphthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Acenaphthylene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,6-Dinitrotoluene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
3-Nitroaniline	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
Acenaphthene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4-Dinitrophenol	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
4-Nitrophenol	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
Dibenzofuran	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
2,4-Dinitrotoluene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Diethylphthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Chlorophenyl-phenylether	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Fluorene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Nitroaniline	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
4,6-Dinitro-2-methylphenol	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
N-Nitrosodiphenylamine (1)	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
4-Bromophenyl-phenylether	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Hexachlorobenzene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Pentachlorophenol	µg/Kg	3500 U	3700 U	3700 U	NS	NS	3500 U	NS	3800 U
Phenanthrene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Anthracene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Fluoranthene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Pyrene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	72 J
Butylbenzylphthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
3,3'-Dichlorobenzidine	µg/Kg	1400 U	1500 U	1500 U	NS	NS	1500 U	NS	1600 U
Benzo(a)anthracene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Chrysene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
bis(2-Ethylhexyl)phthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Di-n-octylphthalate	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzo(b)fluoranthene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzo(k)fluoranthene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzo(a)pyrene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Indeno(1,2,3-cd)pyrene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Dibenz(a,h)anthracene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U
Benzo(g,h,i)perylene	µg/Kg	710 U	760 U	760 U	NS	NS	730 U	NS	790 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-28	SOIL B-29			
DEPTH	0-2	2-4	2-4	2-4	2-4	2-4	4-6	4-6	0-2			
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91			
ES ID	S1204-88 (3)	S1204-89	S1204-89A(1)	S1204-89ARE(4)	S1204-89DL(5)	S1204-90 (3)	S1204-90RE(4)	S1204-91	S1204-91			
LAB ID	150237	150238	150240	150240	150238	150241	150241	150242	150242			
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS			
<b>PESTICIDES/PCBs</b>												
alpha-BHC	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
beta-BHC	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
delta-BHC	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
gamma-BHC (Lindane)	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
Heptachlor	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
Aldrin	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
Heptachlor epoxide	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
Endosulfan I	µg/Kg	17 U	18 U	19 U	19 U	J	NS	18 U	18 U	19 U		
Dieldrin	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
4,4'-DDE	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
Endrin	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
Endosulfan II	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
4,4'-DDD	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
Endosulfan sulfate	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
4,4'-DDT	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
Methoxychlor	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Endrin ketone	µg/Kg	35 U	37 U	37 U	37 U	J	NS	35 U	35 U	38 U		
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	J	NS	NS	NS	NS		
alpha-Chlordane	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
gamma-Chlordane	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Toxaphene	µg/Kg	350 U	370 U	370 U	370 U	J	NS	350 U	350 U	380 U		
Aroclor-1016	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Aroclor-1221	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Aroclor-1232	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Aroclor-1242	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Aroclor-1248	µg/Kg	170 U	180 U	190 U	190 U	J	NS	180 U	180 U	190 U		
Aroclor-1254	µg/Kg	350 U	370 U	370 U	370 U	J	NS	350 U	350 U	380 U		
Aroclor-1260	µg/Kg	350 U	370 U	370 U	370 U	J	NS	390	230	380 U		
<b>HERBICIDES</b>												
2,4-D	µg/Kg	54 U	J	58 U	J	59 U	NS	NS	55 U	NS	61 U	
2,4-DB	µg/Kg	54 U	J	58 U	J	59 U	NS	NS	55 U	NS	61 U	
2,4,5-T	µg/Kg	5 U	J	6 U	J	5.9 U	NS	NS	5.5 U	NS	6.1 U	
2,4,5-TP (Silvex)	µg/Kg	5 U	J	6 U	J	5.9 U	NS	NS	5.5 U	NS	6.1 U	
Dalapon	µg/Kg	130 U	J	140 U	J	140 U	NS	NS	130 U	NS	150 U	
Dicamba	µg/Kg	5 U	J	6 U	J	5.9 U	NS	NS	5.5 U	NS	6.1 U	
Dichloroprop	µg/Kg	54 U	J	58 U	J	59 U	NS	NS	55 U	NS	61 U	
Dinoseb	µg/Kg	27 U	J	29 U	J	29 U	NS	NS	28 U	NS	30 U	
MCPA	µg/Kg	5400 U	J	5800 U	J	5900 U	NS	NS	5500 U	NS	6100 U	
MCPP	µg/Kg	5400 U	J	5800 U	J	5900 U	NS	NS	5500 U	NS	6100 U	
<b>METALS</b>												
Aluminum	mg/kg	14500		15600		20100	NS	NS	19200	NS	19100	
Antimony	mg/kg	12.1 U	J	7.8 U	J	6.8 U	J	NS	8.9 U	J	NS	11.2 U
Arsenic	mg/kg	3.9	J	6.3	J	6.1	NS	NS	4.5	NS	NS	5.1
Barium	mg/kg	94.7		69.5		71.5	NS	NS	50.4	NS	NS	144
Beryllium	mg/kg	0.88	R	0.94	R	1	R	NS	0.99	R	NS	1.2
Cadmium	mg/kg	2.6		2.4		4.1	NS	NS	3.9	NS	NS	3.8
Calcium	mg/kg	3540		2670		3010	J	NS	10900	J	NS	5110
Chromium	mg/kg	21.5		26.3		30.5	NS	NS	29	NS	NS	26.6
Cobalt	mg/kg	14.3		18.7		17.7	NS	NS	14.4	NS	NS	13.9
Copper	mg/kg	23.2		24.6		25.6	NS	NS	13.6	NS	NS	28.9
Iron	mg/kg	26200		35800		44000	NS	NS	40900	NS	NS	32000
Lead	mg/kg	16		8.1	R	12.4	J	NS	NS	NS	NS	12.8
Magnesium	mg/kg	4240		6370		7500	NS	NS	7720	NS	NS	5300
Manganese	mg/kg	1290		1070		936	NS	NS	648	NS	NS	1700
Mercury	mg/kg	0.05	J	0.04	U	0.04	U	NS	0.03	U	NS	0.07
Nickel	mg/kg	28.3		43.1		48.2	NS	NS	46.9	NS	NS	35.3
Potassium	mg/kg	1590		1550		1980	NS	NS	1700	NS	NS	2480
Selenium	mg/kg	0.14	U	0.22	U	0.19	U	J	NS	NS	NS	0.13
Silver	mg/kg	2	U	1.2	U	0.43	U	NS	NS	NS	NS	1.1
Sodium	mg/kg	69.9	U	44.2	U	63.1	J	NS	NS	NS	NS	66
Thallium	mg/kg	0.39	U	0.61	U	0.54	U	NS	NS	NS	NS	0.37
Vanadium	mg/kg	19.1		22.4		26	NS	NS	23.7	NS	NS	32.6
Zinc	mg/kg	131		136		166	NS	NS	112	NS	NS	101
Cyanide	mg/kg	0.65	U	0.65	U	0.62	U	NS	NS	NS	NS	0.71

SENECA ARMY DEPOT, ASH LANDFILL  
 SOIL ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-29	B-29	B-29	B-29	B-29	B-29	B-29	B-29	
	DEPTH	0-2	0-2	0-2	0-2	2-4	4-6	4-6	B-29	
	DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	B-29	
	ES ID	S1204-91RE (4)	S1204-91A (1)	S1204-91ARE (1)	S1204-92	S1204-92RE (4)	S1204-93	S1204-93RE (4)	B-29	
	LAB ID	150242	150243	150243	150244	150244	150245	150245	B-29	
	UNITS								B-29	
VOCs										
Chloromethane	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
Bromomethane	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
Vinyl Chloride	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
Chloroethane	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
Methylene Chloride	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Acetone	µg/Kg	NS	12 U	NS	42	NS	1400 U	NS	1400 U	
Carbon Disulfide	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
1,1-Dichloroethane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
1,1-Dichloroethane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
1,2-Dichloroethane (total)	µg/Kg	NS	66	NS	610	NS	14000	NS	700 U	
Chloroform	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	11000	
1,2-Dichloroethane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
2-Butanone	µg/Kg	NS	12 U	NS	41 U	NS	680 U	NS	700 U	
1,1,1-Trichloroethane	µg/Kg	NS	6 U	NS	21 U	NS	1400 U	NS	1400 U	
Carbon Tetrachloride	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Vinyl Acetate	µg/Kg	NS	12 U	NS	21 U	NS	680 U	NS	700 U	
Bromodichloromethane	µg/Kg	NS	6 U	NS	41 U	NS	1400 U	NS	1400 U	
1,2-Dichloropropane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
cis-1,3-Dichloropropane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Trichloroethene	µg/Kg	NS	58	NS	250	NS	680 U	NS	700 U	
Dibromochloromethane	µg/Kg	NS	6 U	NS	21 U	NS	21000	NS	17000	
1,1,2-Trichloroethane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Benzene	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
trans-1,3-Dichloropropane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Bromoform	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
4-Methyl-2-Pentanone	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
2-Hexanone	µg/Kg	NS	12 U	NS	41 U	NS	1400 U	NS	1400 U	
Tetrachloroethene	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
1,1,2,2-Tetrachloroethane	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Toluene	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Chlorobenzene	µg/Kg	NS	6 U	NS	21 U	NS	620 J	NS	700 U	
Ethylbenzene	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	360 J	
Styrene	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	
Xylene (total)	µg/Kg	NS	6 U	NS	21 U	NS	680 U	NS	700 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29	SOIL B-29
DEPTH	0-2	0-2	0-2	0-2	0-2	2-4	4-6	4-6	B-29
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	4-8
ES ID	S1204-91RE(4)	S1204-91A(1)	S1204-91ARE(1)	S1204-92	S1204-92RE(4)	S1204-93	S1204-93RE(4)	S1204-93A(1)	12/04/91
LAB ID	150242	150243	150243	150244	150244	150245	150245	150246	
COMPOUND	UNITS								
<b>VOCs</b>									
<b>SEMIVOLATILES</b>									
Phenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
bis(2-Chloroethyl) ether	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2-Chlorophenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
1,3-Dichlorobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
1,4-Dichlorobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Benzyl Alcohol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
1,2-Dichlorobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2-Methylphenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
bis(2-Chloroisopropyl) ether	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Methylphenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
N-Nitroso-d-n-propylamine	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Hexachloroethane	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Nitrobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Isophorone	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2-Nitrophenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4-Dimethylphenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Benzic acid	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
bis(2-Chloroethoxy) methane	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4-Dichlorophenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
1,2,4-Trichlorobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Naphthalene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Chloroaniline	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Hexachlorobutadiene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Chloro-3-methylphenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2-Methylnaphthalene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Hexachlorocyclopentadiene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4,6-Trichlorophenol	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4,5-Trichlorophenol	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
2-Chloronaphthalene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2-Nitroaniline	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
Dimethylphthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Acenaphthylene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,6-Dinitrotoluene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
3-Nitroaniline	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
Acenaphthene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4-Dinitrophenol	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
4-Nitrophenol	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
Dibenzofuran	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
2,4-Dinitrotoluene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Diethylphthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Chlorophenyl-phenylether	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Fluorene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Nitroaniline	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
4,6-Dinitro-2-methylphenol	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
N-Nitrosodiphenylamine (1)	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
4-Bromophenyl-phenylether	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Hexachlorobenzene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Pentachlorophenol	µg/Kg	NS	3800 U	NS	3500 U	NS	3500 U	NS	3600 U
Phenanthrene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Anthracene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Fluoranthene	µg/Kg	NS	100 J	NS	720 U	NS	730 U	NS	750 U
Pyrene	µg/Kg	NS	120 J	NS	720 U	NS	730 U	NS	750 U
Butylbenzylphthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
3,3'-Dichlorobenzidine	µg/Kg	NS	780 U	NS	1400 U	NS	1500 U	NS	1500 U
Benzo(a)anthracene	µg/Kg	NS	160 J	NS	720 U	NS	730 U	NS	750 U
Chrysene	µg/Kg	NS	160 J	NS	720 U	NS	730 U	NS	750 U
bis(2-Ethylhexyl)phthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Di-n-octylphthalate	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Benzo(b)fluoranthene	µg/Kg	NS	140 J	NS	720 U	NS	730 U	NS	750 U
Benzo(k)fluoranthene	µg/Kg	NS	210 J	NS	720 U	NS	730 U	NS	750 U
Benzo(a)pyrene	µg/Kg	NS	190 J	NS	720 U	NS	730 U	NS	750 U
Indeno(1,2,3-cd)pyrene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Dibenz(a,h)anthracene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U
Benzo(g,h,i)perylene	µg/Kg	NS	780 U	NS	720 U	NS	730 U	NS	750 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	DEPTH	B-29	B-29	B-29	B-29	B-29	B-29	B-29	B-29	
	DATE	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	
	ES ID	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	
	LAB ID	S1204-91RE (4)	S1204-91A (1)	S1204-91ARE (1)	S1204-92	S1204-92RE (4)	S1204-93	S1204-93RE (4)	S1204-93A (1)	
	UNITS	150242	150243	150243	150244	150244	150245	150245	150246	
<b>VOCs</b>										
<b>PESTICIDES/PCBs</b>										
alpha-BHC	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
beta-BHC	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
delta-BHC	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
gamma-BHC (Lindane)	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
Heptachlor	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
Aldrin	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
Heptachlor epoxide	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
Endosulfan I	µg/Kg	19 U J	19 U	19 U J	18 U	18 U J	18 U	18 U J	18 U	
Dieldrin	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
4,4'-DDE	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
Endrin	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
Endosulfan II	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
4,4'-DDD	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
Endosulfan sulfate	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
4,4'-DDT	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
Methoxychlor	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Endrin ketone	µg/Kg	39 U J	38 U	36 U J	35 U	36 U J	35 U	36 U J	36 U	
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
alpha-Chlordane	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
gamma-Chlordane	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Toxaphene	µg/Kg	390 U J	380 U	380 U J	350 U	380 U J	350 U	380 U J	380 U	
Aroclor-1016	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Aroclor-1221	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Aroclor-1232	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Aroclor-1242	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Aroclor-1248	µg/Kg	190 U J	190 U	190 U J	180 U	180 U J	180 U	180 U J	180 U	
Aroclor-1254	µg/Kg	390 U J	380 U	380 U J	350 U	380 U J	350 U	380 U J	380 U	
Aroclor-1260	µg/Kg	390 U J	380 U	380 U J	350 U	380 U J	350 U	380 U J	380 U	
<b>HERBICIDES</b>										
2,4-D	µg/Kg	NS	60 U	NS	57 U	NS	57 U	NS	56 U	
2,4-DB	µg/Kg	NS	60 U	NS	57 U	NS	410 J	NS	58 U J	
2,4,5-T	µg/Kg	NS	6 U	NS	5.7 U	NS	5.7 U	NS	5.6 U	
2,4,5-TP (Silvex)	µg/Kg	NS	6 U	NS	5.7 U	NS	5.7 U	NS	5.6 U	
Dalapon	µg/Kg	NS	140 U	NS	140 U	NS	140 U	NS	130 U	
Dicamba	µg/Kg	NS	6 U	NS	5.7 U	NS	5.7 U	NS	5.6 U	
Dichloroprop	µg/Kg	NS	80 U	NS	57 U	NS	57 U	NS	56 U	
Dinoseb	µg/Kg	NS	30 U	NS	29 U	NS	28 U	NS	28 U	
MCPA	µg/Kg	NS	6000 U	NS	5700 U	NS	5700 U	NS	5600 U	
MCPP	µg/Kg	NS	6000 U	NS	5700 U	NS	5700 U	NS	5600 U	
<b>METALS</b>										
Aluminum	mg/kg	NS	16300	NS	18100	NS	18500	NS	14700	
Antimony	mg/kg	NS	10.4 U J	NS	6.6 U J	NS	10.4 U J	NS	10.3 U J	
Arsenic	mg/kg	NS	4.7	NS	4.2	NS	4.4	NS	4.2	
Barium	mg/kg	NS	84.1	NS	71.8	NS	49.9	NS	34.8 J	
Beryllium	mg/kg	NS	1 R	NS	0.9 R	NS	0.99 R	NS	0.81 R	
Cadmium	mg/kg	NS	3.4	NS	3.7	NS	4	NS	3	
Calcium	mg/kg	NS	5040 J	NS	60500 J	NS	12100 J	NS	15900 J	
Chromium	mg/kg	NS	23.2	NS	25.7	NS	27.5	NS	22	
Cobalt	mg/kg	NS	10.8	NS	15.2	NS	15.2	NS	10.1	
Copper	mg/kg	NS	24.5	NS	27.3	NS	21.5	NS	16	
Iron	mg/kg	NS	26100	NS	35300	NS	36800	NS	27500	
Lead	mg/kg	NS	9.4 J	NS	6.8 J	NS	4.1 J	NS	4.3 J	
Magnesium	mg/kg	NS	5230	NS	9690	NS	7460	NS	8030	
Manganese	mg/kg	NS	551	NS	667	NS	492 J	NS	364 J	
Mercury	mg/kg	NS	0.05 J	NS	0.03 U	NS	0.05 J	NS	0.05 U	
Nickel	mg/kg	NS	31.1	NS	41.8	NS	41.2	NS	32.4	
Potassium	mg/kg	NS	2230	NS	2180	NS	1690	NS	1350	
Selenium	mg/kg	NS	0.13 U J	NS	0.75 U J	NS	0.15 U J	NS	0.22 U J	
Silver	mg/kg	NS	0.66 U	NS	0.42 U	NS	0.89 J	NS	0.66 U	
Sodium	mg/kg	NS	64.9 J	NS	131	NS	80.8 J	NS	78.6 J	
Thallium	mg/kg	NS	0.38 U	NS	0.42 U	NS	0.41 U	NS	0.63 U	
Vanadium	mg/kg	NS	27.8	NS	25.3	NS	23.5	NS	18.9 R	
Zinc	mg/kg	NS	77.2	NS	101	NS	100	NS	68.5	
Cyanide	mg/kg	NS	0.71 U	NS	0.65 U	NS	0.59 U	NS	0.6 U	

SENECA ARMY DEPOT, ASH LANDFILL  
 SOIL ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-29	B-30	B-30	B-30	B-30	B-30	B-30	B-30	B-30
DATE	4-6	0-2	0-2	0-2	2-4	2-4	2-4	2-4	4-6
ES ID	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91
LAB ID	S1204-93ARE(1,4)	S1204-94	S1204-94A(1)	S1204-94RE(4)	S1204-95RE(4)	S1204-95	S1204-95RE(4)	S1204-96	S1204-96
UNITS	150246	150247	150248	150247	150249	150249	150249	150250	150250
<b>VOCs</b>									
Chloromethane	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Bromomethane	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Vinyl Chloride	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Chloroethane	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Methylene Chloride	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Acetone	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Carbon Disulfide	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,1-Dichloroethene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,1-Dichloroethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,2-Dichloroethene (total)	µg/Kg	NS	45	31	NS	1400 J	1700 J	NS	720 U
Chloroform	µg/Kg	NS	6 U	4 J	NS	29 U J	29 U J	NS	18000
1,2-Dichloroethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
2-Butanone	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
1,1,1-Trichloroethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Carbon Tetrachloride	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Vinyl Acetate	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Bromodichloromethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,2-Dichloropropane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
cis-1,3-Dichloropropene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Trichloroethene	µg/Kg	NS	5 J	5 J	NS	110 J	91 J	NS	450 J
Dibromochloromethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,1,2-Trichloroethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Benzene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
trans-1,3-Dichloropropene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Bromoform	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
4-Methyl-2-Pentanone	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
2-Hexanone	µg/Kg	NS	12 U	12 U	NS	57 U J	57 U J	NS	1400 U
Tetrachloroethene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
1,1,2,2-Tetrachloroethane	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Toluene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	410 J
Chlorobenzene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Ethylbenzene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Styrene	µg/Kg	NS	6 U	6 U	NS	29 U J	29 U J	NS	720 U
Xylene (total)	µg/Kg	NS	6 U	6 U	NS	41 J	28 J	NS	970



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-29	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30
DEPTH	4-6	0-2	0-2	0-2	0-2	2-4	2-4	2-4	4-6
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91
ES ID	S1204-93ARE(1,4)	S1204-94	S1204-94A(1)	S1204-94RE(4)	S1204-95RE(4)	S1204-95RE(4)	S1204-95	S1204-95RE(4)	S1204-96
LAB ID	150246	150247	150248	150247	150249	150249	150249	150249	150250
COMPOUND	UNITS								
VOCs									
SEMIVOLATILES									
Phenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
bis(2-Chloroethyl) ether	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2-Chlorophenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
1,3-Dichlorobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
1,4-Dichlorobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Benzyl Alcohol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
1,2-Dichlorobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2-Methylphenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
bis(2-Chloroisopropyl) ether	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
4-Methylphenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
N-Nitroso-d-n-propylamine	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Hexachloroethane	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Nitrobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Isophorone	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2-Nitrophenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
2,4-Dimethylphenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
Benzic acid	µg/Kg	NS	3900 U R	120 J	3900 U J	NS	3500 U J	720 U J	1500 U J
bis(2-Chloroethoxy) methane	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2,4-Dichlorophenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
1,2,4-Trichlorobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Naphthalene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	240 J
4-Chloroaniline	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Hexachlorobutadiene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
4-Chloro-3-methylphenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
2-Methylnaphthalene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	250 J
Hexachlorocyclopentadiene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2,4,6-Trichlorophenol	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U	720 U	1500 U J
2,4,5-Trichlorophenol	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U	3500 U	7100 U J
2-Chloronaphthalene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2-Nitroaniline	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U J	3500 U J	7100 U J
Dimethylphthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Acenaphthylene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2,6-Dinitrotoluene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
3-Nitroaniline	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U J	3500 U J	7100 U J
Acenaphthene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2,4-Dinitrophenol	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U	3500 U	7100 U J
4-Nitrophenol	µg/Kg	NS	3900 U R	81 J	3900 U J	NS	3500 U	3500 U	7100 U J
Dibenzofuran	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
2,4-Dinitrotoluene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Diethylphthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
4-Chlorophenyl-phenylether	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Fluorene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
4-Nitroaniline	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U J	3500 U J	7100 U J
4,6-Dinitro-2-methylphenol	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U	3500 U	7100 U J
N-Nitrosodiphenylamine (1)	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
4-Bromophenyl-phenylether	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Hexachlorobenzene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Pentachlorophenol	µg/Kg	NS	3900 U R	3700 U	3900 U J	NS	3500 U	3500 U	7100 U J
Phenanthrene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Anthracene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Fluoranthene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Pyrene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Butylbenzylphthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
3,3'-Dichlorobenzidine	µg/Kg	NS	1600 U R	760 U	1600 U J	NS	1400 U J	1400 U J	2900 U J
Benzo(a)anthracene	µg/Kg	NS	800 U R	85 J	800 U J	NS	720 U J	720 U J	1500 U J
Chrysene	µg/Kg	NS	800 U R	79 J	800 U J	NS	720 U J	720 U J	1500 U J
bis(2-Ethylhexyl)phthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Di-n-octylphthalate	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Benzo(b)fluoranthene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Benzo(k)fluoranthene	µg/Kg	NS	800 U R	760 U	800 U J	NS	720 U J	720 U J	1500 U J
Benzo(a)pyrene	µg/Kg	NS	800 U R	70 J	800 U J	NS	720 U J	720 U J	1500 U J
Indeno(1,2,3-cd)pyrene	µg/Kg	NS	800 U R	81 J	800 U J	NS	720 U J	720 U J	1500 U J
Dibenz(a,h)anthracene	µg/Kg	NS	800 U R	81 J	800 U J	NS	720 U J	720 U J	1500 U J
Benzo(g,h,i)perylene	µg/Kg	NS	800 U R	84 J	800 U J	NS	720 U J	720 U J	1500 U J

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-29	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30
DEPTH	4-6	0-2	0-2	0-2	0-2	2-4	2-4	2-4	4-6
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91	12/04/91
ES ID	S1204-93ARE(1,4)	S1204-94	S1204-94A(1)	S1204-94RE(4)	S1204-95RE(4)	S1204-95RE(4)	S1204-95	S1204-95RE(4)	S1204-95
LAB ID	150246	150247	150246	150247	150249	150249	150249	150249	150250
COMPOUND	UNITS								
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
beta-BHC	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
delta-BHC	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
gamma-BHC (Lindane)	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
Heptachlor	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
Aldrin	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
Heptachlor epoxide	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
Endosulfan I	µg/Kg	18 U J	19 U R	18 U	19 U J	19 U	17 U	18 U J	18 U
Dieldrin	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
4,4'-DDE	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
Endrin	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
Endosulfan II	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
4,4'-DDD	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
Endosulfan sulfate	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
4,4'-DDT	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
Methoxychlor	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Endrin ketone	µg/Kg	35 U J	39 U R	37 U	38 U J	36 U	35 U	35 U J	36 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
gamma-Chlordane	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Toxaphene	µg/Kg	350 U J	390 U R	370 U	380 U J	380 U	350 U	350 U J	360 U
Aroclor-1016	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Aroclor-1221	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Aroclor-1232	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Aroclor-1242	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	200 R
Aroclor-1248	µg/Kg	180 U J	190 U R	180 U	190 U J	190 U	170 U	180 U J	180 U
Aroclor-1254	µg/Kg	350 U J	390 U R	370 U	380 U J	380 U	350 U	350 U J	360 U
Aroclor-1260	µg/Kg	350 U J	390 U R	370 U	380 U J	380 U	580	770 J	370
<b>HERBICIDES</b>									
2,4-D	µg/Kg	NS	61 U	80 U	NS	NS	56 U	NS	56 U
2,4-DB	µg/Kg	NS	61 U	60 U	NS	NS	56 U	NS	56 U
2,4,5-T	µg/Kg	NS	6.1 U	6 U	NS	NS	5.6 U	NS	5.6 U
2,4,5-TP (Silvex)	µg/Kg	NS	6.1 U	6 U	NS	NS	5.6 U	NS	5.6 U
Dalapon	µg/Kg	NS	150 U	140 U	NS	NS	130 U	NS	130 U
Dicamba	µg/Kg	NS	6.1 U	6 U	NS	NS	5.6 U	NS	5.6 U
Dichloroprop	µg/Kg	NS	61 U	60 U	NS	NS	56 U	NS	56 U
Dinoseb	µg/Kg	NS	30 U	30 U	NS	NS	28 U	NS	28 U
MCPA	µg/Kg	NS	6100 U	6000 U	NS	NS	5600 U	NS	5600 U
MCPP	µg/Kg	NS	6100 U	6000 U	NS	NS	5600 U	NS	5600 U
<b>METALS</b>									
Aluminum	mg/kg	NS	16200	14400	NS	NS	15700	NS	13000
Antimony	mg/kg	NS	7.3 U J	9.5 U J	NS	NS	7.6 U J	NS	6.3 U J
Arsenic	mg/kg	NS	5.1	4.8	NS	NS	5.5	NS	3
Barium	mg/kg	NS	86.4	74.6	NS	NS	64.9	NS	38.5
Beryllium	mg/kg	NS	0.79 R	0.8 R	NS	NS	0.82 R	NS	0.69 R
Cadmium	mg/kg	NS	2.2	2.2	NS	NS	3	NS	2.9
Calcium	mg/kg	NS	16900 J	20200	NS	NS	44800 J	NS	2460 J
Chromium	mg/kg	NS	20	18.5	NS	NS	22.5	NS	20.7
Cobalt	mg/kg	NS	8.9	7.8 J	NS	NS	12.5	NS	10.4
Copper	mg/kg	NS	18.9	18.1	NS	NS	22.9	NS	12
Iron	mg/kg	NS	24000	19700	NS	NS	27700	NS	29800
Lead	mg/kg	NS	11.5 J	8.8 J	NS	NS	7 J	NS	7.3 J
Magnesium	mg/kg	NS	5190	10700	NS	NS	7660	NS	5160
Manganese	mg/kg	NS	735	597	NS	NS	627	NS	347
Mercury	mg/kg	NS	0.04 U	0.05 J	NS	NS	0.04 J	NS	0.04 U
Nickel	mg/kg	NS	23.7	19.8	NS	NS	36.7	NS	31
Potassium	mg/kg	NS	2040	2120	NS	NS	1910	NS	938
Selenium	mg/kg	NS	0.17 U J	1.1 U J	NS	NS	0.98 U J	NS	0.61 U J
Silver	mg/kg	NS	0.47 U	0.81 U	NS	NS	0.48 U	NS	0.45 J
Sodium	mg/kg	NS	83.3 J	74.8 J	NS	NS	101 J	NS	40 J
Thallium	mg/kg	NS	0.47 U	0.6 U	NS	NS	0.55 U	NS	0.34 U
Vanadium	mg/kg	NS	25.2	24	NS	NS	21.5 R	NS	16 R
Zinc	mg/kg	NS	66.5	69.5	NS	NS	98.5	NS	74.4
Cyanide	mg/kg	NS	0.69 U	0.66 U	NS	NS	0.61 U	NS	0.65 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-30	B-30	B-30	B-30	B-31	B-31	B-31	B-31	
	DEPTH	4-6	4-6	4-6	4-6	0-2	0-2	0-2	B-31	
	DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/05/91	12/05/91	12/05/91	0-2	
	ES ID	S1204-96A(1)	S1204-96ADL(5)	S1204-96RE(4)	S1204-96ARE(1.4)	S1205-97	S1205-97A(1)	S1205-97RE(4)	12/05/91	
	LAB ID	150251	150251	150250	150251	150252	150253	150252	S1205-97ARE(1.4)	
	UNITS								150253	
VOCs										
Chloromethane	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Bromomethane	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Vinyl Chloride	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Chloroethane	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Methylene Chloride	µg/Kg	710 U	1500 R	NS	NS	6 U	6 U	NS	NS	
Acetone	µg/Kg	680 J	4100 R	NS	NS	12 U	12 U	NS	NS	
Carbon Disulfide	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,1-Dichloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,1-Dichloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,2-Dichloroethane (total)	µg/Kg	16000	4100 R	NS	NS	6 U	6 U	NS	NS	
Chloroform	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,2-Dichloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
2-Butanone	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
1,1,1-Trichloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Carbon Tetrachloride	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Vinyl Acetate	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Bromodichloromethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,2-Dichloropropane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
cis-1,3-Dichloropropene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Trichloroethene	µg/Kg	390 J	1400 U R	NS	NS	23 J	110 J	NS	NS	
Dibromochloromethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,1,2-Trichloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Benzene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
trans-1,3-Dichloropropene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Bromoform	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
4-Methyl-2-Pentanone	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
2-Hexanone	µg/Kg	1400 U	2800 U R	NS	NS	12 U	12 U	NS	NS	
Tetrachloroethene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
1,1,2,2-Tetrachloroethane	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Toluene	µg/Kg	640 J	420 R	NS	NS	6 U	6 U	NS	NS	
Chlorobenzene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Ethylbenzene	µg/Kg	660 J	520 R	NS	NS	6 U	6 U	NS	NS	
Styrene	µg/Kg	710 U	1400 U R	NS	NS	6 U	6 U	NS	NS	
Xylene (total)	µg/Kg	2100	970 R	NS	NS	6 U	6 U	NS	NS	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
DEPTH	B-30	B-30	B-30	B-30	B-30	B-31	B-31	B-31	B-31
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91
ES ID	S1204-96A(1)	S1204-96ADL(5)	S1204-96RE(4)	S1204-96ARE(1,4)	S1205-97	S1205-97A(1)	S1205-97RE(4)	S1205-97ARE(1,4)	
LAB ID	150251	150251	150250	150251	150252	150253	150252	150253	
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOCs									
SEMIVOLATILES									
Phenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
bis(2-Chloroethyl) ether	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2-Chlorophenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
1,3-Dichlorobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
1,4-Dichlorobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Benzyl Alcohol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
1,2-Dichlorobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2-Methylphenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
bis(2-Chloroisopropyl) ether	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
4-Methylphenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
N-Nitroso-di-n-propylamine	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Hexachloroethane	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Nitrobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Isophorone	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2-Nitrophenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4-Dimethylphenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Benzic acid	µg/Kg	7000 U J	NS	NS	NS	3900 U	94 J	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4-Dichlorophenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
1,2,4-Trichlorobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Naphthalene	µg/Kg	240 J	NS	NS	NS	600 U	780 U	NS	NS
4-Chloroaniline	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Hexachlorobutadiene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
4-Chloro-3-methylphenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2-Methylnaphthalene	µg/Kg	220 J	NS	NS	NS	78 J	780 U	NS	NS
Hexachlorocyclopentadiene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4,6-Trichlorophenol	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4,5-Trichlorophenol	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
2-Chloronaphthalene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2-Nitroaniline	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
Dimethylphthalate	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Acenaphthylene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,6-Dinitrotoluene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
3-Nitroaniline	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
Acenaphthene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4-Dinitrophenol	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
4-Nitrophenol	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
Dibenzofuran	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
2,4-Dinitrotoluene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Diethylphthalate	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
4-Chlorophenyl-phenylether	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Fluorene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
4-Nitroaniline	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
4,6-Dinitro-2-methylphenol	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
N-Nitrosodiphenylamine (1)	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
4-Bromophenyl-phenylether	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Hexachlorobenzene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Pentachlorophenol	µg/Kg	7000 U J	NS	NS	NS	3900 U	3600 U	NS	NS
Phenanthrene	µg/Kg	1400 U J	NS	NS	NS	180 J	120 J	NS	NS
Anthracene	µg/Kg	1400 U J	NS	NS	NS	800 U	780 U	NS	NS
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	1400 U J	NS	NS	NS	800 U	150 J	NS	NS
Fluoranthene	µg/Kg	1400 U J	NS	NS	NS	250 J	250 J	NS	NS
Pyrene	µg/Kg	1400 U J	NS	NS	NS	190 J	250 J	NS	NS
Butylbenzylphthalate	µg/Kg	1400 U J	NS	NS	NS	800 U	140 J	NS	NS
3,3'-Dichlorobenzidine	µg/Kg	2900 U J	NS	NS	NS	1600 U	1600 U	NS	NS
Benzo(a)anthracene	µg/Kg	1400 U J	NS	NS	NS	140 J	260 J	NS	NS
Chrysene	µg/Kg	1400 U J	NS	NS	NS	150 J	210 J	NS	NS
bis(2-Ethylhexyl)phthalate	µg/Kg	1400 U J	NS	NS	NS	83 J	230 J	NS	NS
Di-n-octylphthalate	µg/Kg	1400 U J	NS	NS	NS	800 U	150 J	NS	NS
Benzo(b)fluoranthene	µg/Kg	1400 U J	NS	NS	NS	130 J	240 J	NS	NS
Benzo(k)fluoranthene	µg/Kg	1400 U J	NS	NS	NS	99 J	160 J	NS	NS
Benzo(a)pyrene	µg/Kg	1400 U J	NS	NS	NS	110 J	200 J	NS	NS
Indeno(1,2,3-cd)pyrene	µg/Kg	1400 U J	NS	NS	NS	82 J	200 J	NS	NS
Dibenz(a,h)anthracene	µg/Kg	1400 U J	NS	NS	NS	800 U	170 J	NS	NS
Benzo(g,h,i)perylene	µg/Kg	1400 U J	NS	NS	NS	83 J	220 J	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-30	SOIL B-31	SOIL B-31	SOIL B-31	SOIL B-31	SOIL B-31
DEPTH	4-6	4-6	4-6	4-6	0-2	0-2	0-2	0-2	0-2
DATE	12/04/91	12/04/91	12/04/91	12/04/91	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91
ES ID	S1204-96A(1)	S1204-96ADL(5)	S1204-96RE(4)	S1204-96ARE(1,4)	S1205-97	S1205-97A(1)	S1205-97A(1)	S1205-97RE(4)	S1205-97ARE(1,4)
LAB ID	150251	150251	150250	150251	150252	150253	150252	150252	150253
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>VOCs</b>									
<b>PESTICIDES/PCBs</b>									
alpha-BHC	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
beta-BHC	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
delta-BHC	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
gamma-BHC (Lindane)	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
Heptachlor	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
Aldrin	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
Heptachlor epoxide	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
Endosulfan I	µg/Kg	17 U	NS	17 U J	17 U J	20 U	19 U	19 U J	19 U J
Dieldrin	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
4,4'-DDE	µg/Kg	35 U	NS	35 U J	34 U J	39 U	41	43 J	43 J
Endrin	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
Endosulfan II	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
4,4'-DDD	µg/Kg	35 U	NS	38 J	34 U J	39 U	38 U	39 U J	38 U J
Endosulfan sulfate	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
4,4'-DDT	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
Methoxychlor	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Endrin ketone	µg/Kg	35 U	NS	35 U J	34 U J	39 U	38 U	39 U J	38 U J
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
gamma-Chlordane	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Toxaphene	µg/Kg	350 U	NS	350 U J	340 U J	390 U	380 U	390 U J	380 U J
Aroclor-1016	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Aroclor-1221	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Aroclor-1232	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Aroclor-1242	µg/Kg	180 J	NS	170 U J	170 U J	400 R	220 R	190 U J	190 U J
Aroclor-1248	µg/Kg	170 U	NS	170 U J	170 U J	200 U	190 U	190 U J	190 U J
Aroclor-1254	µg/Kg	350 U	NS	350 U J	340 U J	390 U	380 U	390 U J	380 U J
Aroclor-1260	µg/Kg	270 J	NS	490 J	280 J	390 U	380 U	390 U J	380 U J
<b>HERBICIDES</b>									
2,4-D	µg/Kg	55 U	NS	NS	NS	60 U	59 U	NS	NS
2,4-DB	µg/Kg	55 U	NS	NS	NS	60 U	59 U	NS	NS
2,4,5-T	µg/Kg	5.5 U	NS	NS	NS	6 U	5.9 U	NS	NS
2,4,5-TP (Silvex)	µg/Kg	5.5 U	NS	NS	NS	6 U	5.9 U	NS	NS
Dalapon	µg/Kg	130 U	NS	NS	NS	140 U	140 U	NS	NS
Dicamba	µg/Kg	5.5 U	NS	NS	NS	6 U	5.9 U	NS	NS
Dichloroprop	µg/Kg	55 U	NS	NS	NS	60 U	59 U	NS	NS
Dinoseb	µg/Kg	27 U	NS	NS	NS	30 U	30 U	NS	NS
MCPA	µg/Kg	5500 U	NS	NS	NS	6000 U	5900 U	NS	NS
MCPP	µg/Kg	5500 U	NS	NS	NS	6000 U	5900 U	NS	NS
<b>METALS</b>									
Aluminum	mg/kg	19600	NS	NS	NS	18400	14100	NS	NS
Antimony	mg/kg	11.1 U J	NS	NS	NS	9.9 U J	7.4 J	NS	NS
Arsenic	mg/kg	4.3	NS	NS	NS	10.8	8.6	NS	NS
Barium	mg/kg	63.9	NS	NS	NS	136	111	NS	NS
Beryllium	mg/kg	1.1 R	NS	NS	NS	1 R	0.87 R	NS	NS
Cadmium	mg/kg	3.7	NS	NS	NS	3.8	3.7	NS	NS
Calcium	mg/kg	4110 J	NS	NS	NS	24700 J	79200 J	NS	NS
Chromium	mg/kg	29.7	NS	NS	NS	28.3 J	22.4 J	NS	NS
Cobalt	mg/kg	13.7	NS	NS	NS	11.8	10.8	NS	NS
Copper	mg/kg	15.6	NS	NS	NS	64.8	146	NS	NS
Iron	mg/kg	35500	NS	NS	NS	34400	30700	NS	NS
Lead	mg/kg	8.2 J	NS	NS	NS	160	202	NS	NS
Magnesium	mg/kg	7230	NS	NS	NS	7810	8510	NS	NS
Manganese	mg/kg	449	NS	NS	NS	670	495	NS	NS
Mercury	mg/kg	0.04 U	NS	NS	NS	0.76	0.17	NS	NS
Nickel	mg/kg	42.4	NS	NS	NS	35.5 J	39.9 J	NS	NS
Potassium	mg/kg	2060	NS	NS	NS	2610	2110	NS	NS
Selenium	mg/kg	0.19 U J	NS	NS	NS	0.23 U J	0.22 U J	NS	NS
Silver	mg/kg	0.76 J	NS	NS	NS	0.63 U	0.56 J	NS	NS
Sodium	mg/kg	62.9 J	NS	NS	NS	113 J	141 J	NS	NS
Thallium	mg/kg	0.52 U	NS	NS	NS	0.84 U	0.61 U	NS	NS
Vanadium	mg/kg	24.8	NS	NS	NS	29.7	24.1	NS	NS
Zinc	mg/kg	111	NS	NS	NS	797	1210	NS	NS
Cyanide	mg/kg	0.65 U	NS	NS	NS	0.72 U	0.63 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-31	B-31	B-31	B-31	B-31	B-31
	DEPTH	2-4	2-4	4-6	4-6	6-8	6-8
	DATE	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91
	ES ID	S1205-98(3)	S1205-98RE(3,4)	S1205-99	S1205-99R	S1205-100(2)	S1205-100RE(4)
	LAB ID	150254	150254	150255	150255	150256	150256
	UNITS						
VOCs							
Chloromethane	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Bromomethane	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Vinyl Chloride	µg/Kg	12 U	NS	66	NS	370	320
Chloroethane	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Methylene Chloride	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Acetone	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Carbon Disulfide	µg/Kg	6 U	NS	120	NS	32 U	32 U
1,1-Dichloroethene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
1,1-Dichloroethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
1,2-Dichloroethene (total)	µg/Kg	6 U	NS	660	NS	630	600
Chloroform	µg/Kg	5 J	NS	28 U	NS	32 U	32 U
1,2-Dichloroethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
2-Butanone	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
1,1,1-Trichloroethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Carbon Tetrachloride	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Vinyl Acetate	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Bromochloromethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
1,2-Dichloropropane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
cis-1,3-Dichloropropene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Trichloroethene	µg/Kg	5 J	NS	2400 E	NS	640	610
Dibromochloromethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
1,1,2-Trichloroethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Benzene	µg/Kg	6 U	NS	6 J	NS	32 U	32 U
trans-1,3-Dichloropropene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Bromoform	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
4-Methyl-2-Pentanone	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
2-Hexanone	µg/Kg	12 U	NS	58 U	NS	63 U	63 U
Tetrachloroethene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
1,1,2,2-Tetrachloroethane	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Toluene	µg/Kg	6 U	NS	85	NS	32 U	32 U
Chlorobenzene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Ethylbenzene	µg/Kg	6 U	NS	23 J	NS	32 U	32 U
Styrene	µg/Kg	6 U	NS	28 U	NS	32 U	32 U
Xylene (total)	µg/Kg	6 U	NS	69	NS	32 U	32 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-31	B-31	B-31	B-31	B-31	B-31
VOCs	DEPTH	2-4	2-4	4-8	4-8	6-8	6-8
	DATE	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91
	ES ID	S1205-98(3)	S1205-98RE(3,4)	S1205-99	S1205-99R	S1205-100(2)	S1205-100RE(4)
	LAB ID	150254	150254	150255	150255	150256	150256
UNITS							
SEMIVOLATILES							
Phenol	µg/Kg	780 U	NS	720 U	720 U	14000 J	NS
bis(2-Chloroethyl) ether	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2-Chlorophenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
1,3-Dichlorobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
1,4-Dichlorobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Benzyl Alcohol	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
1,2-Dichlorobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2-Methylphenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
bis(2-Chloroisopropyl) ether	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
4-Methylphenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
N-Nitroso-d-n-propylamine	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Hexachloroethane	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Nitrobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Isophorone	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2-Nitrophenol	µg/Kg	780 U	NS	720 U	720 U	1300 J	NS
2,4-Dimethylphenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
Benzoic acid	µg/Kg	3800 U	NS	3500 U J	3500 U J	1500 J	NS
bis(2-Chloroethoxy) methane	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2,4-Dichlorophenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
1,2,4-Trichlorobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Naphthalene	µg/Kg	780 U	NS	180 J	200 J	4100 U J	NS
4-Chloroaniline	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Hexachlorobutadiene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
4-Chloro-3-methylphenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
2-Methylnaphthalene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Hexachlorocyclopentadiene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2,4,6-Trichlorophenol	µg/Kg	780 U	NS	720 U	720 U	4100 U J	NS
2,4,5-Trichlorophenol	µg/Kg	3500 U	NS	3500 U	3500 U	20000 U J	NS
2-Chloronaphthalene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2-Nitroaniline	µg/Kg	3800 U	NS	3500 U J	3500 U J	20000 U J	NS
Dimethylphthalate	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Acenaphthylene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2,6-Dinitrotoluene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
3-Nitroaniline	µg/Kg	3800 U	NS	3500 U J	3500 U J	20000 U J	NS
Acenaphthene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
2,4-Dinitrophenol	µg/Kg	3800 U	NS	3500 U	3500 U	20000 U J	NS
4-Nitrophenol	µg/Kg	3800 U	NS	3500 U	3500 U	1600 J	NS
Dibenzofuran	µg/Kg	780 U	NS	110 U J	720 U J	4100 U J	NS
2,4-Dinitrotoluene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Diethylphthalate	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
4-Chlorophenyl-phenylether	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Fluorene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
4-Nitroaniline	µg/Kg	3800 U	NS	3500 U J	3500 U J	20000 U J	NS
4,6-Dinitro-2-methylphenol	µg/Kg	3800 U	NS	720 U	3500 U	20000 U J	NS
N-Nitrosodiphenylamine (1)	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
4-Bromophenyl-phenylether	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Hexachlorobenzene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Pentachlorophenol	µg/Kg	3800 U	NS	3500 U	3500 U	20000 U J	NS
Phenanthrene	µg/Kg	780 U	NS	110 U J	110 U J	4100 U J	NS
Anthracene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Fluoranthene	µg/Kg	150 J	NS	120 U J	110 U J	4100 U J	NS
Pyrene	µg/Kg	110 J	NS	140 U J	130 U J	4100 U J	NS
Butylbenzylphthalate	µg/Kg	780 U	NS	390 U J	720 U J	4100 U J	NS
3,3'-Dichlorobenzidine	µg/Kg	1600 U	NS	1400 U J	1400 U J	8100 U J	NS
Benzo(a)anthracene	µg/Kg	100 J	NS	720 U J	720 U J	4100 U J	NS
Chrysene	µg/Kg	100 J	NS	83 U J	110 U J	4100 U J	NS
bis(2-Ethylhexyl)phthalate	µg/Kg	170 J	NS	220 U J	210 U J	4100 U J	NS
Di-n-octylphthalate	µg/Kg	780 U	NS	250 U J	720 U J	4100 U J	NS
Benzo(b)fluoranthene	µg/Kg	100 J	NS	720 U J	720 U J	4100 U J	NS
Benzo(k)fluoranthene	µg/Kg	82 J	NS	720 U J	720 U J	4100 U J	NS
Benzo(a)pyrene	µg/Kg	86 J	NS	720 U J	720 U J	4100 U J	NS
Indeno(1,2,3-cd)pyrene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Dibenz(a,h)anthracene	µg/Kg	780 U	NS	720 U J	720 U J	4100 U J	NS
Benzo(g,h,i)perylene	µg/Kg	72 J	NS	720 U J	720 U J	4100 U J	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-31	B-31	B-31	B-31	B-31	B-31
	DEPTH	2-4	2-4	4-6	4-6	6-8	6-8
	DATE	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91	12/05/91
	ES ID	S1205-98(3)	S1205-98RE (3,4)	S1205-99	S1205-99R	S1205-100 (2)	S1205-100RE(4)
	LAB ID	150254	150254	150255	150255	150256	150256
	UNITS						
<b>VOCs</b>							
<b>PESTICIDES/PCBs</b>							
alpha-BHC	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
beta-BHC	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
delta-BHC	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
gamma-BHC (Lindane)	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
Heptachlor	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
Aldrin	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
Heptachlor epoxide	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
Endosulfan I	µg/Kg	19 U	19 U J	17 U	17 U J	20 U	20 U J
Dieldrin	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
4,4'-DDE	µg/Kg	57	71 J	35 U	35 U J	40 U	40 U J
Endrin	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
Endosulfan II	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
4,4'-DDD	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
Endosulfan sulfate	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
4,4'-DDT	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
Methoxychlor	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Endrin ketone	µg/Kg	38 U	38 U J	35 U	35 U J	40 U	40 U J
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
gamma-Chlordane	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Toxaphene	µg/Kg	380 U	380 U J	350 U	350 U J	400 U	400 U J
Aroclor-1016	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Aroclor-1221	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Aroclor-1232	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Aroclor-1242	µg/Kg	1000 R	190 U J	570 R	170 U J	450 R	200 U J
Aroclor-1248	µg/Kg	190 U	190 U J	170 U	170 U J	200 U	200 U J
Aroclor-1254	µg/Kg	380 U	380 U J	350 U	350 U J	400 U	400 U J
Aroclor-1260	µg/Kg	380 U	380 U J	350 U	350 U J	400 U	400 U J
<b>HERBICIDES</b>							
2,4-D	µg/Kg	60 U	NS	54 U	NS	61 U	NS
2,4-DB	µg/Kg	60 U	NS	54 U	NS	61 U	NS
2,4,5-T	µg/Kg	6 U	NS	5.4 U	NS	6.1 U	NS
2,4,5-TP (Silvex)	µg/Kg	6 U	NS	5.4 U	NS	6.1 U	NS
Dalapon	µg/Kg	140 U	NS	130 U	NS	150 U	NS
Dicamba	µg/Kg	6 U	NS	5.4 U	NS	6.1 U	NS
Dichloroprop	µg/Kg	60 U	NS	54 U	NS	61 U	NS
Dinoseb	µg/Kg	30 U	NS	27 U	NS	31 U	NS
MCPA	µg/Kg	6000 U	NS	6200 U	NS	6100 U	NS
MCPP	µg/Kg	6000 U	NS	6200 U	NS	6100 U	NS
<b>METALS</b>							
Aluminum	mg/kg	25500	NS	15000	NS	21200	NS
Antimony	mg/kg	8.7 U J	NS	11.4 U J	NS	13.1 U J	NS
Arsenic	mg/kg	45.8	NS	3.9	NS	2.6	NS
Barium	mg/kg	121	NS	52.2	NS	61.1	NS
Beryllium	mg/kg	0.98 R	NS	0.86 R	NS	1.1 R	NS
Cadmium	mg/kg	4.3	NS	3.5	NS	4.4	NS
Calcium	mg/kg	17800 J	NS	25500 J	NS	3460	NS
Chromium	mg/kg	34.8	NS	28.8	NS	30.4	NS
Cobalt	mg/kg	15.4	NS	14.4	NS	18.1	NS
Copper	mg/kg	76.1	NS	31.6	NS	26.4	NS
Iron	mg/kg	41800	NS	29000	NS	44100	NS
Lead	mg/kg	696	NS	66.5	NS	15.3 J	NS
Magnesium	mg/kg	9290	NS	7020	NS	7010	NS
Manganese	mg/kg	724	NS	337	NS	541	NS
Mercury	mg/kg	0.17	NS	0.05 J	NS	0.05 U	NS
Nickel	mg/kg	40.9	NS	51.1	NS	47	NS
Potassium	mg/kg	2330	NS	2170	NS	1280	NS
Selenium	mg/kg	0.23 U J	NS	0.24 J	NS	0.23 U J	NS
Silver	mg/kg	0.55 U	NS	0.9 J	NS	0.84 U	NS
Sodium	mg/kg	201 J	NS	141 J	NS	326 J	NS
Thallium	mg/kg	0.64 U	NS	0.51 U	NS	0.66 U	NS
Vanadium	mg/kg	28.3	NS	22 R	NS	25.3	NS
Zinc	mg/kg	472	NS	393	NS	93.5	NS
Cyanide	mg/kg	0.63 U	NS	0.64 U	NS	0.73 U	NS



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-32	B-32	B-32	B-32	B-32	B-33	B-33	B-34	
	DEPTH(FT.)	0-2	2-4	4-6	6-7.8	0-2	2-3.5	0-2	B-34	
	DATE	04/27/93	04/27/93	04/27/93	04/27/93	12/14/92	12/14/92	12/14/92	2-2.75	
	ES ID	B32-1	B32-2	B32-3	B32-4	B33-1	B33-2	B34-1	B34-2	
	LAB ID	183092	183093	183094	183095	178253	178254	178255	178256	
	UNITS									
VOCs										
Chloromethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Bromomethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Vinyl Chloride	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Chloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Methylene Chloride	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Acetone	µg/Kg	17 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Carbon Disulfide	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,1-Dichloroethene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,1-Dichloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloroethene (total)	µg/Kg	110	12 U	1300 U	240 J	12 U	12 U	12 U	12 U	12 U
Chloroform	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
2-Butanone	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,1,1-Trichloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Carbon Tetrachloride	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,2-Dichloropropane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
cis-1,3-Dichloropropene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Trichloroethene	µg/Kg	140	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Dibromochloromethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,1,2-Trichloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Benzene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
trans-1,3-Dichloropropene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Bromoform	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
4-Methyl-2-Pentanone	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
2-Hexanone	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Tetrachloroethene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
1,1,2,2-Tetrachloroethane	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Toluene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Chlorobenzene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Ethylbenzene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Styrene	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U
Xylene (total)	µg/Kg	11 U	12 U	1300 U	1300 U	12 U	12 U	12 U	12 U	12 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-32	B-32	B-32	B-32	B-33	B-33	B-34	B-34	
	DEPTH(FT.)	0-2	2-4	4-6	6-7.8	0-2	2-3.5	0-2	2-7.5	
	DATE	04/27/93	04/27/93	04/27/93	04/27/93	12/14/92	12/14/92	12/14/92	12/14/92	
	ES ID	B32-1	B32-2	B32-3	B32-4	B33-1	B33-2	B34-1	B34-2	
	LAB ID	183092	183093	183094	183095	178253	178254	178255	178258	
	UNITS									
VOCs										
Semivolatiles										
Phenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
bis(2-Chloroethyl) ether	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2-Chlorophenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
1,3-Dichlorobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
1,4-Dichlorobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2-Methylphenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,2'-oxybis(1-Chloropropane)	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
4-Methylphenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
N-Nitroso-d-n-propylamine	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Hexachloroethane	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Nitrobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Isophorone	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2-Nitrophenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4-Dimethylphenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Benzic acid	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4-Dichlorophenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
1,2,4-Trichlorobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Naphthalene	µg/Kg	380 U	400 U	440 U	290 J	420 U	380 U	400 U	380 U	
4-Chloroaniline	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Hexachlorobutadiene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
4-Chloro-3-methylphenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2-Methylnaphthalene	µg/Kg	380 U	400 U	440 U	320 J	420 U	380 U	400 U	380 U	
Hexachlorocyclopentadiene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4,6-Trichlorophenol	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4,5-Trichlorophenol	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
2-Chloronaphthalene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2-Nitroaniline	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
Dimethylphthalate	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Acenaphthylene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,6-Dinitrotoluene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
3-Nitroaniline	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
Acenaphthene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4-Dinitrophenol	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
4-Nitrophenol	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
Dibenzofuran	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
2,4-Dinitrotoluene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Diethylphthalate	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
4-Chlorophenyl-phenylether	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Fluorene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
4-Nitroaniline	µg/Kg	870 U	970 U	1100 U	860 U	1000 U	910 U	970 U	880 U	
4,6-Dinitro-2-methylphenol	µg/Kg	870 U	970 U	1100 U	880 U	1000 U	910 U	970 U	880 U	
N-Nitrosodiphenylamine	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
4-Bromophenyl-phenylether	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Hexachlorobenzene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Pentachlorophenol	µg/Kg	870 U	970 U	1100 U	880 U	1000 U	910 U	970 U	880 U	
Phenanthrene	µg/Kg	380 U	400 U	440 U	140 J	20 J	380 U	51 J	360 U	
Anthracene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	19 J	360 U	
Carbazole	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	360 U	
Di-n-butylphthalate	µg/Kg	380 U	400 U	440 U	180 J	420 U	380 U	400 U	360 U	
Fluoranthene	µg/Kg	80 J	400 U	440 U	350 U	28 J	380 U	82 J	360 U	
Pyrene	µg/Kg	74 J	400 U	440 U	130 J	30 J	380 U	64 J	16 J	
Butylbenzylphthalate	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	360 U	
3,3'-Dichlorobenzidine	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Benzo(a)anthracene	µg/Kg	58 J	400 U	440 U	350 U	18 J	380 U	42 J	380 U	
Chrysene	µg/Kg	88 J	400 U	440 U	350 U	25 J	380 U	51 J	13 J	
bis(2-Ethylhexyl)phthalate	µg/Kg	53 J	110 J	200 J	440	400 J	380 U	850	780	
Di-n-octylphthalate	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Benzo(b)fluoranthene	µg/Kg	87 J	400 U	440 U	350 U	420 U	380 U	39 J	360 U	
Benzo(k)fluoranthene	µg/Kg	49 J	400 U	440 U	350 U	420 U	380 U	39 J	360 U	
Benzo(a)pyrene	µg/Kg	58 J	400 U	440 U	350 U	420 U	380 U	36 J	360 U	
Indeno(1,2,3-cd)pyrene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	34 J	360 U	
Dibenz(a,h)anthracene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	400 U	380 U	
Benzo(g,h,i)perylene	µg/Kg	380 U	400 U	440 U	350 U	420 U	380 U	37 J	360 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.)	SOIL B-32	SOIL B-32	SOIL B-32	SOIL B-32	SOIL B-33	SOIL B-33	SOIL B-33	SOIL B-34	SOIL B-34
DATE	04/27/93	04/27/93	04/27/93	04/27/93	04/27/93	12/14/92	12/14/92	12/14/92	12/14/92
ES ID	B32-1	B32-2	B32-3	B32-4	B33-1	B33-2	B34-1	B34-2	B34-2
LAB ID	183092	183093	183094	183095	176253	176254	176255	176256	176256
UNITS									
<b>COMPOUND</b>									
<b>VOCs</b>									
<b>Pesticides/PCBs</b>									
alpha-BHC	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
beta-BHC	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
delta-BHC	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
gamma-BHC (Lindane)	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Heptachlor	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Aldrin	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Heptachlor epoxide	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Endosulfan I	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Dieldrin	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
4,4'-DDE	µg/Kg	6.8	4 U	4.4 U	3.6 U	2.5 J	3.8 U	4.7 J	3.7 U
Endrin	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
Endosulfan II	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
4,4'-DDD	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
Endosulfan sulfate	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
4,4'-DDT	µg/Kg	1.8 J	4 U	4.4 U	3.6 U	3.8 J	3.8 U	9	2.5 J
Methoxychlor	µg/Kg	19 U	21 U	23 U	19 U	22 U	19 U	21 U	19 U
Endrin ketone	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
Endrin aldehyde	µg/Kg	3.8 U	4 U	4.4 U	3.6 U	4.2 U	3.8 U	4 U	3.7 U
alpha-Chlordane	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
gamma-Chlordane	µg/Kg	1.9 U	2.1 U	2.3 U	1.9 U	2.2 U	1.9 U	2.1 U	1.9 U
Toxaphene	µg/Kg	190 U	210 U	230 U	190 U	220 U	190 U	210 U	190 U
Aroclor-1018	µg/Kg	38 U	40 U	44 U	38 U	42 U	38 U	40 U	37 U
Aroclor-1221	µg/Kg	74 U	81 U	90 U	74 U	86 U	77 U	81 U	74 U
Aroclor-1232	µg/Kg	38 U	40 U	44 U	38 U	42 U	38 U	40 U	37 U
Aroclor-1242	µg/Kg	38 U	40 U	44 U	38 U	42 U	38 U	40 U	37 U
Aroclor-1248	µg/Kg	38 U	40 U	29 J	140 J	42 U	38 U	40 U	37 U
Aroclor-1254	µg/Kg	38 U	40 U	44 U	36 U	42 U	38 U	40 U	37 U
Aroclor-1260	µg/Kg	38 U	40 U	170	320 J	42 U	38 U	40 U	37 U
<b>Herbicides</b>									
2,4-D	µg/Kg	58 U	61 U	68 U	55 U	64 U	57 U	61 U	55 U
2,4-DB	µg/Kg	58 U	61 U	68 U	55 U	64 U	57 U	61 U	55 U
2,4,5-T	µg/Kg	5.8 U	6.1 U	6.8 U	5.5 U	6.4 U	5.7 U	6.1 U	5.5 U
2,4,5-TP (Silvex)	µg/Kg	5.8 U	6.1 U	6.8 U	5.5 U	6.4 U	5.7 U	6.1 U	5.5 U
Dalapon	µg/Kg	140 U	150 U	170 U	140 U	150 U	140 U	150 U	130 U
Dicamba	µg/Kg	5.8 U	6.1 U	6.8 U	5.5 U	6.4 U	5.7 U	6.1 U	5.5 U
Dichloroprop	µg/Kg	58 U	61.0 U	68 U	55 U	64 U	57 U	61 U	55 U
Dinoseb	µg/Kg	28 U	31.0 U	34 U	28 U	32 U	29 U	30 U	27 U
MCPA	µg/Kg	5800 U	6100.0 U	6800 U	5500 U	6400 U	5700 U	6100 U	5500 U
MCPP	µg/Kg	5800 U	6100.0 U	6800 U	5500 U	6400 U	5700 U	6100 U	5500 U
<b>Metals</b>									
Aluminum	mg/Kg	13900	14400	16800	13900	19700	16000	21400	17200
Antimony	mg/Kg	5.7 UJ	5.7 UJ	4.9 UJ	3.7 UJ	6.9 UJ	7.7 UJ	7.5 UJ	7.7 UJ
Arsenic	mg/Kg	4.5	4.5	5	2.7	2	1.6	3.6	1.9
Barium	mg/Kg	85.1	105	81.8	46.6	108 J	58.9 J	99.1 J	65.9 J
Beryllium	mg/Kg	0.89 J	0.81 J	0.8 J	0.62 J	1	0.74	1.1	0.76
Cadmium	mg/Kg	0.41 U	0.42 U	0.36 U	0.27 U	0.4 U	0.44 U	0.43 U	0.44 U
Calcium	mg/Kg	27900	6740	4310	3910	4620	46100	4340	41300
Chromium	mg/Kg	25.5	22.9	27.4	22.7	32 J	26.6 J	35 J	28.5 J
Cobalt	mg/Kg	15.8	11.2	18.5	12	17.1	17.3	16.5	15.5
Copper	mg/Kg	38.8	32.8	29.8	17.3	24.4	18.7	26	18.4
Iron	mg/Kg	29800	26500	34900	28300	36800	35300	40200	33400
Lead	mg/Kg	44.8	36.1	15.5	5.6	19.2	6.7 R	9.1 R	9.1 R
Magnesium	mg/Kg	7520	6030	6200	5710	6550	7260	7020	7200
Manganese	mg/Kg	499	799	430	513	1070	780	857	852
Mercury	mg/Kg	0.21	0.04 U	0.05 U	0.03 U	0.06 R	0.04 R	0.09 R	0.06 R
Nickel	mg/Kg	49.7	29.1	46.2	36	45.6	43.7	49.5	42.6
Potassium	mg/Kg	1450	1550	1320	904	1580	1370	1520	1410
Selenium	mg/Kg	0.24 J	0.19 U	0.23 U	0.17 U	0.15 U	0.48 J	0.58 J	0.69
Silver	mg/Kg	0.89 U	0.9 U	0.76 U	0.58 U	0.41 U	0.45 U	0.44 U	0.46 U
Sodium	mg/Kg	118 J	107 U	91 U	88.7 U	52 J	162 J	55 J	155 J
Thallium	mg/Kg	0.6 U	0.56 U	0.89 U	0.5 U	0.35 U	0.33 U	0.37 U	0.32 U
Vanadium	mg/Kg	19.3	23.7	24.7	17	26.9	20.9	29	22.4
Zinc	mg/Kg	194	129	132	79.1	114 J	87.8 J	200 J	84.2 J
Cyanide	mg/Kg	0.68 U	0.71 U	0.81 U	0.68 U	0.78 U	0.65 U	0.7 U	0.63 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-35	B-35	B-35	B-35	B-35	B-35	B-36	B-36	
	DEPTH(FT.)	0-2	0-2	2-4	2-4	4-5.1	0-2	2-4	4-6	
	DATE	12/15/92	12/15/92	12/15/92	12/15/92	12/15/92	04/27/93	04/27/93	04/27/93	
	ES ID	B35-1	B35-1RE	B35-2	B35-2RE	B35-3	B36-1	B36-2	B36-3	
	LAB ID	176442	176442R1	176443	176443R1	176444	183096	183097	183098	
	UNITS									
VOCs										
Chloromethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Bromomethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Vinyl Chloride	µg/Kg	13 U J	13 U J	13 U	NS	8 J	12 U	12 U	53 U	
Chloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Methylene Chloride	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Acetone	µg/Kg	13 U J	13 U J	23 U	NS	20 U	12 U	130	87	
Carbon Disulfide	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,1-Dichloroethane	µg/Kg	13 U J	13 U J	3 J	NS	140	12 U	12 U	53 U	
1,1-Dichloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,2-Dichloroethane (total)	µg/Kg	13 U J	13 U J	13 J	NS	200	12 U	12 U	53 U	
Chloroform	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,2-Dichloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
2-Butanone	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,1,1-Trichloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	17	53 U	
Carbon Tetrachloride	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Vinyl acetate	µg/Kg	NS	NS	NS	NS	12 U	12 U	12 U	53 U	
Bromodichloromethane	µg/Kg	13 U J	13 U J	13 U	NS	NS	NS	NS	NS	
1,2-Dichloropropane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
cis-1,3-Dichloropropene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Trichloroethene	µg/Kg	44 J	45 J	5 J	NS	110	12 U	12 U	53 U	
Dibromochloromethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,1,2-Trichloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Benzene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
trans-1,3-Dichloropropene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Bromoform	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
4-Methyl-2-Pentanone	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
2-Hexanone	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Tetrachloroethene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
1,1,2,2-Tetrachloroethane	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Toluene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	3 J	11 J	
Chlorobenzene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Ethylbenzene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	8 J	
Styrene	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	53 U	
Xylene (total)	µg/Kg	13 U J	13 U J	13 U	NS	12 U	12 U	12 U	91	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-35	B-35	B-35	B-35	B-35	B-35	B-36	B-36	B-36
	DEPTH(FT.)	0-2	0-2	2-4	2-4	4-5.1	0-2	2-4	4-6	4-6
	DATE	12/15/92	12/15/92	12/15/92	12/15/92	12/15/92	04/27/93	04/27/93	04/27/93	04/27/93
	ES ID	B35-1	B35-1RE	B35-2	B35-2RE	B35-3	B36-1	B36-2	B36-3	B36-3
	LAB ID	176442	176442R1	176443	176443R1	176444	183096	183097	183098	183098
	UNITS									
VOCs										
SemiVolatiles										
Phenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
bis(2-Chloroethyl) ether	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2-Chlorophenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
1,3-Dichlorobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
1,4-Dichlorobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Benzyl alcohol	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2-Methylphenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,2'-oxybis(1-Chloropropane)	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
4-Methylphenol	µg/Kg	400 UJ	400 UJ	8100 UJ	29 J	410 U	370 U	410 U	770 U	770 U
N-Nitroso-d-n-propylamine	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Hexachloroethane	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Nitrobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Isophorone	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2-Nitrophenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,4-Dimethyl phenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Benzotic acid	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,4-Dichlorophenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
1,2,4-Trichlorobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Naphthalene	µg/Kg	52 J	23 J	8100 UJ	25 J	410 U	370 U	410 U	770 U	770 U
4-Chloroaniline	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Hexachlorobutadiene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
4-Chloro-3-methylphenol	µg/Kg	400 UJ	8100 UJ	400 UJ	410 UJ	380 U	370 U	410 U	770 U	770 U
2-Methylnaphthalene	µg/Kg	20 J	19 J	8100 UJ	20 J	410 U	370 U	410 U	3600	3600
Hexachlorocyclopentadiene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,4,6-Trichlorophenol	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,4,5-Trichlorophenol	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
2-Chloronaphthalene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2-Nitroaniline	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
Dimethylphthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Acenaphthylene	µg/Kg	14 J	400 UJ	8100 UJ	400 UJ	410 U	54 J	39 J	770 U	770 U
2,6-Dinitrotoluene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
3-Nitroaniline	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
Acenaphthene	µg/Kg	40 J	36 J	8100 UJ	13 J	410 U	37 J	410 U	770 U	770 U
2,4-Dinitrophenol	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
4-Nitrophenol	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
Dibenzofuran	µg/Kg	24 J	24 J	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
2,4-Dinitrotoluene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Diethylphthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
4-Chlorophenyl-phenyl ether	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Fluorene	µg/Kg	38 J	35 J	8100 UJ	16 J	410 U	43 J	410 U	470 J	470 J
4-Nitroaniline	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
4,6-Dinitro-2-methylphenol	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
N-Nitrosodiphenylamine	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
4-Bromophenyl-phenyl ether	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Hexachlorobenzene	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Pentachlorophenol	µg/Kg	980 UJ	980 UJ	20000 UJ	980 UJ	990 U	910 U	980 U	1900 U	1900 U
Phenanthrene	µg/Kg	480 J	430 J	330 J	280 J	410 U	300 J	230 J	1200	1200
Anthracene	µg/Kg	75 J	89 J	8100 UJ	87 J	410 U	81 J	410 U	770 U	770 U
Carbazole	µg/Kg	180 J	180 J	8100 UJ	100 J	410 U	370 U	410 U	770 U	770 U
Di-n-butylphthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	23 J	280 J	370 U	220 J	330 J	330 J
Fluoranthene	µg/Kg	530 J	580 J	550 J	480 J	410 U	630	210 J	180 J	180 J
Pyrene	µg/Kg	830 J	500 J	800 J	710 J	410 U	510	190 J	230 J	230 J
Butylbenzylphthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	130 J	410 U	370 U	410 U	770 U	770 U
3,3'-Dichlorobenzidine	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Benzo(a)anthracene	µg/Kg	220 J	220 J	8100 UJ	430 J	410 U	480	150 J	770 U	770 U
Chrysene	µg/Kg	290 J	290 J	420 J	450 J	410 U	430	100 J	770 U	770 U
bis(2-Ethylhexyl)phthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	340 J	1700	190 J	370 J	700 J	700 J
Di-n-octylphthalate	µg/Kg	400 UJ	400 UJ	8100 UJ	400 UJ	410 U	370 U	410 U	770 U	770 U
Benzo(b)fluoranthene	µg/Kg	180 J	220 J	420 J	380 J	410 U	640	130 J	770 U	770 U
Benzo(k)fluoranthene	µg/Kg	210 J	210 J	8100 UJ	380 J	410 U	400	130 J	770 U	770 U
Benzo(a)pyrene	µg/Kg	100 J	120 J	8100 UJ	300 J	410 U	470	120 J	770 U	770 U
Indeno(1,2,3-cd)pyrene	µg/Kg	89 J	110 J	8100 UJ	200 J	410 U	280 J	110 J	770 U	770 U
Dibenz(a,h)anthracene	µg/Kg	46 J	29 J	8100 UJ	86 J	410 U	140 J	410 U	770 U	770 U
Benzo(g,h,i)perylene	µg/Kg	31 J	42 J	8100 UJ	58 J	410 U	150 J	410 U	770 U	770 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID	SOIL B-35 0-2 12/15/92 B35-1 176442	SOIL B-35 0-2 12/15/92 B35-1RE 176442R1	SOIL B-35 2-4 12/15/92 B35-2 176443	SOIL B-35 2-4 12/15/92 B35-2RE 176443R1	SOIL B-35 4-5.1 12/15/92 B35-3 176444	SOIL B-36 0-2 04/27/93 B36-1 183096	SOIL B-36 2-4 04/27/93 B36-2 183097	SOIL B-36 4-6 04/27/93 B36-3 183098
<b>COMPOUND</b>								
<b>VOCs</b>								
<b>Pesticides/PCBs</b>								
alpha-BHC	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
beta-BHC	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.6 J	4.2 U
delta-BHC	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	2.3 J
gamma-BHC (Lindane)	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
Heptachlor	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
Aldrin	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
Heptachlor epoxide	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
Endosulfan I	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	1.9 U	4.2 U
Dieldrin	µg/Kg	4 U	NS	4 U	NS	4 U	3.7 U	6.1 U
4,4'-DDE	µg/Kg	3.9 J	NS	5.6 J	NS	4 U	27	2.3 J
Endrin	µg/Kg	4 U	NS	4 U	NS	4 U	3.7 U	4.1 J
Endosulfan II	µg/Kg	4 U	NS	4 U	NS	4 U	2.7 J	8.1 U
4,4'-DDD	µg/Kg	4 U	NS	7.6	NS	4 U	16	74
Endosulfan sulfate	µg/Kg	2.2 J	NS	4 U	NS	4 U	25.5 J	8.1 U
4,4'-DDT	µg/Kg	3.9 J	NS	4 U	NS	4 U	7.1 J	13 J
Methoxychlor	µg/Kg	20 U	NS	21 U	NS	21 U	19 U	42 U
Endrin ketone	µg/Kg	4 U	NS	4 U	NS	4 U	5.5 J	6.1 U
Endrin aldehyde	µg/Kg	4 U	NS	4 U	NS	4 U	3.7 U	6.1 U
alpha-Chlordane	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	3.1 J	4.2 U
gamma-Chlordane	µg/Kg	2 U	NS	2.1 U	NS	2.1 U	2.1	4.2 U
Toxaphene	µg/Kg	200 U	NS	210 U	NS	210 U	190 U	420 U
Aroclor-1016	µg/Kg	40 U	NS	40 U	NS	40 U	37 U	81 U
Aroclor-1221	µg/Kg	60 U	NS	82 U	NS	82 U	76 U	160 U
Aroclor-1232	µg/Kg	40 U	NS	40 U	NS	40 U	37 U	81 U
Aroclor-1242	µg/Kg	40 U	NS	40 U	NS	40 U	37 U	81 U
Aroclor-1248	µg/Kg	40 U	NS	40 U	NS	40 U	37 U	81 U
Aroclor-1254	µg/Kg	40 U	NS	25 J	NS	40 U	37 U	81 U
Aroclor-1260	µg/Kg	40 U	NS	40 U	NS	40 U	37 U	350 J
<b>Herbicides</b>								
2,4-D	µg/Kg	60 U	NS	61 U	NS	61 U	57 U	62 U
2,4-DB	µg/Kg	60 U	NS	61 U	NS	61 U	57 U	62 U
2,4,5-T	µg/Kg	6 U	NS	6.1 U	NS	6.1 U	5.7 U	6.2 U
2,4,5-TP (Silvex)	µg/Kg	6 U	NS	6.1 U	NS	6.1 U	5.7 U	6.2 U
Dalapon	µg/Kg	140 U	NS	150 U	NS	150 U	140 U	150 U
Dicamba	µg/Kg	6 U	NS	6.1 U	NS	6.1 U	5.7 U	6.2 U
Dichloroprop	µg/Kg	60 U	NS	61 U	NS	61 U	57.0 U	62 U
Dinoseb	µg/Kg	30 U	NS	31 U	NS	30 U	29.0 U	31 U
MCPA	µg/Kg	6000 U	NS	6100 U	NS	6100 U	5700.0 U	6200 U
MCPP	µg/Kg	6000 U	NS	6100 U	NS	6100 U	5700.0 U	6200 U
<b>Metals</b>								
Aluminum	mg/Kg	14300	NS	15000	NS	22000	11700	16200
Antimony	mg/Kg	8 J	NS	9.1 UJ	NS	7.2 UJ	3.8 UJ	4.7 UJ
Arsenic	mg/Kg	1.7	NS	3.8	NS	2.1	9.8	8.1
Barium	mg/Kg	183 J	NS	182 J	NS	98.1 J	73.7	133
Beryllium	mg/Kg	0.59 J	NS	0.7 J	NS	1.1	0.57 J	0.85 J
Cadmium	mg/Kg	0.71	NS	0.6 J	NS	0.42 U	0.39 J	0.35 U
Calcium	mg/Kg	25200	NS	30400	NS	5010	40400	7650
Chromium	mg/Kg	28.9 J	NS	34.2 J	NS	36.9 J	26.5	24.8
Cobalt	mg/Kg	10.8	NS	11	NS	17.7	11.5	12
Copper	mg/Kg	75.5	NS	73.2	NS	23.3	51.8	27.1
Iron	mg/Kg	28600	NS	30200	NS	42900	36900	28100
Lead	mg/Kg	128	NS	203	NS	25.4	110	57.9
Magnesium	mg/Kg	7380	NS	7410	NS	7690	7020	5320
Manganese	mg/Kg	476	NS	443	NS	1250	472	669
Mercury	mg/Kg	0.39	NS	0.76	NS	0.06 R	0.33	0.14
Nickel	mg/Kg	35.4	NS	38.1	NS	54.4	42.9	32.8
Potassium	mg/Kg	1130	NS	1800	NS	1680	1210	1420
Selenium	mg/Kg	1	NS	1.1	NS	0.67 J	0.23 U	0.59 J
Silver	mg/Kg	0.4 U	NS	0.82 J	NS	0.43 U	0.82 J	0.75 U
Sodium	mg/Kg	203 J	NS	268 J	NS	248 J	120 J	88.9 U
Thallium	mg/Kg	0.33 U	NS	0.39 U	NS	0.35 U	0.68 U	0.43 U
Vanadium	mg/Kg	21.3	NS	22.8	NS	28.9	23.9	25.5
Zinc	mg/Kg	6290	NS	4210	NS	116 J	252	108
Cyanide	mg/Kg	0.49 U	NS	2.2	NS	0.67 U	0.68 U	0.74 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-36	B-36	B-37	B-37	B-37	B-37	B-37	B-36
DEPTH(FT.)	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID
LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID
UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOCs			DUP B36-3				DUP B37-3		
Chloromethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Bromomethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Vinyl Chloride	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Chloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Methylene Chloride	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Acetone	µg/Kg	1300 U	100	13 U	11 U	11 U	11 U	11 U	NS
Carbon Disulfide	µg/Kg	1300 U	58 U	13 U	11 U	11 U	13 U	11 U	NS
1,1-Dichloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,1-Dichloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,2-Dichloroethane (total)	µg/Kg	1300 U	58 U	3 J	2 J	16	11 U	11 U	NS
Chloroform	µg/Kg	1300 U	58 U	13 U	11 U	11 U	12	7 J	NS
1,2-Dichloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
2-Butanone	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,1,1-Trichloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Carbon Tetrachloride	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,2-Dichloropropane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
cis-1,3-Dichloropropene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Trichloroethane	µg/Kg	1300 U	58 U	8 J	10 J	37	11 U	73	NS
Dibromochloromethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,1,2-Trichloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Benzene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
trans-1,3-Dichloropropene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Bromoform	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
4-Methyl-2-Pentanone	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
2-Hexanone	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Tetrachloroethene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
1,1,2,2-Tetrachloroethane	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Toluene	µg/Kg	1300 U	8 J	13 U	11 U	11 U	11 U	11 U	NS
Chlorobenzene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Ethylbenzene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Styrene	µg/Kg	1300 U	58 U	13 U	11 U	11 U	11 U	11 U	NS
Xylene (total)	µg/Kg	500 J	76	13 U	11 U	11 U	11 U	11 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-36	B-36	B-37	B-37	B-37	B-37	B-37	B-38	
	DEPTH(FT.)	6-7.9	4-6	0-2	2-4	4-5.5	4-5.5	4-5.5	0-2	
	DATE	04/27/93	04/27/93	04/28/93	04/28/93	04/28/93	04/28/93	04/28/93	04/28/93	
	ES ID	B36-4	B36-6	B37-1	B37-2	B37-3	B37-6	B38-1	04/28/93	
	LAB ID	183099	183100	183181	183182	183183	183184	183185	B38-1RE	
	UNITS		DUP B36-3				DUP B37-3		183185R1	
VOCs										
SemiVolatiles										
Phenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
bis(2-Chloroethyl) ether	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2-Chlorophenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
1,3-Dichlorobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
1,4-Dichlorobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2-Methylphenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,2'-oxybis(1-Chloropropane)	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
4-Methylphenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
N-Nitroso-d-n-propylamine	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Hexachloroethane	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Nitrobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Isophorone	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2-Nitrophenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4-Dimethylphenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzotic acid	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4-Dichlorophenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
1,2,4-Trichlorobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Naphthalene	µg/Kg	460 J	370 J	460 U	390 U	360 U	370 U	360 U	360 U	
4-Chloroaniline	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Hexachlorobutadiene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
4-Chloro-3-methylphenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2-Methylnaphthalene	µg/Kg	1900	3200	460 U	390 U	360 U	370 U	360 U	360 U	
Hexachlorocyclopentadiene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4,6-Trichlorophenol	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4,5-Trichlorophenol	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
2-Chloronaphthalene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2-Nitroaniline	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
Dimethylphthalate	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Acenaphthylene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,6-Dinitrotoluene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
3-Nitroaniline	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
Acenaphthene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4-Dinitrophenol	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
4-Nitrophenol	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
Dibenzofuran	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
2,4-Dinitrotoluene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Diethylphthalate	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
4-Chlorophenyl-phenyl ether	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Fluorene	µg/Kg	460 J	660	460 U	390 U	360 U	370 U	360 U	360 U	
4-Nitroaniline	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
4,6-Dinitro-2-methylphenol	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
N-Nitrosodiphenylamine	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
4-Bromophenyl-phenyl ether	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Hexachlorobenzene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Pentachlorophenol	µg/Kg	1500 U	940 U	1100 U	940 U	870 U	890 U	880 U	880 U	
Phenanthrene	µg/Kg	1200	1400	460 U	390 U	360 U	370 U	360 U	360 U	
Anthracene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Carbazole	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Di-n-butylphthalate	µg/Kg	420 J	290 J	460 U	390 U	360 U	370 U	360 U	360 U	
Fluoranthene	µg/Kg	610 U	94 J	460 U	390 U	360 U	370 U	360 U	360 U	
Pyrene	µg/Kg	290 J	98 J	460 U	390 U	360 U	370 U	360 U	360 U	
Butylbenzylphthalate	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
3,3'-Dichlorobenzidine	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzo(a)anthracene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Chrysene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
bis(2-Ethylhexyl)phthalate	µg/Kg	790	300 J	83 J	99 J	170 J	290 J	490	500	
Di-n-octylphthalate	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzo(b)fluoranthene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzo(k)fluoranthene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzo(a)pyrene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Indeno(1,2,3-cd)pyrene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Dibenz(a,h)anthracene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	
Benzo(g,h,i)perylene	µg/Kg	610 U	390 U	460 U	390 U	360 U	370 U	360 U	360 U	



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	DEPTH (FT.)	B-36	B-36	B-37	B-37	B-37	B-37	B-37	B-36	
DATE	04/27/93	04/27/93	04/28/93	04/28/93	04/28/93	04/28/93	04/28/93	04/28/93	04/28/93	
ES ID	B36-4	B36-6	B37-1	B37-2	B37-3	B37-6	B37-1	B37-1	B38-1RE	
LAB ID	183099	183100	183181	183182	183183	183184	183185	183185R1		
UNITS		DUP B36-3					DUP B37-3			
<b>VOCs</b>										
<b>Pesticides/PCBs</b>										
alpha-BHC	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
beta-BHC	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
delta-BHC	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.8 J	NS	
gamma-BHC (Lindane)	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
Heptachlor	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
Aldrin	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
Heptachlor epoxide	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
Endosulfan I	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	2.1 J	NS	
Dieldrin	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
4,4'-DDE	µg/Kg	3.6 U	2.2 J	4.6 U	3.9 U	3.6 U	3.7 U	3.4 J	NS	
Endrin	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
Endosulfan II	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
4,4'-DDD	µg/Kg	15	35	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
Endosulfan sulfate	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
4,4'-DDT	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
Methoxychlor	µg/Kg	13 J	20 U	24 U	20 U	16 U	19 U	19 U	NS	
Endrin ketone	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	5.6 J	NS	
Endrin aldehyde	µg/Kg	3.6 U	3.9 U	4.6 U	3.9 U	3.6 U	3.7 U	3.6 U	NS	
alpha-Chlordane	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.3 J	NS	
gamma-Chlordane	µg/Kg	1.9 U	2 U	2.4 U	2 U	1.8 U	1.9 U	1.9 U	NS	
Toxaphene	µg/Kg	190 U	200 U	240 U	200 U	180 U	190 U	190 U	NS	
Aroclor-1016	µg/Kg	36 U	39 U	46 U	39 U	36 U	37 U	36 U	NS	
Aroclor-1221	µg/Kg	74 U	80 U	94 U	78 U	72 U	74 U	73 U	NS	
Aroclor-1232	µg/Kg	36 U	39 U	46 U	39 U	36 U	37 U	36 U	NS	
Aroclor-1242	µg/Kg	36 U	39 U	46 U	39 U	36 U	37 U	36 U	NS	
Aroclor-1246	µg/Kg	180 J	89 J	46 U	39 U	36 U	37 U	36 U	NS	
Aroclor-1254	µg/Kg	36 U	36 U	46 U	39 U	36 U	37 U	36 U	NS	
Aroclor-1260	µg/Kg	390 J	170 J	46 U	39 U	36 U	37 U	36 U	NS	
<b>Herbicides</b>										
2,4-D	µg/Kg	56 U	59 U	71 U	59 U	54 U	56 U	55 U	NS	
2,4-DB	µg/Kg	56 U	59 U	71 U	59 U	54 U	56 U	55 U	NS	
2,4,5-T	µg/Kg	5.6 U	5.9 U	7.1 U	5.9 U	5.4 U	5.6 U	5.5 U	NS	
2,4,5-TP (Silvex)	µg/Kg	5.6 U	5.9 U	7.1 U	5.9 U	5.4 U	5.6 U	5.5 U	NS	
Dalapon	µg/Kg	140 U	150 U	170 U	150 U	130 U	140 U	140 U	NS	
Dicamba	µg/Kg	5.6 U	5.9 U	7.1 U	5.9 U	5.4 U	5.6 U	5.5 U	NS	
Dichloroprop	µg/Kg	56 U	59 U	71 U	59 U	54 U	56 U	55 U	NS	
Dinoseb	µg/Kg	28 U	30 U	36 U	30 U	27 U	28 U	28 U	NS	
MCPA	µg/Kg	5600 U	5900 U	7100 U	5900 U	5400 U	5600 U	5500 U	NS	
MCPP	µg/Kg	5600 U	5900 U	7100 U	5900 U	5400 U	5600 U	5500 U	NS	
<b>Metals</b>										
Aluminum	mg/Kg	11500	15700	15400	15400	18000	12800	9120	NS	
Antimony	mg/Kg	3.1 UJ	4.1 UJ	7.3 UJ	5.4 UJ	3.5 UJ	4.8 UJ	4.2 J	NS	
Arsenic	mg/Kg	4.1	5.3	2.5	4.4	5.9	2.1 J	2.8	NS	
Barium	mg/Kg	50.6	75.2	114	75.2	68.7	36.4	211	NS	
Beryllium	mg/Kg	0.52 J	0.77	0.92 J	0.74 J	0.74	0.55 J	0.46 J	NS	
Cadmium	mg/Kg	0.22 U	0.3 U	0.74 J	0.4 U	0.26 U	0.35 U	0.36 J	NS	
Calcium	mg/Kg	61500	7700	6020	26900	7240	21700	16000	NS	
Chromium	mg/Kg	18.1	25.5	22.7	24.7	25.6	20.1	18.4	NS	
Cobalt	mg/Kg	10.6	15.2	9.6 J	14.5	14.3	10.8	11.5	NS	
Copper	mg/Kg	19.4	31.4	34.7	26.4	22.8	10.3	38.4	NS	
Iron	mg/Kg	23400	34600	25200	30000	31000	25800	19000	NS	
Lead	mg/Kg	9.5	12.4	16.3	8.2	8.7	2.9	59	NS	
Magnesium	mg/Kg	7780	6090	4210	6080	6200	5520	4270	NS	
Manganese	mg/Kg	495	618	337	757	678	476	400	NS	
Mercury	mg/Kg	0.05 U	0.05 U	0.05 U	0.04 U	0.04 U	0.05 U	0.04 J	NS	
Nickel	mg/Kg	31	44.1	26	41.3	39.9	31.1	34.3	NS	
Potassium	mg/Kg	985	1300	1540	1680	1320	1000	1250	NS	
Selenium	mg/Kg	0.53 J	0.19 J	0.41 J	0.21 U	0.16 U	0.22 U	0.19 J	NS	
Silver	mg/Kg	0.48 U	0.85 U	1.1 U	0.86 U	0.55 U	0.75 U	0.61 U	NS	
Sodium	mg/Kg	184 J	77.3 U	137 U	102 U	65.9 U	69.2 J	102 J	NS	
Thallium	mg/Kg	0.61 U	0.43 U	0.66 U	0.62 U	0.49 U	0.85 U	0.42 U	NS	
Vanadium	mg/Kg	15.3	23.8	24.1	22.7	21.4	14.9	15.3	NS	
Zinc	mg/Kg	75.7	111	96.7	90	84.5	66.4	4070	NS	
Cyanide	mg/Kg	0.56 U	0.59 U	0.85 U	0.7 U	0.65 U	0.66 U	0.66 U	NS	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-38	B-38	B-38	B-38	B-39	B-39	B-39	B-39
VOCs	DEPTH(FT.)	2-4	4-6	6-8	4-6	0-2	0-2	3-4	3-4
	DATE	04/28/93	04/28/93	04/28/93	04/28/93	12/15/92	12/15/92	12/15/92	12/15/92
VOCs	ES ID	B38-2	B38-3	B38-4	B38-5	B39-1	12/15/92	B39-2	B39-2RE
	LAB ID	183186	183187	183188	183189	176445	176445R1	176446	176446R1
UNITS	UNITS				DUP B38-3				
Chloromethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Bromomethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Vinyl Chloride	µg/Kg	2 J	11 U	9 J	9 J	1300 U	NS	1000	NS
Chloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Methylene Chloride	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Acetone	µg/Kg	140	11 U	12 U	12 U	1300 U	NS	60 J	NS
Carbon Disulfide	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,1-Dichloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,1-Dichloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	30 J	NS
1,2-Dichloroethane (total)	µg/Kg	7 J	46	190	95	38000	NS	60 U	NS
Chloroform	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	7300 J	NS
1,2-Dichloroethane	µg/Kg	12 U	11 U	12 U	12 U	210 J	NS	60 U	NS
2-Butanone	µg/Kg	22	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,1,1-Trichloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Carbon Tetrachloride	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	60 U	NS
Bromodichloromethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,2-Dichloropropane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
cis-1,3-Dichloropropane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Trichloroethene	µg/Kg	28	47	150	64	150000 J	NS	700	NS
Dibromochloromethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,1,2-Trichloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Benzene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
trans-1,3-Dichloropropane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Bromoform	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
4-Methyl-2-Pentanone	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
2-Hexanone	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Tetrachloroethene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
1,1,2,2-Tetrachloroethane	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Toluene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Chlorobenzene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Ethylbenzene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Styrene	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	60 U	NS
Xylene (total)	µg/Kg	12 U	11 U	12 U	12 U	1300 U	NS	30 J	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-38	B-38	B-38	B-38	B-39	B-39	B-39	B-39	
	DEPTH(FT.)	2-4	4-6	6-8	4-6	0-2	0-2	3-4	3-4	
	DATE	04/28/93	04/28/93	04/28/93	04/28/93	12/15/92	12/15/92	12/15/92	12/15/92	
	ES ID	B38-2	B38-3	B38-4	B38-6	B39-1	B39-1RE	B39-2	B39-2RE	
	LAB ID	183186	183187	183188	183189	176445	176445R1	176446	176446R1	
COMPOUND	UNITS				DUP B38-3					
<b>VOCs</b>										
<b>Semivolatiles</b>										
Phenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
bis(2-Chloroethyl) ether	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2-Chlorophenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
1,3-Dichlorobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
1,4-Dichlorobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2-Methylphenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,2'-oxybis(1-Chloropropane)	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Methylphenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
N-Nitroso-d-n-propylamine	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Hexachloroethane	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Nitrobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Isophorone	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2-Nitrophenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4-Dimethylphenol	µg/Kg	400 U	370 U	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Benzoic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	400 U	370 U	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4-Dichlorophenol	µg/Kg	400 U	370 U	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
1,2,4-Trichlorobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Naphthalene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Chloroaniline	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Hexachlorobutadiene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Chloro-3-methylphenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	390 UJ	
2-Methylnaphthalene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Hexachlorocyclopentadiene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4,8-Trichlorophenol	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4,5-Trichlorophenol	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
2-Chloronaphthalene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2-Nitroaniline	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
Dimethylphthalate	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Acenaphthylene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,6-Dinitrotoluene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
3-Nitroaniline	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
Acenaphthene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4-Dinitrophenol	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
4-Nitrophenol	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
Dibenzofuran	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
2,4-Dinitrotoluene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Diethylphthalate	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Chlorophenyl-phenylether	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Fluorene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Nitroaniline	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
4,8-Dinitro-2-methylphenol	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
N-Nitrosodiphenylamine	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
4-Bromophenyl-phenylether	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Hexachlorobenzene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Pentachlorophenol	µg/Kg	980 U	910 U	920 U	880 U	870 UJ	870 UJ	980 UJ	980 UJ	
Phenanthrene	µg/Kg	200 J	370 U	380 U	360 U	96 J	91 J	31 J	28 J	
Anthracene	µg/Kg	58 J	370 U	380 U	360 U	360 UJ	13 J	400 UJ	400 UJ	
Carbazole	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Di-n-butylphthalate	µg/Kg	190 J	180 J	110 J	280 J	360 UJ	60 J	400 UJ	400 UJ	
Fluoranthene	µg/Kg	530	370 U	380 U	33 J	110 J	17 J	400 UJ	400 UJ	
Pyrene	µg/Kg	460	370 U	380 U	24 J	140 J	130 J	28 J	400 UJ	
Butylbenzylphthalate	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
3,3'-Dichlorobenzidine	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Benzo(a)anthracene	µg/Kg	280 J	370 U	380 U	360 U	38 J	51 J	400 UJ	400 UJ	
Chrysene	µg/Kg	220 J	370 U	380 U	360 U	83 J	66 J	400 UJ	400 UJ	
bis(2-Ethylhexyl)phthalate	µg/Kg	380 J	520	240 J	550	410 UJ	340 J	800 UJ	590 UJ	
Di-n-octylphthalate	µg/Kg	400 U	370 U	380 U	23 J	360 UJ	360 UJ	400 UJ	400 UJ	
Benzo(b)fluoranthene	µg/Kg	280 J	370 U	380 U	360 U	41 J	50 J	400 UJ	400 UJ	
Benzo(k)fluoranthene	µg/Kg	200 J	370 U	380 U	360 U	40 J	47 J	400 UJ	400 UJ	
Benzo(a)pyrene	µg/Kg	220 J	370 U	380 U	360 U	360 UJ	24 J	400 UJ	400 UJ	
Indeno(1,2,3-cd)pyrene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	
Dibenz(a,h)anthracene	µg/Kg	400 U	370 U	380 U	380 U	360 UJ	360 UJ	400 UJ	400 UJ	
Benzo(g,h,i)perylene	µg/Kg	400 U	370 U	380 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-38	B-38	B-38	B-38	B-39	B-39	B-39	B-39	
	DEPTH(FT.)	2-4	4-6	6-8	4-6	0-2	0-2	3-4	3-4	
	DATE	04/28/93	04/28/93	04/28/93	04/28/93	12/15/92	12/15/92	12/15/92	12/15/92	
	ES ID	B38-2	B38-3	B38-4	B38-6	B39-1	B39-1RE	B39-2	B39-2RE	
	LAB ID	183166	183167	183168	183169	176445	176445R1	176445	176446R1	
	UNITS				DUP B38-3					
<b>VOCs</b>										
<b>Pesticides/PCBs</b>										
alpha-BHC	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
beta-BHC	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
delta-BHC	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
gamma-BHC (Lindane)	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Heptachlor	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Aldrin	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Heptachlor epoxide	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Endosulfan I	µg/Kg	1.9 J	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Dieldrin	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
4,4'-DDE	µg/Kg	3.2 J	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
Endrin	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
Endosulfan II	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
4,4'-DDD	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
Endosulfan sulfate	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
4,4'-DDT	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	4.1 J	NS	4.1 U	NS	
Methoxychlor	µg/Kg	20 U	19 U	20 U	19 U	18 U	NS	21 U	NS	
Endrin ketone	µg/Kg	3.8 J	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
Endrin aldehyde	µg/Kg	4 U	3.7 U	3.8 U	3.8 U	3.6 U	NS	4.1 U	NS	
alpha-Chlordane	µg/Kg	1.4 J	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
gamma-Chlordane	µg/Kg	2 U	1.9 U	2 U	1.9 U	1.8 U	NS	2.1 U	NS	
Toxaphene	µg/Kg	200 U	190 U	200 U	190 U	180 U	NS	210 U	NS	
Aroclor-1018	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
Aroclor-1221	µg/Kg	81 U	76 U	78 U	74 U	73 U	NS	82 U	NS	
Aroclor-1232	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
Aroclor-1242	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
Aroclor-1248	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
Aroclor-1254	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
Aroclor-1280	µg/Kg	40 U	37 U	38 U	38 U	36 U	NS	41 U	NS	
<b>Herbicides</b>										
2,4-D	µg/Kg	61 U	57 U	58 U	57 U	54 U	NS	61 U	NS	
2,4-DB	µg/Kg	61 U	57 U	58 U	57 U	54 U	NS	61 U	NS	
2,4,5-T	µg/Kg	6.1 U	5.7 U	5.8 U	5.7 U	5.4 U	NS	6.1 U	NS	
2,4,5-TP (Silvex)	µg/Kg	6.1 U	5.7 U	5.8 U	5.7 U	5.4 U	NS	6.1 U	NS	
Dalapon	µg/Kg	150 U	140 U	140 U	140 U	130 U	NS	150 U	NS	
Dicamba	µg/Kg	6.1 U	5.7 U	5.8 U	5.7 U	5.4 U	NS	6.1 U	NS	
Dichloroprop	µg/Kg	61 U	57 U	58 U	57 U	54 U	NS	61 U	NS	
Dinoseb	µg/Kg	31 U	29 U	29 U	29 U	27 U	NS	30 U	NS	
MCPA	µg/Kg	6100 U	5700 U	5800 U	5700 U	5400 U	NS	6100 U	NS	
MCPP	µg/Kg	6100 U	5700 U	5800 U	5700 U	5400 U	NS	6100 U	NS	
<b>Metals</b>										
Aluminum	mg/Kg	13500	10600	14800	10500	7410	NS	11100	NS	
Antimony	mg/Kg	5.3 UJ	5.5 UJ	6.3 UJ	4.4 UJ	6.4 UJ	NS	6.9 UJ	NS	
Arsenic	mg/Kg	4.8	2.9	3.5	4.5	2.3	NS	4.4	NS	
Barium	mg/Kg	105	47.5	51.7	48.4	88.8 J	NS	78.8 J	NS	
Beryllium	mg/Kg	0.89 J	0.51 J	0.72 J	0.53 J	0.38 J	NS	0.57 J	NS	
Cadmium	mg/Kg	0.39 U	4.4	0.47 U	0.32 U	0.63	NS	0.4 U	NS	
Calcium	mg/Kg	53900	64500	11500	61900	139000	NS	124000	NS	
Chromium	mg/Kg	25	17.8	24.8	17.3	17.4 J	NS	15.9 J	NS	
Cobalt	mg/Kg	12.1	10.4	14.8	10.2	7	NS	6.9	NS	
Copper	mg/Kg	31	24.5	15.8	27.5	38.4	NS	22.5	NS	
Iron	mg/Kg	27600	22900	30000	21800	16900	NS	17700	NS	
Lead	mg/Kg	55.9	59.1 J	6.2	8.2 J	165	NS	11	NS	
Magnesium	mg/Kg	7270	8610	6290	9160	23400	NS	10300	NS	
Manganese	mg/Kg	1040	488	855	454	436	NS	573	NS	
Mercury	mg/Kg	0.04 U	0.02 U	0.04 U	0.03 U	0.1 R	NS	0.08 R	NS	
Nickel	mg/Kg	38.9	30	39.8	30.4	24.8	NS	18.4	NS	
Potassium	mg/Kg	1340	867 J	1130 J	1020	1400	NS	1320	NS	
Selenium	mg/Kg	0.54 J	0.11 U	0.14 U	0.19 U	1.8	NS	1.6	NS	
Silver	mg/Kg	0.83 U	0.86 U	1 U	0.7 U	0.38 U	NS	0.41 U	NS	
Sodium	mg/Kg	257 J	226 J	119 U	245 J	225 J	NS	442 J	NS	
Thallium	mg/Kg	0.49 U	0.34 U	0.42 U	0.58 U	1.6 U	NS	1.7 U	NS	
Vanadium	mg/Kg	23.7	15.1	16.6	16.1	12.9	NS	18.4	NS	
Zinc	mg/Kg	1110	86.5	64	104	3540	NS	88.2 J	NS	
Cyanide	mg/Kg	0.72 U	0.66 U	0.69 U	0.55 U	1.4	NS	0.73 U	NS	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-39	B-39	B-39	BK-1	BK-2	BK-2RE	B-40	B-40	
	DEPTH(FT.)	4-6	4-6	6-6.5	0-2	0-2	0-2	0-2	2-3.4	
	DATE	12/15/92	12/15/92	12/15/92	12/16/92	12/16/92	12/16/92	12/08/92	12/08/92	
	ES ID	B39-3	B39-3RE	B39-4	BK-1	BK-2	BK-2RE	B40-1	B40-2	
	LAB ID	176447	176447R1	176448	176440	176441	176441R1	175786	175787	
	UNITS									
VOCs										
Chloromethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Bromomethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Vinyl Chloride	µg/Kg	180	NS	240 E	14 U	13 U	NS	13 U	12 U	
Chloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Methylene Chloride	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Acetone	µg/Kg	57 U	NS	21 U	14 U	13 U	NS	13 U	12 U	
Carbon Disulfide	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,1-Dichloroethane	µg/Kg	130	NS	140	14 U	13 U	NS	13 U	12 U	
1,1-Dichloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,2-Dichloroethane (total)	µg/Kg	1800	NS	1700	13 U	13 U	NS	13 U	12 U	
Chloroform	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,2-Dichloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
2-Butanone	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,1,1-Trichloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Carbon Tetrachloride	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	13 U	12 U	
Bromodichloromethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	NS	NS	
1,2-Dichloropropane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
cis-1,3-Dichloropropene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Trichloroethene	µg/Kg	1000	NS	2200 J	14 U	13 U	NS	13 U	12 U	
Dibromochloromethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,1,2-Trichloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Benzene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
trans-1,3-Dichloropropene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Bromoform	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
4-Methyl-2-Pentanone	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
2-Hexanone	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Tetrachloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
1,1,2,2-Tetrachloroethane	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Toluene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Chlorobenzene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Ethylbenzene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Styrene	µg/Kg	57 U	NS	12 U	14 U	13 U	NS	13 U	12 U	
Xylene (total)	µg/Kg	57 U	NS	5 J	14 U	13 U	NS	13 U	12 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID	SOIL B-39 4-6 12/15/92 B39-3 176447	SOIL B-39 4-6 12/15/92 B39-3RE 176447R1	SOIL B-39 6-6.5 12/15/92 B39-4 176448	SOIL BK-1 0-2 12/16/92 BK-1 176440	SOIL BK-2 0-2 12/16/92 BK-2 176441	SOIL BK-2RE 0-2 12/16/92 BK-2RE 176441R1	SOIL B-40 0-2 12/08/92 B40-1 175786	SOIL B-40 2-3.4 12/08/92 B40-2 175787	
COMPOUND UNITS									
VOCs									
Semivolatiles									
Phenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
bis(2-Chloroethyl) ether	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2-Chlorophenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
1,3-Dichlorobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
1,4-Dichlorobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2-Methylphenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,2'-oxybis(1-Chloropropane)	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Methylphenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
N-Nitroso-d-n-propylamine	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Hexachloroethane	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Nitrobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Isophorone	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2-Nitrophenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4-Dimethylphenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Benzic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4-Dichlorophenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
1,2,4-Trichlorobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Naphthalene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Chloroaniline	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Hexachlorobutadiene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Chloro-3-methylphenol	µg/Kg	390 U	370 U	420 U	430 U	430 UJ	430 UJ	390 U	400 U
2-Methylnaphthalene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Hexachlorocyclopentadiene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4,6-Trichlorophenol	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4,5-Trichlorophenol	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
2-Chloronaphthalene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2-Nitroaniline	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
Dimethylphthalate	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Acenaphthylene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,6-Dinitrotoluene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
3-Nitroaniline	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
Acenaphthene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4-Dinitrophenol	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
4-Nitrophenol	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
Dibenzofuran	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
2,4-Dinitrotoluene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Diethylphthalate	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Chlorophenyl-phenylether	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Fluorene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Nitroaniline	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
4,6-Dinitro-2-methylphenol	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
N-Nitrosodiphenylamine	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
4-Bromophenyl-phenylether	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Hexachlorobenzene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Pentachlorophenol	µg/Kg	940 U	940 U	900 U	1000 U	1000 UJ	1000 UJ	950 U	980 U
Phenanthrene	µg/Kg	390 U	390 U	370 U	420 U	29 J	130 J	53 J	16 J
Anthracene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Carbazole	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Di-n-butylphthalate	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	160 J	240 J
Fluoranthene	µg/Kg	390 U	390 U	370 U	420 U	23 J	47 J	190 J	92 J
Pyrene	µg/Kg	390 U	390 U	370 U	420 U	21 J	41 J	140 J	110 J
Butylbenzylphthalate	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
3,3'-Dichlorobenzidine	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Benzo(a)anthracene	µg/Kg	390 U	390 U	370 U	420 U	21 J	77 J	46 J	400 U
Chrysene	µg/Kg	390 U	390 U	370 U	420 U	28 J	80 J	74 J	400 U
bis(2-Ethylhexyl)phthalate	µg/Kg	1500	1300	540 U	870 U	430 UJ	280 J	600	320 J
Di-n-octylphthalate	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Benzo(b)fluoranthene	µg/Kg	390 U	390 U	370 U	420 U	20 J	66 J	62 J	400 U
Benzo(k)fluoranthene	µg/Kg	390 U	390 U	370 U	420 U	20 J	70 J	65 J	400 U
Benzo(a)pyrene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	48 J	48 J	400 U
Indeno(1,2,3-cd)pyrene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	34 J	38 J	400 U
Dibenz(a,h)anthracene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	390 U	400 U
Benzo(g,h,i)perylene	µg/Kg	390 U	390 U	370 U	420 U	430 UJ	430 UJ	37 J	400 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.)	SOIL B-39	SOIL B-39	SOIL B-39	SOIL BK-1	SOIL BK-2	SOIL BK-2RE	SOIL B-40	SOIL B-40
DATE	4-6	4-6	6-6.5	0-2	0-2	0-2	0-2	2-3.4
ES ID	12/15/92	12/15/92	12/15/92	12/16/92	12/16/92	12/16/92	12/08/92	12/08/92
LAB ID	B39-3	B39-3RE	B39-4	BK-1	BK-2	BK-2RE	B40-1	B40-2
UNITS	178447	178447R1	178448	178440	178441	178441R1	175786	175787
<b>COMPOUND</b>								
<b>VOCs</b>								
<b>Pesticides/P CBs</b>								
alpha-BHC	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
beta-BHC	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
delta-BHC	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
gamma-BHC (Lindane)	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Heptachlor	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Aldrin	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Heptachlor epoxide	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Endosulfan I	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Dieldrin	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
4,4'-DDE	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
Endrin	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
Endosulfan II	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
4,4'-DDD	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
Endosulfan sulfate	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
4,4'-DDT	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
Methoxychlor	µg/Kg	20 U	NS	19 U	22 U	22 U	NS	20 U
Endrin ketone	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
Endrin aldehyde	µg/Kg	3.9 U	NS	3.7 U	4.3 U	4.3 U	NS	3.9 U
alpha-Chlordane	µg/Kg	2 U	NS	1.9 U	2.2 U	1.3 J	NS	2 U
gamma-Chlordane	µg/Kg	2 U	NS	1.9 U	2.2 U	2.2 U	NS	2 U
Toxaphene	µg/Kg	200 U	NS	190 U	220 U	220 U	NS	200 U
Aroclor-1016	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
Aroclor-1221	µg/Kg	79 U	NS	78 U	88 U	88 U	NS	79 U
Aroclor-1232	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
Aroclor-1242	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
Aroclor-1248	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
Aroclor-1254	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
Aroclor-1260	µg/Kg	39 U	NS	37 U	43 U	43 U	NS	39 U
<b>Herbicides</b>								
2,4-D	µg/Kg	58 U	NS	57 U	64 U	65 U	NS	59 U
2,4-DB	µg/Kg	58 U	NS	57 U	64 U	65 U	NS	59 U
2,4,5-T	µg/Kg	5.8 U	NS	5.7 U	6.4 U	6.5 U	NS	5.9 U
2,4,5-TP (Silvex)	µg/Kg	5.8 U	NS	5.7 U	6.4 U	6.5 U	NS	5.9 U
Dalapon	µg/Kg	140 U	NS	140 U	150 U	160 U	NS	140 U
Dicamba	µg/Kg	5.6 U	NS	5.7 U	6.4 U	6.5 U	NS	5.9 U
Dichloroprop	µg/Kg	56 U	NS	57 U	64 U	65 U	NS	59 U
Dinoseb	µg/Kg	29 U	NS	28 U	32 U	33 U	NS	30 U
MCPA	µg/Kg	5800 U	NS	5700 U	6400 U	6500 U	NS	5900 U
MCPP	µg/Kg	5600 U	NS	5700 U	6400 U	6500 U	NS	5900 U
<b>Metals</b>								
Aluminum	mg/Kg	11000	NS	10800	19400	14400	NS	16900
Antimony	mg/Kg	8.5 UJ	NS	7.8 UJ	7.9 U	7.2 U	NS	9.9 UJ
Arsenic	mg/Kg	2.2	NS	3.4	3	2.7	NS	4.6
Barium	mg/Kg	54.1 J	NS	59 J	159	106	NS	73.1
Beryllium	mg/Kg	0.47 J	NS	0.45 J	1.1	0.81	NS	0.7 J
Cadmium	mg/Kg	0.37 U	NS	0.45 U	0.45 U	0.41 U	NS	0.57 U
Calcium	mg/Kg	102000	NS	54700	4590	22500	NS	3500
Chromium	mg/Kg	18.6 J	NS	17.9 J	30	22.3	NS	27
Cobalt	mg/Kg	9.2	NS	10.2	14.4	12.3	NS	11.6
Copper	mg/Kg	20.9	NS	23.2	26.9	18.8	NS	16.9
Iron	mg/Kg	20800	NS	21100	38600	26600	NS	32700
Lead	mg/Kg	19	NS	17	15.8	18.9	NS	17.3
Magnesium	mg/Kg	6430	NS	17500	5980	7910	NS	5570
Manganese	mg/Kg	488	NS	758	2380	800	NS	723
Mercury	mg/Kg	0.08 R	NS	0.08 R	0.13 J	0.11	NS	0.09 J
Nickel	mg/Kg	27.4	NS	27.2	47.7	31	NS	32.9
Potassium	mg/Kg	1140	NS	1200	1720	1210	NS	1060
Selenium	mg/Kg	0.26 J	NS	0.5 J	0.73 J	0.94	NS	0.45 J
Silver	mg/Kg	0.38 U	NS	0.46 U	0.47 U	0.43 U	NS	0.59 U
Sodium	mg/Kg	407 J	NS	342 J	49.1 J	61.1 J	NS	54.8 U
Thallium	mg/Kg	1.7 U	NS	0.34 U	0.42 U	0.38 U	NS	0.5 U
Vanadium	mg/Kg	15.9	NS	17.2	28	22.4	NS	24.3
Zinc	mg/Kg	108 J	NS	434	98.8	63.7	NS	83.1
Cyanide	mg/Kg	0.68 U	NS	0.65 U	0.57 U	0.61 U	NS	0.57 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-40	B-40	B-41	B-41	B-41	B-41	B-41	B-41	
	DEPTH(FT.)	6-8	8-10	0-2	0-2	2-4	2-4	5.5-6.5	B-41	
	DATE	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	
	ES ID	B40-4	B40-5	B41-1	B41-1RE	B41-2	B41-2RE	B41-3	B41-3RE	
	LAB ID	175789	175790	176001	176001R1	176002	176002R1	176003	176003R1	
	UNITS									
VOCs										
Chloromethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Bromomethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Vinyl Chloride	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Chloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Methylene Chloride	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Acetone	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Carbon Disulfide	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,1-Dichloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,1-Dichloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,2-Dichloroethane (total)	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Chloroform	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,2-Dichloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
2-Butanone	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,1,1-Trichloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Carbon Tetrachloride	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
Bromodichloromethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,2-Dichloropropane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
cis-1,3-Dichloropropene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Trichloroethene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Dibromochloromethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,1,2-Trichloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Benzene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
trans-1,3-Dichloropropene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Bromoform	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
4-Methyl-2-Pentanone	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
2-Hexanone	µg/Kg	11 U	12 U	11 J	NS	12 U	NS	11 U	NS	
Tetrachloroethene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
1,1,2,2-Tetrachloroethane	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Toluene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Chlorobenzene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Ethylbenzene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Styrene	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	
Xylene (total)	µg/Kg	11 U	12 U	11 U	NS	12 U	NS	11 U	NS	



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-40	B-40	B-41	B-41	B-41	B-41	B-41	B-41	
	DEPTH(FT.)	6-8	8-10	0-2	0-2	2-4	2-4	2-4	5.5-8.5	
	DATE	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	12/08/92	
	ES ID	B40-4	B40-5	B41-1	B41-1RE	B41-2	B41-2	B41-3	12/08/92	
	LAB ID	175789	175790	176001	176001R1	176002	176002R1	176003	176003R1	
	UNITS									
VOCs										
Semivolatiles										
Phenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
bis(2-Chloroethyl) ether	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2-Chlorophenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
1,3-Dichlorobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
1,4-Dichlorobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2-Methylphenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2,2'-oxybis(1-Chloropropane)	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
4-Methylphenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
N-Nitroso-di-n-propylamine	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Hexachloroethane	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Nitrobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Isophorone	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2-Nitrophenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2,4-Dimethylphenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Benzole acid	NS	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2,4-Dichlorophenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
1,2,4-Trichlorobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Naphthalene	µg/Kg	360 U	360 U	360 UJ	39 J	400 UJ	400 UJ	390 UJ	400 UJ	
4-Chloroaniline	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Hexachlorobutadiene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
4-Chloro-3-methylphenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2-Methylnaphthalene	µg/Kg	360 U	360 U	360 UJ	21 J	400 UJ	400 UJ	390 UJ	400 UJ	
Hexachlorocyclopentadiene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2,4,6-Trichlorophenol	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2,4,5-Trichlorophenol	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
2-Chloronaphthalene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
2-Nitroaniline	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
Dimethylphthalate	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Acenaphthylene	µg/Kg	360 U	360 U	360 UJ	61 J	400 UJ	400 UJ	390 UJ	400 UJ	
2,6-Dinitrotoluene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
3-Nitroaniline	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
Acenaphthene	µg/Kg	360 U	360 U	360 UJ	72 J	400 UJ	400 UJ	390 UJ	400 UJ	
2,4-Dinitrophenol	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
4-Nitrophenol	µg/Kg	930 U	910 U	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	960 UJ	
Dibenzofuran	µg/Kg	360 U	360 U	360 UJ	26 J	400 UJ	400 UJ	390 UJ	400 UJ	
2,4-Dinitrotoluene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Diethylphthalate	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
4-Chlorophenyl-phenylether	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Fluorene	µg/Kg	360 U	360 U	360 UJ	54 J	400 UJ	400 UJ	390 UJ	400 UJ	
4-Nitroaniline	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
4,6-Dinitro-2-methylphenol	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
N-Nitrosodiphenylamine	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
4-Bromophenyl-phenylether	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Hexachlorobenzene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Pentachlorophenol	µg/Kg	890 U	930 U	910 UJ	920 UJ	960 UJ	960 UJ	950 UJ	960 UJ	
Phenanthrene	µg/Kg	360 U	360 U	130 J	760 J	40 J	80 J	390 UJ	16 J	
Anthracene	µg/Kg	360 U	360 U	17 J	150 J	400 UJ	400 UJ	390 UJ	400 UJ	
Carbazole	µg/Kg	360 U	360 U	110 J	490 J	400 UJ	400 UJ	390 UJ	400 UJ	
Di-n-butylphthalate	µg/Kg	360 J	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Fluoranthene	µg/Kg	360 U	360 U	280 J	1300 J	78 J	120 J	390 UJ	30 J	
Pyrene	µg/Kg	360 U	360 U	220 J	1300 J	63 J	94 J	390 UJ	400 UJ	
Butylbenzylphthalate	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
3,3'-Dichlorobenzidine	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Benzo(a)anthracene	µg/Kg	360 U	360 U	93 J	590 J	27 J	45 J	390 UJ	400 UJ	
Chrysene	µg/Kg	360 U	360 U	150 J	850 J	45 J	85 J	390 UJ	18 J	
bis(2-Ethylhexyl)phthalate	µg/Kg	280 J	360 U	360 UJ	360 UJ	400 UJ	400 UJ	690 J	1100 J	
Di-n-octylphthalate	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Benzo(b)fluoranthene	µg/Kg	360 U	360 U	160 J	1100 J	43 J	83 J	390 UJ	400 UJ	
Benzo(k)fluoranthene	µg/Kg	360 U	360 U	150 J	670 J	45 J	65 J	390 UJ	400 UJ	
Benzo(a)pyrene	µg/Kg	360 U	360 U	46 J	650 J	15 J	46 J	390 UJ	400 UJ	
Indeno(1,2,3-cd)pyrene	µg/Kg	360 U	360 U	93 J	290 J	30 J	45 J	390 UJ	400 UJ	
Dibenz(a,h)anthracene	µg/Kg	360 U	360 U	360 UJ	360 UJ	400 UJ	400 UJ	390 UJ	400 UJ	
Benzo(g,h,i)perylene	µg/Kg	360 U	360 U	74 J	280 J	26 J	400 UJ	390 UJ	400 UJ	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.)	DATE	ES ID	LAB ID	UNITS	SOIL B-40 6-8 12/08/92 B40-4 175789	SOIL B-40 8-10 12/08/92 B40-5 175790	SOIL B-41 0-2 12/08/92 B41-1 176001	SOIL B-41 0-2 12/08/92 B41-1RE 176001R1	SOIL B-41 2-4 12/08/92 B41-2 176002	SOIL B-41 2-4 12/08/92 B41-2RE 176002R1	SOIL B-41 5.5-6.5 12/08/92 B41-3 176003	SOIL B-41 5.5-6.5 12/08/92 B41-3RE 176003R1
<b>COMPOUND</b>												
<b>VOCs</b>												
<b>Pesticides/PCBs</b>												
alpha-BHC	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
beta-BHC	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
delta-BHC	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
gamma-BHC (Lindane)	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
Heptachlor	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
Aldrin	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
Heptachlor epoxide	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
Endosulfan I	µg/Kg	1.9 U	2 U	19 U	NS	20 U	NS	20 U	NS	10 U	NS	
Dieldrin	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
4,4'-DDE	µg/Kg	3.7 U	3.8 U	91 J	NS	91 J	NS	91 J	NS	74	NS	
Endrin	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
Endosulfan II	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
4,4'-DDD	µg/Kg	3.7 U	3.8 U	260 J	NS	350	NS	350	NS	170	NS	
Endosulfan sulfate	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
4,4'-DDT	µg/Kg	3.7 U	3.8 U	39 J	NS	27 J	NS	27 J	NS	29	NS	
Methoxychlor	µg/Kg	19 U	20 U	190 U	NS	200 U	NS	200 U	NS	100 U	NS	
Endrin ketone	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
Endrin aldehyde	µg/Kg	3.7 U	3.8 U	37 U	NS	39 U	NS	39 U	NS	20 U	NS	
alpha-Chlordane	µg/Kg	1.9 U	2 U	12 J	NS	9.7 J	NS	9.7 J	NS	14 J	NS	
gamma-Chlordane	µg/Kg	1.9 U	2 U	11 J	NS	11 J	NS	11 J	NS	15	NS	
Toxaphene	µg/Kg	190 U	200 U	1900 U	NS	2000 U	NS	2000 U	NS	1000 U	NS	
Aroclor-1016	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
Aroclor-1221	µg/Kg	74 U	78 U	760 U	NS	790 U	NS	790 U	NS	400 U	NS	
Aroclor-1232	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
Aroclor-1242	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
Aroclor-1248	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
Aroclor-1254	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
Aroclor-1260	µg/Kg	37 U	38 U	370 U	NS	390 U	NS	390 U	NS	200 U	NS	
<b>Herbicides</b>												
2,4-D	µg/Kg	56 U	59 U	56 U	NS	60 U	NS	60 U	NS	60 U	NS	
2,4-DB	µg/Kg	56 U	59 U	56 U	NS	60 U	NS	60 U	NS	60 U	NS	
2,4,5-T	µg/Kg	5.6 U	5.9 U	5.6 U	NS	6 U	NS	6 U	NS	6 U	NS	
2,4,5-TP (Silvex)	µg/Kg	5.6 U	5.9 U	5.6 U	NS	6 U	NS	6 U	NS	6 U	NS	
Dalapon	µg/Kg	130 U	140 U	140 U	NS	140 U	NS	140 U	NS	140 U	NS	
Dicamba	µg/Kg	5.6 U	5.9 U	5.6 U	NS	6 U	NS	6 U	NS	6 U	NS	
Dichloroprop	µg/Kg	56 U	59 U	56 U	NS	60 U	NS	60 U	NS	60 U	NS	
Dinoseb	µg/Kg	28 U	29 U	28 U	NS	30 U	NS	30 U	NS	30 U	NS	
MCPA	µg/Kg	5600 U	5900 U	5600 U	NS	6000 U	NS	6000 U	NS	6000 U	NS	
MCPP	µg/Kg	5600 U	5900 U	5600 U	NS	6000 U	NS	6000 U	NS	6000 U	NS	
<b>Metals</b>												
Aluminum	mg/Kg	11600	9270	10100	NS	12000	NS	12000	NS	18700	NS	
Antimony	mg/Kg	11.6 UJ	12.2 UJ	9.9 UJ	NS	8.6 UJ	NS	8.6 UJ	NS	6.7 UJ	NS	
Arsenic	mg/Kg	4.1	4.5	4.9	NS	3.2	NS	3.2	NS	4.4	NS	
Barium	mg/Kg	62.7	43.3 J	68.9	NS	87.8	NS	87.8	NS	105	NS	
Beryllium	mg/Kg	0.51 J	0.49 J	0.57 J	NS	0.55 J	NS	0.55 J	NS	0.84	NS	
Cadmium	mg/Kg	0.87 U	0.7 U	0.7 J	NS	0.5 U	NS	0.5 U	NS	0.38 U	NS	
Calcium	mg/Kg	50500	57300	89100	NS	42500	NS	42500	NS	7920	NS	
Chromium	mg/Kg	19.9	16.3	19	NS	19.4	NS	19.4	NS	30.3	NS	
Cobalt	mg/Kg	10.4 J	8.5 J	9.7	NS	8.2	NS	8.2	NS	17	NS	
Copper	mg/Kg	25.4	25.1	29.2	NS	32.2	NS	32.2	NS	25.1	NS	
Iron	mg/Kg	25200	22300	20000	NS	20000	NS	20000	NS	40900	NS	
Lead	mg/Kg	14.2	8.9	81.4	NS	52.5	NS	52.5	NS	26.9	NS	
Magnesium	mg/Kg	9810	6790	16200	NS	8600	NS	8600	NS	7250	NS	
Manganese	mg/Kg	523	590	462	NS	299	NS	299	NS	528	NS	
Mercury	mg/Kg	0.03 U	0.03 J	0.04 J	NS	0.06 J	NS	0.06 J	NS	0.06 J	NS	
Nickel	mg/Kg	34.5	26.2	29	NS	28.5	NS	28.5	NS	45.9	NS	
Potassium	mg/Kg	1290	941 J	1200	NS	1320	NS	1320	NS	1140	NS	
Selenium	mg/Kg	0.67 J	0.45 J	0.56 J	NS	0.82	NS	0.82	NS	0.54 J	NS	
Silver	mg/Kg	0.89 U	0.72 U	0.59 U	NS	0.52 U	NS	0.52 U	NS	0.4 U	NS	
Sodium	mg/Kg	78.5 J	87.2 U	108 J	NS	91.3 J	NS	91.3 J	NS	40.3 J	NS	
Thallium	mg/Kg	0.45 U	0.38 U	0.33 U	NS	0.36 U	NS	0.36 U	NS	0.31 U	NS	
Vanadium	mg/Kg	17.3	13.8	27	NS	23.6	NS	23.6	NS	26.4	NS	
Zinc	mg/Kg	76.9	96.3	139	NS	223	NS	223	NS	123	NS	
Cyanide	mg/Kg	0.53 U	0.47 U	0.89 U	NS	0.7 U	NS	0.7 U	NS	0.66 U	NS	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-41	B-41	B-42	B-42	B-42	B-42	B-42	B-42
VOCs	DEPTH(FT.)	6.5-8	6.5-8	0-2	0-2	2-4	2-4	4-6	4-6
	DATE	12/09/92	12/08/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92
UNITS	ES ID	B41-4	B41-4RE	B42-1	B42-1RE	B42-2	B42-2RE	B42-3	B42-3RE
	LAB ID	176004	176004R1	176005	176005R1	176006	176006R1	176007	176007R1
Chloromethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Bromomethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Vinyl Chloride	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Chloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Methylene Chloride	µg/Kg	11 U	NS	5 J	11 UJ	12 UJ	12 UJ	15 U	NS
Acetone	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Carbon Disulfide	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,1-Dichloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,1-Dichloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,2-Dichloroethane (total)	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Chloroform	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,2-Dichloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
2-Butanone	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,1,1-Trichloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Carbon Tetrachloride	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,2-Dichloropropane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
cis-1,3-Dichloropropene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Trichloroethene	µg/Kg	11 U	NS	90 J	98 J	170 J	230 J	38	NS
Dibromochloromethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,1,2-Trichloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Benzene	µg/Kg	11 U	NS	11 UJ	11 UJ	2 J	3 J	15 U	NS
trans-1,3-Dichloropropene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Bromoform	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
4-Methyl-2-Pentanone	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
2-Hexanone	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Tetrachloroethene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
1,1,2,2-Tetrachloroethane	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Toluene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Chlorobenzene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Ethylbenzene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Styrene	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS
Xylene (total)	µg/Kg	11 U	NS	11 UJ	11 UJ	12 UJ	12 UJ	15 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH(FT.)	DATE	ES ID	LAB ID	UNITS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						B-41	B-41	B-42	B-42	B-42	B-42	B-42	B-42	B-42
						6.5-8	6.5-6	0-2	0-2	2-4	2-4	2-4	2-4	2-4
						12/09/92	12/08/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92
						B41-4	B41-4RE	B42-1	B42-1RE	B42-2	B42-2RE	B42-2RE	B42-3	B42-3RE
						176004	176004R1	176005	176005R1	176006	176006R1	176006R1	176007	176007R1
<b>VOCs</b>														
<b>Semivolatiles</b>														
Phenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
bis(2-Chloroethyl) ether	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2-Chlorophenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
1,3-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
1,4-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2-Methylphenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2,2'-oxybis(1-Chloropropane)	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
4-Methylphenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
N-Nitroso-di-n-propylamine	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Hexachloroethane	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Nitrobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Isophorone	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2-Nitrophenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2,4-Dimethylphenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Benzic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2,4-Dichlorophenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
1,2,4-Trichlorobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Naphthalene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	44 J	120 UJ	150 J	150 J	150 J	150 J	150 J	150 J	150 J
4-Chloroaniline	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Hexachlorobutadiene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
4-Chloro-3-methylphenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2-Methylnaphthalene	µg/Kg	360 UJ	360 UJ	14 J	15 J	40 J	71 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Hexachlorocyclopentadiene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2,4,6-Trichlorophenol	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2,4,5-Trichlorophenol	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
2-Chloronaphthalene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
2-Nitroaniline	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
Dimethylphthalate	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Acenaphthylene	µg/Kg	360 UJ	360 UJ	41 J	44 J	390 UJ	23 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
2,6-Dinitrotoluene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
3-Nitroaniline	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
Acenaphthene	µg/Kg	360 UJ	360 UJ	54 J	48 J	240 J	390 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
2,4-Dinitrophenol	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
4-Nitrophenol	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
Dibenzofuran	µg/Kg	360 UJ	360 UJ	32 J	25 J	110 J	180 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
2,4-Dinitrotoluene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Diethylphthalate	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
4-Chlorophenyl-phenylether	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Fluorene	µg/Kg	360 UJ	360 UJ	49 J	39 J	200 J	320 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
4-Nitroaniline	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
4,6-Dinitro-2-methylphenol	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
N-Nitrosodiphenylamine	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
4-Bromophenyl-phenylether	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Hexachlorobenzene	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Pentachlorophenol	µg/Kg	860 UJ	870 UJ	920 UJ	920 UJ	920 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ	950 UJ
Phenanthrene	µg/Kg	360 UJ	360 UJ	570 J	530 J	1900 J	2200 J	22 J	76 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Anthracene	µg/Kg	360 UJ	360 UJ	120 J	130 J	310 J	560 J	410 UJ	19 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Carbazole	µg/Kg	360 UJ	360 UJ	370 J	260 J	1000 J	910 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Di-n-butylphthalate	µg/Kg	110 J	430 J	1100 J	820 J	390 UJ	390 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Fluoranthene	µg/Kg	360 UJ	360 UJ	1100 J	920 J	2700 J	2800 J	32 J	100 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Pyrene	µg/Kg	360 UJ	360 UJ	810 J	890 J	2100 J	2400 J	35 J	77 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Butylbenzylphthalate	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
3,3'-Dichlorobenzidine	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Benzo(a)anthracene	µg/Kg	360 UJ	360 UJ	490 J	560 J	1100 J	1500 J	14 J	39 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Chrysene	µg/Kg	360 UJ	360 UJ	600 J	710 J	1300 J	1600 J	22 J	49 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
bis(2-Ethylhexyl)phthalate	µg/Kg	360 J	1100 J	2200 J	1100 J	600 J	550 J	260 UJ	370 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Di-n-octylphthalate	µg/Kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
Benzo(b)fluoranthene	µg/Kg	360 UJ	360 UJ	770 J	800 J	1400 J	1700 J	27 J	59 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Benzo(k)fluoranthene	µg/Kg	360 UJ	360 UJ	870 J	730 J	1000 J	1200 J	27 J	50 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Benzo(a)pyrene	µg/Kg	360 UJ	360 UJ	580 J	660 J	780 J	1300 J	410 UJ	38 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Indeno(1,2,3-cd)pyrene	µg/Kg	360 UJ	360 UJ	370 J	460 J	510 J	810 J	21 J	39 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Diberz(e,h)anthracene	µg/Kg	360 UJ	360 UJ	130 J	170 J	200 J	360 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ
Benzo(g,h,i)perylene	µg/Kg	360 UJ	360 UJ	290 J	300 J	320 J	620 J	60 J	46 J	410 UJ	410 UJ	410 UJ	410 UJ	410 UJ

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-41	B-41	B-42	B-42	B-42	B-42	B-42	B-42	
	DEPTH(FT.)	6.5-8	6.5-8	0-2	0-2	2-4	2-4	4-8	4-8	
	DATE	12/09/92	12/08/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	
	ES ID	B41-4	B41-4RE	B42-1	B42-1RE	B42-2	B42-2RE	B42-3	B42-3RE	
	LAB ID	176004	176004R1	176005	176005R1	176006	176006R1	176007	176007R1	
	UNITS									
<b>VOCs</b>										
<b>Pesticides/PCBs</b>										
alpha-BHC	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
beta-BHC	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
delta-BHC	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
gamma-BHC (Lindane)	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Heptachlor	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Aldrin	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Heptachlor epoxide	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Endosulfan I	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Dieldrin	µg/Kg	3.6 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
4,4'-DDE	µg/Kg	3.6 U	NS	90 J	NS	290	NS	14	NS	
Endrin	µg/Kg	3.6 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
Endosulfan II	µg/Kg	3.6 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
4,4'-DDD	µg/Kg	3.6 U	NS	8.4 J	NS	15 J	NS	1.3 J	NS	
Endosulfan sulfate	µg/Kg	3.6 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
4,4'-DDT	µg/Kg	3.6 U	NS	260 J	NS	240	NS	30	NS	
Methoxychlor	µg/Kg	18 U	NS	98 U	NS	100 U	NS	21 U	NS	
Endrin ketone	µg/Kg	3.8 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
Endrin aldehyde	µg/Kg	3.8 U	NS	19 U	NS	20 U	NS	4.1 U	NS	
alpha-Chlordane	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
gamma-Chlordane	µg/Kg	1.8 U	NS	9.8 U	NS	10 U	NS	2.1 U	NS	
Toxaphene	µg/Kg	180 U	NS	980 U	NS	1000 U	NS	210 U	NS	
Aroclor-1016	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
Aroclor-1221	µg/Kg	72 U	NS	390 U	NS	400 U	NS	84 U	NS	
Aroclor-1232	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
Aroclor-1242	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
Aroclor-1248	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
Aroclor-1254	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
Aroclor-1260	µg/Kg	36 U	NS	190 U	NS	200 U	NS	41 U	NS	
<b>Herbicides</b>										
2,4-D	µg/Kg	54 U	53 U	58 U	NS	60 U	NS	62 U	NS	
2,4-DB	µg/Kg	54 U	53 U	58 U	NS	60 U	NS	62 U	NS	
2,4,5-T	µg/Kg	5.4 U	5.3 U	5.8 U	NS	6 U	NS	6.2 U	NS	
2,4,5-TP (Silvex)	µg/Kg	5.4 U	5.3 U	5.8 U	NS	6 U	NS	6.2 U	NS	
Dalapon	µg/Kg	130 U	130 U	140 U	NS	140 U	NS	150 U	NS	
Dicamba	µg/Kg	5.4 U	5.3 U	5.8 U	NS	6 U	NS	6.2 U	NS	
Dichloroprop	µg/Kg	54 U	53 U	58 U	NS	60 U	NS	62 U	NS	
Dinoseb	µg/Kg	27 U	27 U	29 U	NS	30 U	NS	31 U	NS	
MCPA	µg/Kg	5400 U	5300 U	5800 U	NS	6000 U	NS	6200 U	NS	
MCPP	µg/Kg	5400 U	5300 U	5800 U	NS	6000 U	NS	6200 U	NS	
<b>Metals</b>										
Aluminum	mg/Kg	7460	NS	12500	NS	12500	NS	20600	NS	
Antimony	mg/Kg	9.8 UJ	NS	15.2 J	NS	8.6 UJ	NS	8.9 UJ	NS	
Arsenic	mg/Kg	2.4	NS	8.7	NS	10.5	NS	7.1	NS	
Barium	mg/Kg	20.4 J	NS	168	NS	218	NS	104	NS	
Beryllium	mg/Kg	0.29 J	NS	0.45 J	NS	0.45 J	NS	1.1	NS	
Cadmium	mg/Kg	0.58 U	NS	2.8	NS	3.7	NS	0.51 U	NS	
Calcium	mg/Kg	12100	NS	31200	NS	32300	NS	6320	NS	
Chromium	mg/Kg	12.2	NS	48.8	NS	52.4	NS	41.5	NS	
Cobalt	mg/Kg	6 J	NS	12.8	NS	25.1	NS	15.2	NS	
Copper	mg/Kg	5.4 R	NS	177	NS	311	NS	51.6	NS	
Iron	mg/Kg	15300	NS	49800	NS	49300	NS	40900	NS	
Lead	mg/Kg	4.2	NS	1170	NS	672	NS	158	NS	
Magnesium	mg/Kg	3300	NS	8470	NS	6760	NS	6500	NS	
Manganese	mg/Kg	287 R	NS	630	NS	589	NS	641	NS	
Mercury	mg/Kg	0.06	NS	1.2	NS	0.89	NS	0.38	NS	
Nickel	mg/Kg	18	NS	68	NS	2520	NS	78.8	NS	
Potassium	mg/Kg	405 J	NS	1420	NS	1730	NS	1950	NS	
Selenium	mg/Kg	0.38 J	NS	1 J	NS	2.1	NS	0.88	NS	
Silver	mg/Kg	0.58 U	NS	10.5	NS	2	NS	0.53 U	NS	
Sodium	mg/Kg	54.1 U	NS	309 J	NS	375 J	NS	87.6 J	NS	
Thallium	mg/Kg	0.38 U	NS	0.59 U	NS	0.51 U	NS	0.4 U	NS	
Vanadium	mg/Kg	8.3 J	NS	27.1	NS	27.7	NS	30.3	NS	
Zinc	mg/Kg	40.5	NS	649	NS	907	NS	171	NS	
Cyanide	mg/Kg	0.62 U	NS	0.52 U	NS	0.51 U	NS	0.58 U	NS	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	B-42	B-42	B-43	B-43	B-43	B-43	B-43	B-43
VOCs	DEPTH (FT.)	6-7.2	6-7.2	0-2	0-2	2-4	2-4	4-6	8-10
	DATE	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92
UNITS	ES ID	B42-4	B42-4RE	B43-1	B43-1RE	B43-2	B43-2RE	B43-3	B43-3RE
	LAB ID	176008	176008R2	176009	176009R1	176010	176010R1	176011	176011R1
Chloromethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Bromomethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Vinyl Chloride	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Chloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Methylene Chloride	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Acetone	µg/Kg	11 U	NS	11 U	NS	13 U	NS	36 UJ	48 UJ
Carbon Disulfide	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,1-Dichloroethene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,1-Dichloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,2-Dichloroethene (total)	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Chloroform	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,2-Dichloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
2-Butanone	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,1,1-Trichloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	7 J	7 J
Carbon Tetrachloride	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Vinyl acetate	µg/Kg	NS	NS	NS	NS	13 U	NS	12 UJ	12 UJ
Bromodichloromethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	NS	NS
1,2-Dichloropropane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
cis-1,3-Dichloropropene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Trichloroethene	µg/Kg	2 J	NS	8 J	NS	8 J	NS	11 J	9 J
Dibromochloromethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,1,2-Trichloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Benzene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
trans-1,3-Dichloropropene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Bromoform	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
4-Methyl-2-Pentanone	µg/Kg	11 U	NS	5 J	NS	13 U	NS	12 UJ	12 UJ
2-Hexanone	µg/Kg	11 U	NS	9 J	NS	13 U	NS	12 UJ	12 UJ
Tetrachloroethene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
1,1,2,2-Tetrachloroethane	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Toluene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Chlorobenzene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Ethylbenzene	µg/Kg	11 U	NS	3 J	NS	13 U	NS	12 UJ	12 UJ
Styrene	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ
Xylene (total)	µg/Kg	11 U	NS	11 U	NS	13 U	NS	12 UJ	12 UJ

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-42	B-42	B-43	B-43	B-43	B-43	B-43	B-43	
	DEPTH(FT.)	6-7.2	6-7.2	0-2	0-2	2-4	2-4	2-4	4-6	
	DATE	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	12/09/92	
	ES ID	B42-4	B42-4RE	B43-1	B43-1RE	B43-2	B43-2RE	B43-3	B43-3RE	
	LAB ID	176008	176008R2	176009	176009R1	176010	176010R1	176011	176011R1	
	UNITS									
VOCs										
SemiVolatiles										
Phenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 J	2800 UJ	1000 UJ	1000 UJ	
bis(2-Chloroethyl) ether	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2-Chlorophenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
1,3-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
1,4-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2-Methylphenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,2'-oxybis(1-Chloropropane)	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
4-Methylphenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
N-Nitroso-dl-n-propylamine	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Hexachloroethane	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Nitrobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Isophorone	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2-Nitrophenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,4-Dimethylphenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Benzic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,4-Dichlorophenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
1,2,4-Trichlorobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Naphthalene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	500 J	2800 UJ	1000 UJ	1000 UJ	
4-Chloroaniline	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Hexachlorobutadiene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
4-Chloro-3-methylphenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2-Methylnaphthalene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	350 J	2800 UJ	1000 UJ	1000 UJ	
Hexachlorocyclopentadiene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,4,6-Trichlorophenol	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,4,5-Trichlorophenol	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
2-Chloronaphthalene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2-Nitroaniline	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
Dimethylphthalate	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Acenaphthylene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
2,6-Dinitrotoluene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
3-Nitroaniline	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
Acenaphthene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 J	250 J	88 J	1000 UJ	
2,4-Dinitrophenol	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
4-Nitrophenol	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
Dibenzofuran	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	990 J	120 J	1000 UJ	1000 UJ	
2,4-Dinitrotoluene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Diethylphthalate	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	1300 J	2800 UJ	1000 UJ	1000 UJ	
4-Chlorophenyl-phenylether	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Fluorene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	1900 J	230 J	53 J	1000 UJ	
4-Nitroaniline	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
4,6-Dinitro-2-methylphenol	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
N-Nitrosodiphenylamine	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
4-Bromophenyl-phenylether	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Hexachlorobenzene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Pentachlorophenol	µg/Kg	870 UJ	880 UJ	6200 UJ	6200 UJ	5200 UJ	6700 UJ	2500 UJ	2500 UJ	
Phenanthrene	µg/Kg	360 UJ	360 UJ	160 J	820 J	15000 J	2600 J	320 J	240 J	
Anthracene	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	2900 J	680 J	95 J	79 J	
Carbazole	µg/Kg	360 UJ	360 UJ	2500 UJ	2500 UJ	18000 J	1300 J	430 J	180 J	
Di-n-butylphthalate	µg/Kg	390 J	90 J	82 J	25000 UJ	200 J	320 J	1000 UJ	1000 UJ	
Fluoranthene	µg/Kg	360 UJ	18 J	240 J	1300 J	15000 J	4300 J	410 J	480 J	
Pyrene	µg/Kg	360 UJ	13 J	270 J	1100 J	14000 J	3600 J	500 J	340 J	
Butylbenzylphthalate	µg/Kg	14 J	14 J	2500 UJ	25000 UJ	300 J	300 J	1000 UJ	1000 UJ	
3,3'-Dichlorobenzidine	µg/Kg	360 UJ	360 UJ	2500 UJ	25000 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Benzo(a)anthracene	µg/Kg	360 UJ	140 J	2500 UJ	25000 UJ	8000 J	2200 J	250 J	200 J	
Chrysene	µg/Kg	360 UJ	170 J	2500 UJ	25000 UJ	8600 J	2400 J	300 J	230 J	
bis(2-Ethylhexyl)phthalate	µg/Kg	1500	1200 J	33000 J	230000 J	13000 J	21000 J	3000 J	5800 J	
Di-n-octylphthalate	µg/Kg	360 UJ	360 UJ	2500 UJ	25000 UJ	2100 UJ	2800 UJ	1000 UJ	1000 UJ	
Benzo(b)fluoranthene	µg/Kg	360 UJ	170 J	2500 UJ	25000 UJ	1900 J	260 J	250 J	210 J	
Benzo(k)fluoranthene	µg/Kg	360 UJ	360 UJ	180 J	25000 UJ	5900 J	1600 J	290 J	200 J	
Benzo(a)pyrene	µg/Kg	360 UJ	360 UJ	94 J	25000 UJ	6400 J	1800 J	210 J	210 J	
Indeno(1,2,3-cd)pyrene	µg/Kg	360 UJ	360 UJ	120 J	25000 UJ	4700 J	1400 J	200 J	150 J	
Dibenz(a,h)anthracene	µg/Kg	360 UJ	360 UJ	2500 UJ	25000 UJ	2100 J	480 J	1000 UJ	1000 UJ	
Benzo(g,h,i)perylene	µg/Kg	360 UJ	360 UJ	2500 UJ	25000 UJ	2300 J	950 J	260 J	140 J	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH (FT.) DATE ES ID LAB ID UNITS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
		B-42 6-7.2 12/09/92 B42-4 176008	B-42 6-7.2 12/09/92 B42-4RE 176008R2	B-43 0-2 12/09/92 B43-1 176009	B-43 0-2 12/09/92 B43-1RE 176009R1	B-43 2-4 12/09/92 B43-2 176010	B-43 2-4 12/09/92 B43-2RE 176010R1	B-43 4-6 12/09/92 B43-3 176011	B-43 4-6 12/09/92 B43-3RE 176011R1	
<b>VOCs</b>										
<b>Pesticides/PCBs</b>										
alpha-BHC	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
beta-BHC	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
delta-BHC	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
gamma-BHC (Lindane)	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Heptachlor	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Aldrin	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Heptachlor epoxide	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Endosulfan I	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Dieldrin	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
4,4'-DDE	µg/Kg	3.6 UJ	NS	17 J	NS	84	NS	22	NS	
Endrin	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
Endosulfan II	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
4,4'-DDD	µg/Kg	3.6 UJ	NS	16 J	NS	66	NS	24	NS	
Endosulfan sulfate	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
4,4'-DDT	µg/Kg	3.6 UJ	NS	5.5 J	NS	22 J	NS	6.7 J	NS	
Methoxychlor	µg/Kg	19 UJ	NS	20 UJ	NS	110 U	NS	21 U	NS	
Endrin ketone	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
Endrin aldehyde	µg/Kg	3.6 UJ	NS	3.9 UJ	NS	21 U	NS	4.2 U	NS	
alpha-Chlordane	µg/Kg	1.9 UJ	NS	1.3 UJ	NS	8 J	NS	5 J	NS	
gamma-Chlordane	µg/Kg	1.9 UJ	NS	2 UJ	NS	11 U	NS	2.1 U	NS	
Toxaphene	µg/Kg	190 UJ	NS	200 UJ	NS	1100 UJ	NS	210 U	NS	
Aroclor-1016	µg/Kg	36 UJ	NS	39 UJ	NS	210 U	NS	42 U	NS	
Aroclor-1221	µg/Kg	73 UJ	NS	79 UJ	NS	430 U	NS	85 U	NS	
Aroclor-1232	µg/Kg	36 UJ	NS	39 UJ	NS	210 U	NS	42 U	NS	
Aroclor-1242	µg/Kg	36 UJ	NS	45 J	NS	260	NS	96	NS	
Aroclor-1248	µg/Kg	36 UJ	NS	39 UJ	NS	210 U	NS	42 U	NS	
Aroclor-1254	µg/Kg	36 UJ	NS	43 J	NS	180 J	NS	66	NS	
Aroclor-1260	µg/Kg	36 UJ	NS	39 UJ	NS	210 U	NS	42 U	NS	
<b>Herbicides</b>										
2,4-D	µg/Kg	55 U	NS	58 U	NS	64 U	NS	63 U	NS	
2,4-DB	µg/Kg	55 U	NS	58 U	NS	64 U	NS	63 U	NS	
2,4,5-T	µg/Kg	5.5 U	NS	5.8 U	NS	6.4 U	NS	6.3 U	NS	
2,4,5-TP (Silvex)	µg/Kg	5.5 U	NS	5.8 U	NS	6.4 U	NS	6.3 U	NS	
Dalapon	µg/Kg	130 U	NS	140 U	NS	150 U	NS	150 U	NS	
Dicamba	µg/Kg	5.5 U	NS	5.8 U	NS	6.4 U	NS	6.3 U	NS	
Dichloroprop	µg/Kg	55 U	NS	58 U	NS	64 U	NS	63 U	NS	
Dinoseb	µg/Kg	27 U	NS	29 U	NS	32 U	NS	31 U	NS	
MCPA	µg/Kg	5500 U	NS	5800 U	NS	6400 U	NS	6300 U	NS	
MCPP	µg/Kg	5500 U	NS	5800 U	NS	6400 U	NS	6300 U	NS	
<b>Metals</b>										
Aluminum	mg/Kg	12900	NS	13600	NS	11100	NS	16300	NS	
Antimony	mg/Kg	7.7 UJ	NS	8.5 UJ	NS	10.2 UJ	NS	7.8 UJ	NS	
Arsenic	mg/Kg	3.9	NS	7.4	NS	8.4	NS	7.5	NS	
Barium	mg/Kg	61	NS	116	NS	114	NS	166	NS	
Beryllium	mg/Kg	0.57 J	NS	0.57 J	NS	0.44 J	NS	0.55 J	NS	
Cadmium	mg/Kg	0.44 U	NS	1.8	NS	11.4	NS	3.9	NS	
Calcium	mg/Kg	65200	NS	37700	NS	21100	NS	54400	NS	
Chromium	mg/Kg	21.9	NS	33.8	NS	35.8	NS	36.8	NS	
Cobalt	mg/Kg	11.9	NS	10.6	NS	21.8	NS	12.2	NS	
Copper	mg/Kg	24.4	NS	79.4	NS	91.8	NS	89.3	NS	
Iron	mg/Kg	25100	NS	35000	NS	65100	NS	67500	NS	
Lead	mg/Kg	17.3	NS	151	NS	2610	NS	233	NS	
Magnesium	mg/Kg	9910	NS	6830	NS	4900	NS	9960	NS	
Manganese	mg/Kg	435	NS	476	NS	405	NS	860	NS	
Mercury	mg/Kg	0.04 J	NS	0.42	NS	0.38	NS	0.38	NS	
Nickel	mg/Kg	36.5	NS	38.5	NS	43.3	NS	51	NS	
Potassium	mg/Kg	1460	NS	1250	NS	1140	NS	1420	NS	
Selenium	mg/Kg	0.67 J	NS	1 J	NS	1.2	NS	0.82 J	NS	
Silver	mg/Kg	0.45 U	NS	0.83 J	NS	1.3 J	NS	0.9 J	NS	
Sodium	mg/Kg	119 J	NS	96.5 J	NS	118 J	NS	216 J	NS	
Thallium	mg/Kg	0.45 U	NS	0.55 U	NS	0.35 U	NS	0.54 U	NS	
Vanadium	mg/Kg	19.4	NS	26.1	NS	20.5	NS	29.3	NS	
Zinc	mg/Kg	61.5	NS	74.5	NS	1410	NS	3100	NS	
Cyanide	mg/Kg	0.55 U	NS	0.59 U	NS	0.62 U	NS	0.95	NS	



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH(FT.)	B-43	B-43	B-44	B-44	B-44	B-44	B-44	B-44	B-44
	DATE	8-10	8-10	8-8.2	8-8.2	0-2	0-2	0-2	2-4	2-4
	ES ID	12/09/92	12/09/92	12/10/92	12/10/92	12/10/92	12/10/92	12/10/92	12/10/92	12/10/92
	LAB ID	B43-4	B43-4RE	B44A-3	B44A-3RE	B44B-1	B44B-1RE	B44B-2	B44B-2RE	B44B-2RE
	UNITS	178012	178012R1	178013	178013R1	178014	178014R1	178015	178015R1	178015R1
VOCs										
Chloromethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Bromomethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Vinyl Chloride	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Chloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Methylene Chloride	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Acetone	µg/Kg	24 UJ	14 UJ	93 J	19 J	12 U	NS	12 U	12 U	12 U
Carbon Disulfide	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,1-Dichloroethene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,1-Dichloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,2-Dichloroethene (total)	µg/Kg	13 UJ	13 UJ	5 J	12 U	12 U	NS	12 U	12 U	12 U
Chloroform	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,2-Dichloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
2-Butanone	µg/Kg	13 UJ	13 UJ	16 J	6 J	12 U	NS	12 U	12 U	12 U
1,1,1-Trichloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Carbon Tetrachloride	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,2-Dichloropropane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
cis-1,3-Dichloropropene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Trichloroethene	µg/Kg	15 J	15 J	5 J	5 J	12 U	NS	12 U	12 U	2 J
Dibromochloromethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,1,2-Trichloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Benzene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
trans-1,3-Dichloropropene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Bromoform	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
4-Methyl-2-Pentanone	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
2-Hexanone	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Tetrachloroethene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
1,1,2,2-Tetrachloroethane	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Toluene	µg/Kg	2 J	2 J	10 J	10 J	12 U	NS	12 U	12 U	12 U
Chlorobenzene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Ethylbenzene	µg/Kg	13 UJ	13 UJ	48 J	44 J	12 U	NS	12 U	12 U	12 U
Styrene	µg/Kg	13 UJ	13 UJ	12 UJ	12 U	12 U	NS	12 U	12 U	12 U
Xylene (total)	µg/Kg	13 UJ	13 UJ	250 J	240 J	12 U	NS	12 U	12 U	12 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID UNITS	SOIL B-43 8-10 12/09/92 B43-4 178012	SOIL B-43 8-10 12/09/92 B43-4RE 178012R1	SOIL B-44 8-8.2 12/10/92 B44A-3 178013	SOIL B-44 8-8.2 12/10/92 B44A-3RE 178013R1	SOIL B-44 0-2 12/10/92 B44B-1 178014	SOIL B-44 0-2 12/10/92 B44B-1RE 178014R1	SOIL B-44 2-4 12/10/92 B44B-2 178015	SOIL B-44 2-4 12/10/92 B44B-2RE 178015R1	
<b>VOCs</b>									
<b>Semivolatiles</b>									
Phenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
bis(2-Chloroethyl) ether	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2-Chlorophenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
1,3-Dichlorobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
1,4-Dichlorobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2-Methylphenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2,2'-oxybis(1-Chloropropane)	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
4-Methylphenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
N-Nitroso-d-n-propylamine	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Hexachloroethane	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Nitrobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Isophorone	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2-Nitrophenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2,4-Dimethylphenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Benzic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2,4-Dichlorophenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
1,2,4-Trichlorobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Naphthalene	µg/Kg	1300 J	770 J	150 J	5100 UJ	410 UJ	420 UJ	400 UJ	100 J
4-Chloroaniline	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Hexachlorobutadiene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
4-Chloro-3-methylphenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2-Methylnaphthalene	µg/Kg	1800 J	1300 J	86 J	5100 UJ	410 UJ	420 UJ	400 UJ	100 J
Hexachlorocyclopentadiene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2,4,6-Trichlorophenol	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2,4,5-Trichlorophenol	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
2-Chloronaphthalene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
2-Nitroaniline	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
Dimethylphthalate	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Acenaphthylene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	76 J
2,6-Dinitrotoluene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
3-Nitroaniline	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
Acenaphthene	µg/Kg	9500 J	14000 J	120 J	5100 UJ	18 J	420 UJ	400 UJ	280 J
2,4-Dinitrophenol	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
4-Nitrophenol	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
Dibenzofuran	µg/Kg	5800 J	7000 J	71 J	5100 UJ	410 UJ	420 UJ	400 UJ	120 J
2,4-Dinitrotoluene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Diethylphthalate	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
4-Chlorophenyl-phenylether	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Fluorene	µg/Kg	12000 J	11000 J	130 J	5100 UJ	17 J	420 UJ	400 UJ	250 J
4-Nitroaniline	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
4,6-Dinitro-2-methylphenol	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
N-Nitrosodiphenylamine	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
4-Bromophenyl-phenylether	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Hexachlorobenzene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Pentachlorophenol	µg/Kg	14000 UJ	17000 UJ	2500 UJ	12000 UJ	1000 UJ	1000 UJ	970 UJ	980 UJ
Phenanthrene	µg/Kg	43000 J	35000 J	610 J	850 J	140 J	93 J	87 J	2000 J
Anthracene	µg/Kg	13000 J	15000 J	140 J	280 J	32 J	22 J	14 J	550 J
Carbazole	µg/Kg	37000 J	14000 J	660 J	350 J	200 J	38 J	110 J	1400 J
Di-n-butylphthalate	µg/Kg	5800 UJ	7000 UJ	120 J	25000 J	40 J	420 UJ	18 J	400 UJ
Fluoranthene	µg/Kg	25000 J	29000 J	440 J	1000 J	200 J	220 J	120 J	2600 J
Pyrene	µg/Kg	24000 J	18000 J	510 J	820 J	180 J	160 J	140 J	2200 J
Butylbenzylphthalate	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
3,3'-Dichlorobenzidine	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Benzo(a)anthracene	µg/Kg	5800 J	4300 J	250 J	470 J	97 J	88 J	62 J	1400 J
Chrysene	µg/Kg	5700 J	4100 J	250 J	520 J	110 J	130 J	81 J	1500 J
bis(2-Ethylhexyl)phthalate	µg/Kg	5800 UJ	3500 J	810 J	25000 J	410 UJ	420 UJ	400 UJ	400 UJ
Di-n-octylphthalate	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	410 UJ	420 UJ	400 UJ	400 UJ
Benzo(b)fluoranthene	µg/Kg	2700 J	1400 J	210 J	5100 UJ	110 J	120 J	88 J	1500 J
Benzo(k)fluoranthene	µg/Kg	2600 J	1400 J	230 J	5100 UJ	99 J	100 J	81 J	1200 J
Benzo(e)pyrene	µg/Kg	2100 J	1200 J	170 J	350 J	97 J	82 J	51 J	1200 J
Indeno(1,2,3-cd)pyrene	µg/Kg	1000 J	450 J	150 J	250 J	79 J	70 J	62 J	610 J
Dibenz(a,h)anthracene	µg/Kg	5800 UJ	7000 UJ	1000 UJ	5100 UJ	23 J	420 UJ	400 UJ	270 J
Benzo(g,h,i)perylene	µg/Kg	590 J	7000 UJ	130 J	280 J	57 J	60 J	44 J	430 J

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID	SOIL B-43 8-10 12/09/92 B43-4 176012	SOIL B-43 8-10 12/09/92 B43-4RE 176012R1	SOIL B-44 8-8.2 12/10/92 B44A-3 176013	SOIL B-44 8-6.2 12/10/92 B44A-3RE 176013R1	SOIL B-44 0-2 12/10/92 B44B-1 176014	SOIL B-44 0-2 12/10/92 B44B-1RE 176014R1	SOIL B-44 2-4 12/10/92 B44B-2 176015	SOIL B-44 2-4 12/10/92 B44B-2RE 176015R1	
<b>COMPOUND</b>									
<b>VOCs</b>									
<b>Pesticides/P CBs</b>									
alpha-BHC	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
beta-BHC	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
delta-BHC	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
gamma-BHC (Lindane)	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Heptachlor	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Aldrin	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Heptachlor epoxide	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Endosulfan I	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Dieldrin	µg/Kg	4.1 U	NS	8.1 U	NS	4.1 U	NS	4 U	NS
4,4'-DDE	µg/Kg	7.8 J	NS	37	NS	2.9 J	NS	14	NS
Endrin	µg/Kg	6.2 J	NS	8.1 U	NS	2 J	NS	4 U	NS
Endosulfan II	µg/Kg	4.1 U	NS	8.1 U	NS	4.1 U	NS	4 U	NS
4,4'-DDD	µg/Kg	11 J	NS	34	NS	4.1 U	NS	17	NS
Endosulfan sulfate	µg/Kg	2.6 J	NS	8.1 U	NS	4.1 U	NS	4 U	NS
4,4'-DDT	µg/Kg	4.1 J	NS	7.6 J	NS	4.1 U	NS	14	NS
Methoxychlor	µg/Kg	4.4 J	NS	42 U	NS	21 U	NS	21 U	NS
Endrin ketone	µg/Kg	4.1 U	NS	8.1 U	NS	4.1 U	NS	4 U	NS
Endrin aldehyde	µg/Kg	4.1 U	NS	8.1 U	NS	4.1 U	NS	4 U	NS
alpha-Chlordane	µg/Kg	15 J	NS	2 J	NS	5 J	NS	3.2 J	NS
gamma-Chlordane	µg/Kg	2.1 U	NS	4.2 U	NS	2.1 U	NS	2.1 U	NS
Toxaphene	µg/Kg	210 U	NS	420 U	NS	210 U	NS	210 U	NS
Aroclor-1016	µg/Kg	41 U	NS	81 U	NS	41 U	NS	40 U	NS
Aroclor-1221	µg/Kg	83 U	NS	160 U	NS	84 U	NS	82 U	NS
Aroclor-1232	µg/Kg	41 U	NS	81 U	NS	41 U	NS	40 U	NS
Aroclor-1242	µg/Kg	68 J	NS	50 J	NS	41 U	NS	40 U	NS
Aroclor-1248	µg/Kg	41 U	NS	81 U	NS	41 U	NS	40 U	NS
Aroclor-1254	µg/Kg	90 J	NS	89	NS	41 U	NS	40 U	NS
Aroclor-1260	µg/Kg	41 U	NS	81 U	NS	41 U	NS	40 U	NS
<b>Herbicides</b>									
2,4-D	µg/Kg	82 U	NS	NS	NS	82 U	NS	61 U	NS
2,4-DB	µg/Kg	62 U	NS	NS	NS	82 U	NS	61 U	NS
2,4,5-T	µg/Kg	6.2 U	NS	NS	NS	6.2 U	NS	6.1 U	NS
2,4,5-TP (Silvex)	µg/Kg	6.2 U	NS	NS	NS	6.2 U	NS	6.1 U	NS
Dalapon	µg/Kg	150 U	NS	NS	NS	150 U	NS	150 U	NS
Dicamba	µg/Kg	6.2 U	NS	NS	NS	6.2 U	NS	6.1 U	NS
Dichloroprop	µg/Kg	62 U	NS	NS	NS	62 U	NS	61 U	NS
Dinoseb	µg/Kg	31 U	NS	NS	NS	31 U	NS	30 U	NS
MCPA	µg/Kg	6200 U	NS	NS	NS	6200 U	NS	6100 U	NS
MCPP	µg/Kg	6200 U	NS	NS	NS	6200 U	NS	6100 U	NS
<b>Metals</b>									
Aluminum	mg/Kg	13500	NS	11600	NS	15000	NS	13400	NS
Antimony	mg/Kg	13.5 UJ	NS	8.5 UJ	NS	10.7 UJ	NS	10.2 UJ	NS
Arsenic	mg/Kg	6.5	NS	6.1	NS	5.3	NS	5.4	NS
Barium	mg/Kg	108	NS	113	NS	73.3	NS	91	NS
Beryllium	mg/Kg	0.58 J	NS	0.44 J	NS	0.63 J	NS	0.66 J	NS
Cadmium	mg/Kg	7.8	NS	1.5	NS	0.61 U	NS	0.58 U	NS
Calcium	mg/Kg	38500	NS	37500	NS	9720	NS	36300	NS
Chromium	mg/Kg	35.1	NS	32	NS	35.8	NS	25.1	NS
Cobalt	mg/Kg	10.9 J	NS	9	NS	12.3	NS	11.8	NS
Copper	mg/Kg	68.1	NS	224	NS	24.2	NS	27.9	NS
Iron	mg/Kg	60800	NS	46700	NS	28700	NS	26100	NS
Lead	mg/Kg	150	NS	250	NS	21.1	NS	31.8	NS
Magnesium	mg/Kg	7940	NS	9020	NS	6190	NS	9120	NS
Manganese	mg/Kg	792	NS	585	NS	634	NS	583	NS
Mercury	mg/Kg	0.28	NS	0.85	NS	0.04 J	NS	0.07	NS
Nickel	mg/Kg	42.6	NS	35.3	NS	46.6	NS	37.7	NS
Potassium	mg/Kg	1440	NS	1340	NS	1220	NS	982	NS
Selenium	mg/Kg	0.77 J	NS	1.1 J	NS	0.7 J	NS	0.58 J	NS
Silver	mg/Kg	1.8 J	NS	2.4	NS	0.63 U	NS	0.6 U	NS
Sodium	mg/Kg	127 J	NS	1010	NS	58.9 U	NS	136 J	NS
Thallium	mg/Kg	0.85 U	NS	0.59 U	NS	0.44 U	NS	0.37 U	NS
Vanadium	mg/Kg	26.1	NS	18.2	NS	22.9	NS	25.1	NS
Zinc	mg/Kg	1710	NS	525	NS	75.7	NS	102	NS
Cyanide	mg/Kg	0.77 U	NS	0.74 U	NS	0.75 U	NS	0.74 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID UNITS	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		B-44 8-10 12/10/92 B44B-3 178016	B-44 8-10 12/10/92 B44B-3RE 178016R1	B-44 12-13.5 12/10/92 B44B-4 178017	B-44 12-13.5 12/10/92 B44B-4RE 178017R1	B-45 0-2 04/28/93 B45-1 183170	B-45 2-4 04/28/93 B45-2 183171	B-45 4-8 04/28/93 B45-3 183172	B-45 4-8 04/28/93 B45-6 183173
VOCs									
Chloromethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Bromomethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Vinyl Chloride	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Chloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Methylene Chloride	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Acetone	µg/Kg	45	NS	11 U	NS	12 U	12 U	12 U	12 U
Carbon Disulfide	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
1,1-Dichloroethane	µg/Kg	12 U	NS	14	NS	12 U	12 U	12 U	12 U
1,1-Dichloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
1,2-Dichloroethane (total)	µg/Kg	2 J	NS	36	NS	3 J	3 J	210 J	4 J
Chloroform	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
1,2-Dichloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
2-Butanone	µg/Kg	6 J	NS	11 U	NS	12 U	12 U	12 U	12 U
1,1,1-Trichloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Carbon Tetrachloride	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
1,2-Dichloropropane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
cis-1,3-Dichloropropene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Trichloroethene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Dibromochloromethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	71 J	12 U
1,1,2-Trichloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Benzene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
trans-1,3-Dichloropropene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Bromoform	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
4-Methyl-2-Pentanone	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
2-Hexanone	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Tetrachloroethene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
1,1,2,2-Tetrachloroethane	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Toluene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Chlorobenzene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Ethylbenzene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Styrene	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U
Xylene (total)	µg/Kg	12 U	NS	11 U	NS	12 U	12 U	12 U	12 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH(FT.)	SOIL B-44 8-10 DATE 12/10/92 ES ID B44B-3 LAB ID 176016	SOIL B-44 8-10 DATE 12/10/92 B44B-3RE 176016R1	SOIL B-44 12-13.5 DATE 12/10/92 B44B-4 176017	SOIL B-44 12-13.5 DATE 12/10/92 B44B-4RE 176017R1	SOIL B-45 0-2 DATE 04/28/93 B45-1 183170	SOIL B-45 2-4 DATE 04/28/93 B45-2 183171	SOIL B-45 4-6 DATE 04/28/93 B45-3 183172	SOIL B-45 4-6 DATE 04/28/93 B45-6 183173	
	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	
VOCs										
Semi-volatiles										
Phenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
bis(2-Chloroethyl) ether	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2-Chlorophenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
1,3-Dichlorobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
1,4-Dichlorobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzyl alcohol	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
1,2-Dichlorobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2-Methylphenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,2'-oxybis(1-Chloropropane)	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Methylphenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
N-Nitroso-d-n-propylamine	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Hexachloroethane	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Nitrobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Isophorone	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2-Nitrophenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4-Dimethylphenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzoic acid	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
bis(2-Chloroethoxy) methane	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4-Dichlorophenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
1,2,4-Trichlorobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Naphthalene	µg/Kg	87 J	88 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Chloroaniline	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Hexachlorobutadiene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Chloro-3-methylphenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2-Methylnaphthalene	µg/Kg	33 J	48 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Hexachlorocyclopentadiene	µg/Kg	360 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4,6-Trichlorophenol	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4,5-Trichlorophenol	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
2-Chloronaphthalene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2-Nitroaniline	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
Dimethylphthalate	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Acenaphthylene	µg/Kg	380 UJ	44 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,6-Dinitrotoluene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
3-Nitroaniline	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
Acenaphthene	µg/Kg	120 J	140 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4-Dinitrophenol	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
4-Nitrophenol	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
Dibenzofuran	µg/Kg	47 J	69 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
2,4-Dinitrotoluene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Diethylphthalate	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Chlorophenyl-phenyl ether	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Fluorene	µg/Kg	89 J	130 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Nitroaniline	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
4,6-Dinitro-2-methylphenol	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
N-Nitrosodiphenylamine	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
4-Bromophenyl-phenyl ether	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Hexachlorobenzene	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Pentachlorophenol	µg/Kg	930 UJ	950 UJ	860 UJ	870 UJ	1000 U	1000 U	930 U	970 U	
Phenanthrene	µg/Kg	640 J	1000 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Anthracene	µg/Kg	140 J	260 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Carbazole	µg/Kg	780 J	540 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Di-n-butylphthalate	µg/Kg	72 J	390 UJ	73 J	360 UJ	430 U	25 J	140 J	42 J	
Fluoranthene	µg/Kg	700 J	1200 J	360 UJ	13 J	430 U	410 U	380 U	400 U	
Pyrene	µg/Kg	560 J	1200 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Butylbenzyl phthalate	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
3,3'-Dichlorobenzidine	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzo(a)anthracene	µg/Kg	340 J	550 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Chrysene	µg/Kg	370 J	860 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
bis(2-Ethylhexyl)phthalate	µg/Kg	400 J	740 J	470 J	880 J	260 J	320 J	450	530	
Di-n-octylphthalate	µg/Kg	380 UJ	390 UJ	360 UJ	360 UJ	430 U	410 U	47 J	400 U	
Benzo(b)fluoranthene	µg/Kg	360 J	810 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzo(k)fluoranthene	µg/Kg	300 J	490 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzo(a)pyrene	µg/Kg	270 J	460 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Indeno(1,2,3-cd)pyrene	µg/Kg	170 J	150 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Dibenz(a,h)anthracene	µg/Kg	63 J	22 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	
Benzo(g,h,i)perylene	µg/Kg	90 J	120 J	360 UJ	360 UJ	430 U	410 U	380 U	400 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH(FT.)	SOIL B-44 8-10 12/10/92 B44B-3 176016	SOIL B-44 8-10 12/10/92 B44B-3RE 176016R1	SOIL B-44 12-13.5 12/10/92 B44B-4 176017	SOIL B-44 12-13.5 12/10/92 B44B-4RE 176017R1	SOIL B-45 0-2 04/28/93 B45-1 183170	SOIL B-45 2-4 04/28/93 B45-2 183171	SOIL B-45 4-6 04/28/93 B45-3 183172	SOIL B-45 4-6 04/28/93 B45-6 183173	
	UNITS								DUP B45-3	
<b>VOCs</b>										
<b>Pesticides,PCBs</b>										
alpha-BHC	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
beta-BHC	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
delta-BHC	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
gamma-BHC (Lindane)	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Heptachlor	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Aldrin	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Heptachlor epoxide	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Endosulfan I	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Dieldrin	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
4,4'-DDE	µg/Kg	7.3 J	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
Endrin	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
Endosulfan II	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
4,4'-DDD	µg/Kg	3.6 J	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
Endosulfan sulfate	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
4,4'-DDT	µg/Kg	5.8	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
Methoxychlor	µg/Kg	20 U	NS	19 U	NS	22 U	22 U	20 U	21 U	
Endrin ketone	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
Endrin aldehyde	µg/Kg	3.9 U	NS	3.6 U	NS	4.3 U	4.2 U	3.8 U	4 U	
alpha-Chlordane	µg/Kg	3 J	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
gamma-Chlordane	µg/Kg	2 U	NS	1.9 U	NS	2.2 U	2.2 U	2 U	2.1 U	
Toxaphene	µg/Kg	200 U	NS	190 U	NS	220 U	220 U	200 U	210 U	
Aroclor-1016	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
Aroclor-1221	µg/Kg	60 U	NS	73 U	NS	88 U	85 U	78 U	82 U	
Aroclor-1232	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
Aroclor-1242	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
Aroclor-1248	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
Aroclor-1254	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
Aroclor-1260	µg/Kg	39 U	NS	36 U	NS	43 U	42 U	38 U	40 U	
<b>Herbicides</b>										
2,4-D	µg/Kg	59 U	NS	55 U	NS	68 U	64 U	59 U	62 U	
2,4-DB	µg/Kg	59 U	NS	55 U	NS	68 U	64 U	59 U	62 U	
2,4,5-T	µg/Kg	5.9 U	NS	5.5 U	NS	6.8 U	6.4 U	5.9 U	6.2 U	
2,4,5-TP (Silvex)	µg/Kg	5.9 U	NS	5.5 U	NS	6.8 U	6.4 U	5.9 U	6.2 U	
Dalapon	µg/Kg	140 U	NS	130 U	NS	170 U	160 U	150 U	150 U	
Dicamba	µg/Kg	5.9 U	NS	5.5 U	NS	6.8 U	6.4 U	5.9 U	6.2 U	
Dichloroprop	µg/Kg	59 U	NS	55 U	NS	68 U	64 U	59 U	62 U	
Dinoseb	µg/Kg	30 U	NS	27 U	NS	34 U	32 U	30 U	31 U	
MCPA	µg/Kg	5900 U	NS	5500 U	NS	6800 U	6400 U	5900 U	6200 U	
MCPP	µg/Kg	5900 U	NS	5500 U	NS	6800 U	6400 U	5900 U	6200 U	
<b>Metals</b>										
Aluminum	mg/Kg	8850	NS	15400	NS	19700	14800	15200	16900	
Antimony	mg/Kg	12.1 UJ	NS	11.9 UJ	NS	5.3 UJ	5.4 UJ	10.1 J	5.7 UJ	
Arsenic	mg/Kg	5.1	NS	4.7	NS	4.6	5.2	2.7	5.8	
Barium	mg/Kg	58.5	NS	59.3	NS	114	71.4	64.8	87.1	
Beryllium	mg/Kg	0.53 J	NS	0.72 J	NS	0.96 J	0.73 J	0.7 J	0.84 J	
Cadmium	mg/Kg	0.89 U	NS	0.68 U	NS	0.39 U	0.39 U	0.37 U	0.41 U	
Calcium	mg/Kg	44500	NS	7260	NS	4670	16300	2690	6710	
Chromium	mg/Kg	17.6	NS	26.9	NS	31.2	23.3	25.5	27	
Cobalt	mg/Kg	9.1 J	NS	13.7	NS	16.8	12.7	13.7	15.6	
Copper	mg/Kg	29.6	NS	16.2	NS	31.6	27.7	19.5	29.4	
Iron	mg/Kg	20600	NS	32100	NS	38300	30200	31700	34400	
Lead	mg/Kg	192	NS	8.6	NS	11.1	10.5	5.9	8.4	
Magnesium	mg/Kg	8820	NS	6260	NS	7320	6770	5960	6530	
Manganese	mg/Kg	415	NS	511	NS	1020	621	601	736	
Mercury	mg/Kg	0.07 J	NS	0.03 J	NS	0.05 U	0.04 U	0.05 U	0.03 U	
Nickel	mg/Kg	30.8	NS	39.5	NS	50	37.9	39.5	44.9	
Potassium	mg/Kg	1060 J	NS	1110	NS	1320	1130	925 J	1110	
Selenium	mg/Kg	0.54 J	NS	0.59 J	NS	0.18 U	0.2 U	0.16 U	0.17 U	
Silver	mg/Kg	0.71 U	NS	0.71 U	NS	0.63 U	0.64 U	0.8 U	0.89 U	
Sodium	mg/Kg	160 J	NS	65.9 U	NS	96.8 U	100 U	95.1 U	106 U	
Thallium	mg/Kg	0.37 U	NS	0.48 U	NS	0.53 U	0.59 U	0.47 U	0.51 U	
Vanadium	mg/Kg	17.4	NS	19.7	NS	29.8	21.3	19.7	24.6	
Zinc	mg/Kg	83.9	NS	107	NS	86.6	94.1	98.8	108	
Cyanide	mg/Kg	0.67 U	NS	0.68 U	NS	0.81 U	0.77 U	0.69 U	0.74 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	
	LOCATION	B-46	B-46	B-46	B-46	B-46	B-46	B-47	B-47	
	DEPTH(FT.)	0-2	0-2	2-4	4-8	6-7.1	0-2	0-2	B-47	
	DATE	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93	
	ES ID	B46-1	B46-1RE	B46-2	B46-3	B46-4	B47-1	B47-1RE	B47-2	
	LAB ID	183303	183303R1	183304	183305	183306	183307	183307R1	183308	
	UNITS									
VOCs										
Chloromethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Bromomethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Vinyl Chloride	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Chloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Methylene Chloride	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Acetone	µg/Kg	12 U	NS	100	75	12 U	10 UJ	10 UJ	42	
Carbon Disulfide	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,1-Dichloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	13	
1,1-Dichloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,2-Dichloroethane (total)	µg/Kg	12 U	NS	2 J	12 U	12 U	2 J	1 J	170	
Chloroform	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,2-Dichloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
2-Butanone	µg/Kg	12 U	NS	22	17	12 U	10 UJ	10 UJ	7 J	
1,1,1-Trichloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Carbon Tetrachloride	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	
Bromodichloromethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,2-Dichloropropane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
cis-1,3-Dichloropropene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Trichloroethene	µg/Kg	12 U	NS	3 J	1 J	12 U	110 J	39 J	2 J	
Dibromochloromethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,1,2-Trichloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Benzene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
trans-1,3-Dichloropropene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Bromoform	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
4-Methyl-2-Pentanone	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
2-Hexanone	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Tetrachloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
1,1,2,2-Tetrachloroethane	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Toluene	µg/Kg	12 U	NS	12 U	12 U	12 U	4 J	2 J	12 U	
Chlorobenzene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Ethylbenzene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Styrene	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	
Xylene (total)	µg/Kg	12 U	NS	12 U	12 U	12 U	10 UJ	10 UJ	12 U	

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID	SOIL B-46 0-2 04/29/93 B46-1 183303	SOIL B-46 0-2 04/29/93 B46-1RE 163303R1	SOIL B-46 2-4 04/29/93 B46-2 183304	SOIL B-46 4-6 04/29/93 B46-3 183305	SOIL B-46 6-7.1 04/29/93 B46-4 183306	SOIL B-47 0-2 04/29/93 B47-1 183307	SOIL B-47 0-2 04/29/93 B47-1RE 183307R1	SOIL B-47 2-4 04/29/93 B47-2 183308
COMPOUND VOCs								
Semivolatiles								
Phenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	380 U	350 U	NS	380 U
bis(2-Chloroethyl) ether	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2-Chlorophenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
1,3-Dichlorobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
1,4-Dichlorobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Benzyl alcohol	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2-Methylphenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2,2'-oxybis(1-Chloropropane)	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
4-Methylphenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
N-Nitroso-di-n-propylamine	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Hexachloroethane	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Nitrobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Isophorone	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2-Nitrophenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2,4-Dimethylphenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Benzoic acid	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2,4-Dichlorophenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
1,2,4-Trichlorobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Naphthalene	21 J	20 J	39 J	370 U	360 U	350 U	NS	380 U
4-Chloroaniline	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Hexachlorobutadiene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
4-Chloro-3-methylphenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2-Methylnaphthalene	µg/Kg 360 UJ	360 UJ	70 J	370 U	360 U	350 U	NS	380 U
Hexachlorocyclopentadiene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2,4,6-Trichlorophenol	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2,4,5-Trichlorophenol	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
2-Chloronaphthalene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
2-Nitroaniline	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
Dimethylphthalate	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Acenaphthylene	µg/Kg 42 J	32 J	27 J	370 U	360 U	350 U	NS	380 U
2,6-Dinitrotoluene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
3-Nitroaniline	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
Acenaphthene	µg/Kg 36 J	36 J	180 J	370 U	360 U	350 U	NS	380 U
2,4-Dinitrophenol	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
4-Nitrophenol	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
Dibenzofuran	µg/Kg 18 J	18 J	130 J	370 U	360 U	350 U	NS	380 U
2,4-Dinitrotoluene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Diethylphthalate	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
4-Chlorophenyl-phenylether	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Fluorene	µg/Kg 39 J	41 J	280 J	22 J	360 U	350 U	NS	380 U
4-Nitroaniline	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
4,6-Dinitro-2-methylphenol	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
N-Nitrosodiphenylamine	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
4-Bromophenyl-phenylether	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Hexachlorobenzene	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Pentachlorophenol	µg/Kg 880 UJ	880 UJ	920 U	900 U	920 U	840 U	NS	930 U
Phenanthrene	µg/Kg 530 J	520 J	1100	91 J	380 U	90 J	NS	380 U
Anthracene	µg/Kg 140 J	130 J	340 J	32 J	380 U	18 J	NS	380 U
Carbazole	µg/Kg 50 J	42 J	93 J	370 U	360 U	350 U	NS	380 U
Di-n-butylphthalate	µg/Kg 88 J	87 J	87 J	86 J	170 J	180 J	NS	260 J
Fluoranthene	µg/Kg 1100 J	900 J	900	180 J	18 J	170 J	NS	28 J
Pyrene	µg/Kg 1200 J	1300 J	830	130 J	380 U	140 J	NS	23 J
Butylbenzylphthalate	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
3,3'-Dichlorobenzidine	µg/Kg 360 UJ	360 UJ	380 U	370 U	360 U	350 U	NS	380 U
Benzo(a)anthracene	µg/Kg 840 J	840 J	330 J	84 J	380 U	70 J	NS	380 U
Chrysene	µg/Kg 870 J	860 J	300 J	84 J	380 U	91 J	NS	22 J
bis(2-Ethylhexyl)phthalate	µg/Kg 190 J	190 J	220 J	200 J	340 J	340 J	NS	580
Di-n-octylphthalate	µg/Kg 360 UJ	360 UJ	380 U	370 U	29 J	350 U	NS	27 J
Benzo(b)fluoranthene	µg/Kg 560 J	560 J	210 J	55 J	380 U	67 J	NS	380 U
Benzo(k)fluoranthene	µg/Kg 540 J	600 J	240 J	53 J	380 U	52 J	NS	18 J
Benzo(a)pyrene	µg/Kg 880 J	880 J	270 J	67 J	380 U	52 J	NS	380 U
Indeno(1,2,3-cd)pyrene	µg/Kg 410 J	400 J	140 J	40 J	380 U	31 J	NS	380 U
Dibenz(a,h)anthracene	µg/Kg 120 J	75 J	30 J	370 U	360 U	350 U	NS	380 U
Benzo(g,h,i)perylene	µg/Kg 200 J	200 J	71 J	23 J	360 U	21 J	NS	380 U



SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH(FT.) DATE ES ID LAB ID	SOIL B-46 0-2 04/29/93 B46-1 183303	SOIL B-46 0-2 04/29/93 B46-1RE 183303R1	SOIL B-46 2-4 04/29/93 B46-2 183304	SOIL B-46 4-6 04/29/93 B46-3 183305	SOIL B-46 6-7.1 04/29/93 B46-4 183306	SOIL B-47 0-2 04/29/93 B47-1 183307	SOIL B-47 0-2 04/29/93 B47-1RE 183307R1	SOIL B-47 2-4 04/29/93 B47-2 183308	
COMPOUND UNITS									
<b>VOCs</b>									
<b>Pesticides/PCBs</b>									
alpha-BHC	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
beta-BHC	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
delta-BHC	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
gamma-BHC (Lindane)	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
Heptachlor	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
Aldrin	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
Heptachlor epoxide	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
Endosulfan I	µg/Kg	9.3 U	NS	1.9 U	0.95 J	1.9 U	3.1	NS	2 U
Dieldrin	µg/Kg	18 U	NS	3.8 U	3.8 U	3.8 U	3.4 U	NS	3.9 U
4,4'-DDE	µg/Kg	45	NS	3.7 J	6.6	3.8 U	240 J	NS	4.4
Endrin	µg/Kg	18 U	NS	3.8 U	3.8 U	3.8 U	3.4 U	NS	3.9 U
Endosulfan II	µg/Kg	18 U	NS	3.8 U	3.8 U	3.8 U	3.4 U	NS	3.9 U
4,4'-DDD	µg/Kg	42 J	NS	3.8 U	1.8 J	3.8 U	3.4 U	NS	3.9 U
Endosulfan sulfate	µg/Kg	18 U	NS	3.8 U	3.6 U	3.8 U	3.4 U	NS	3.9 U
4,4'-DDT	µg/Kg	180	NS	2.2 J	3 J	3.8 U	23	NS	3.9 U
Methoxychlor	µg/Kg	93 U	NS	19 U	19 U	19 U	18 U	NS	20 U
Endrin ketone	µg/Kg	18 U	NS	3.8 U	3.8 U	3.8 U	3.4 U	NS	3.9 U
Endrin aldehyde	µg/Kg	18 U	NS	3.6 U	3.6 U	3.8 U	3.4 U	NS	3.9 U
alpha-Chlordane	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
gamma-Chlordane	µg/Kg	9.3 U	NS	1.9 U	1.9 U	1.9 U	1.8 U	NS	2 U
Toxaphene	µg/Kg	930 U	NS	190 U	190 U	190 U	180 U	NS	200 U
Aroclor-1016	µg/Kg	180 U	NS	38 U	36 U	36 U	34 U	NS	39 U
Aroclor-1221	µg/Kg	370 U	NS	76 U	74 U	76 U	70 U	NS	78 U
Aroclor-1232	µg/Kg	180 U	NS	38 U	36 U	38 U	34 U	NS	39 U
Aroclor-1242	µg/Kg	180 U	NS	38 U	36 U	38 U	34 U	NS	39 U
Aroclor-1246	µg/Kg	180 U	NS	36 U	36 U	38 U	34 U	NS	39 U
Aroclor-1254	µg/Kg	180 U	NS	38 U	36 U	38 U	34 U	NS	39 U
Aroclor-1260	µg/Kg	180 U	NS	38 U	36 U	38 U	34 U	NS	39 U
<b>Herbicides</b>									
2,4-D	µg/Kg	55 U	NS	58 U	56 U	58 U	53 U	NS	59 U
2,4-DB	µg/Kg	55 U	NS	58 U	56 U	58 U	53 U	NS	59 U
2,4,5-T	µg/Kg	5.5 U	NS	5.8 U	5.6 U	5.8 U	5.3 U	NS	5.9 U
2,4,5-TP (Silvex)	µg/Kg	5.5 U	NS	5.8 U	5.6 U	5.8 U	5.3 U	NS	5.9 U
Dalapon	µg/Kg	140 U	NS	140 U	140 U	140 U	130 U	NS	150 U
Dicamba	µg/Kg	5.5 U	NS	5.8 U	5.6 U	5.8 U	5.3 U	NS	5.9 U
Dichloroprop	µg/Kg	55 U	NS	58 U	56 U	58 U	53 U	NS	59 U
Dinoseb	µg/Kg	28 U	NS	29 U	28 U	29 U	27 U	NS	30 U
MCPA	µg/Kg	5500 U	NS	5800 U	5600 U	5800 U	5300 U	NS	5900 U
MCPP	µg/Kg	5500 U	NS	5800 U	5600 U	5800 U	5300 U	NS	5900 U
<b>Metals</b>									
Aluminum	mg/Kg	12100	NS	15300	9600	14400	10100	NS	17500
Antimony	mg/Kg	4.5 UJ	NS	4.1 UJ	5.9 UJ	5.1 UJ	4 UJ	NS	3.5 UJ
Arsenic	mg/Kg	4.8	NS	7.3	4.7	3.9	3.1	NS	4.8
Barium	mg/Kg	109	NS	96.4	69.9	66.4	55.6	NS	79.3
Beryllium	mg/Kg	0.64 J	NS	0.78	0.52 J	0.78 J	0.5 J	NS	0.85
Cadmium	mg/Kg	0.33 U	NS	0.3 U	0.54 J	0.37 U	0.29 U	NS	0.28 U
Calcium	mg/Kg	39300	NS	20200	172000	90500	69400	NS	8640
Chromium	mg/Kg	18.7	NS	28	15.3	24.1	19.9	NS	26.3
Cobalt	mg/Kg	13.3	NS	12	7.3 J	11.7	9.9	NS	16.4
Copper	mg/Kg	19.8	NS	34	19.2	18.7	30.3	NS	21.6
Iron	mg/Kg	24600	NS	27200	16200	27700	22800	NS	32700
Lead	mg/Kg	45.4	NS	64	19.1	8.7	40.9	NS	12
Magnesium	mg/Kg	6520	NS	6760	9270	10900	8850	NS	5460
Manganese	mg/Kg	1570	NS	526	445	898	370	NS	942
Mercury	mg/Kg	0.05 J	NS	0.07 J	0.05 J	0.04 U	0.06 J	NS	0.05 U
Nickel	mg/Kg	29.9	NS	35.9	22.9	37	35.3	NS	36.2
Potassium	mg/Kg	1330	NS	1570	1440	1470	1170	NS	973
Selenium	mg/Kg	0.14 U	NS	0.2 U	0.54 J	0.2 U	0.15 U	NS	0.2 U
Silver	mg/Kg	0.71 U	NS	0.85 U	0.92 U	0.8 U	0.83 U	NS	0.56 U
Sodium	mg/Kg	230 J	NS	249 J	232 J	141 J	137 J	NS	68 J
Thallium	mg/Kg	0.43 U	NS	0.61 U	2.9 U	0.59 U	0.46 U	NS	0.6 U
Vanadium	mg/Kg	18.9	NS	23.1	17.3	19.1	15.4	NS	22.3
Zinc	mg/Kg	136	NS	235	86.7	65.6	472	NS	84.3
Cyanide	mg/Kg	0.56 U	NS	0.56 U	0.55 U	0.57 U	0.53 U	NS	0.71 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SOIL ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH(FT.)	B-47	B-48	B-48	B-48	B-48
	DATE	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93
	ES ID	B47-3	B48-1	B48-2	B48-3	B48-6
	LAB ID	183309	183310	183311	183312	183313
	UNITS					DUP B48-3
<b>VOCs</b>						
Chloromethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Bromomethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Vinyl Chloride	µg/Kg	53 U	12 U	12 U	19 U	18 U
Chloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Methylene Chloride	µg/Kg	53 U	12 U	12 U	19 U	18 U
Acetone	µg/Kg	53 U	12 U	12 U	19 U	18 U
Carbon Disulfide	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,1-Dichloroethane	µg/Kg	28 J	12 U	12 U	5 J	5 J
1,1-Dichloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,2-Dichloroethane (total)	µg/Kg	650	12 U	12 U	110	130
Chloroform	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,2-Dichloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
2-Butanone	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,1,1-Trichloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Carbon Tetrachloride	µg/Kg	53 U	12 U	12 U	19 U	18 U
Vinyl acetate	µg/Kg	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,2-Dichloropropane	µg/Kg	53 U	12 U	12 U	19 U	18 U
cis-1,3-Dichloropropene	µg/Kg	53 U	12 U	12 U	19 U	18 U
Trichloroethene	µg/Kg	96	75	10 J	200	200
Dibromochloromethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,1,2-Trichloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Benzene	µg/Kg	53 U	12 U	12 U	19 U	18 U
trans-1,3-Dichloropropene	µg/Kg	53 U	12 U	12 U	19 U	18 U
Bromoform	µg/Kg	53 U	12 U	12 U	19 U	18 U
4-Methyl-2-Pentanone	µg/Kg	53 U	12 U	12 U	19 U	18 U
2-Hexanone	µg/Kg	53 U	12 U	12 U	19 U	18 U
Tetrachloroethene	µg/Kg	53 U	12 U	12 U	19 U	18 U
1,1,2,2-Tetrachloroethane	µg/Kg	53 U	12 U	12 U	19 U	18 U
Toluene	µg/Kg	53 U	2 J	12 U	19 U	18 U
Chlorobenzene	µg/Kg	53 U	12 U	12 U	19 U	18 U
Ethylbenzene	µg/Kg	53 U	12 U	12 U	19 U	18 U
Styrene	µg/Kg	53 U	12 U	12 U	19 U	18 U
Xylene (total)	µg/Kg	53 U	12 U	12 U	19 U	18 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DEPTH (FT.) DATE ES ID LAB ID UNITS	SOIL B-47 4-5.3 04/29/93 B47-3 183309	SOIL B-48 0-2 04/29/93 B48-1 183310	SOIL B-48 2-4 04/29/93 B48-2 183311	SOIL B-48 4-6 04/29/93 B48-3 183312	SOIL B-48 4-6 04/29/93 B48-6 183313 DUP B48-3
VOCs						
Semivolatiles						
Phenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
bis(2-Chloroethyl) ether	µg/Kg	360 U	410 U	390 U	380 U	400 U
2-Chlorophenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
1,3-Dichlorobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
1,4-Dichlorobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Benzyl alcohol	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
2-Methylphenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,2'-oxybis(1-Chloropropane)	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Methylphenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
N-Nitroso-di-n-propylamine	µg/Kg	360 U	410 U	390 U	380 U	400 U
Hexachloroethane	µg/Kg	360 U	410 U	390 U	380 U	400 U
Nitrobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Isophorone	µg/Kg	360 U	410 U	390 U	380 U	400 U
2-Nitrophenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4-Dimethylphenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
Benzic acid	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4-Dichlorophenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
1,2,4-Trichlorobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Naphthalene	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Chloroaniline	µg/Kg	360 U	410 U	390 U	380 U	400 U
Hexachlorobutadiene	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Chloro-3-methylphenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
2-Methylnaphthalene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Hexachlorocyclopentadiene	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4,6-Trichlorophenol	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4,5-Trichlorophenol	µg/Kg	880 U	1000 U	950 U	930 U	960 U
2-Chloronaphthalene	µg/Kg	360 U	410 U	390 U	380 U	400 U
2-Nitroaniline	µg/Kg	880 U	1000 U	950 U	930 U	960 U
Dimethylphthalate	µg/Kg	360 U	410 U	390 U	380 U	400 U
Acenaphthylene	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,6-Dinitrotoluene	µg/Kg	360 U	410 U	390 U	380 U	400 U
3-Nitroaniline	µg/Kg	880 U	1000 U	950 U	930 U	960 U
Acenaphthene	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4-Dinitrophenol	µg/Kg	880 U	1000 U	950 U	930 U	960 U
4-Nitrophenol	µg/Kg	880 U	1000 U	950 U	930 U	960 U
Dibenzofuran	µg/Kg	360 U	410 U	390 U	380 U	400 U
2,4-Dinitrotoluene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Diethylphthalate	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Chlorophenyl-phenylether	µg/Kg	360 U	410 U	390 U	380 U	400 U
Fluorene	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Nitroaniline	µg/Kg	880 U	1000 U	950 U	930 U	960 U
4,6-Dinitro-2-methylphenol	µg/Kg	880 U	1000 U	950 U	930 U	960 U
N-Nitrosodiphenylamine	µg/Kg	360 U	410 U	390 U	380 U	400 U
4-Bromophenyl-phenylether	µg/Kg	360 U	410 U	390 U	380 U	400 U
Hexachlorobenzene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Perchlorophenol	µg/Kg	880 U	1000 U	950 U	930 U	960 U
Phenanthrene	µg/Kg	360 U	110 J	390 U	380 U	400 U
Anthracene	µg/Kg	360 U	21 J	390 U	380 U	400 U
Carbazole	µg/Kg	360 U	20 J	390 U	380 U	400 U
Di-n-butylphthalate	µg/Kg	180 J	100 J	130 J	110 J	72 J
Fluoranthene	µg/Kg	360 U	180 J	390 U	380 U	400 U
Pyrene	µg/Kg	360 U	130 J	390 U	380 U	400 U
Butylbenzylphthalate	µg/Kg	360 U	410 U	390 U	380 U	400 U
3,3'-Dichlorobenzidine	µg/Kg	360 U	410 U	390 U	380 U	400 U
Berzo(a)anthracene	µg/Kg	360 U	78 J	390 U	380 U	400 U
Chrysene	µg/Kg	360 U	98 J	390 U	380 U	400 U
bis(2-Ethylhexyl)phthalate	µg/Kg	250 J	320 J	520	240 J	170 J
Di-n-octylphthalate	µg/Kg	360 U	410 U	390 U	380 U	400 U
Berzo(b)fluoranthene	µg/Kg	360 U	93 J	390 U	380 U	400 U
Berzo(k)fluoranthene	µg/Kg	360 U	85 J	390 U	380 U	400 U
Berzo(a)pyrene	µg/Kg	360 U	75 J	390 U	380 U	400 U
Indeno(1,2,3-cd)pyrene	µg/Kg	360 U	59 J	390 U	380 U	400 U
Dibenz(a,h)anthracene	µg/Kg	360 U	410 U	390 U	380 U	400 U
Berzo(g,h,i)perylene	µg/Kg	360 U	35 J	390 U	380 U	400 U

SENECA ARMY DEPOT, ASH LANDFILL  
SOIL ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL
	DEPTH (FT.)	B-47	B-48	B-48	B-48	B-48
	DATE	04/29/93	04/29/93	04/29/93	04/29/93	04/29/93
	ES ID	B47-3	B48-1	B48-2	B48-3	B48-6
	LAB ID	183309	183310	183311	183312	183313
	UNITS					DUP B48-3
<b>VOCs</b>						
<b>Pesticides, PCBs</b>						
alpha-BHC	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
beta-BHC	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
delta-BHC	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
gamma-BHC (Lindane)	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Heptachlor	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Aldrin	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Heptachlor epoxide	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Endosulfan I	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Dieldrin	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
4,4'-DDE	µg/Kg	3.6 U	70	5.4	5.8	4 U
Endrin	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
Endosulfan II	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
4,4'-DDD	µg/Kg	3.6 U	15 J	2.7 J	2.5 J	4 U
Endosulfan sulfate	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
4,4'-DDT	µg/Kg	3.6 U	26	2 J	4.9	4 U
Methoxychlor	µg/Kg	19 U	42 U	20 U	20 U	20 U
Endrin ketone	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
Endrin aldehyde	µg/Kg	3.6 U	8.2 U	3.9 U	3.9 U	4 U
alpha-Chlordane	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
gamma-Chlordane	µg/Kg	1.9 U	4.2 U	2 U	2 U	2 U
Toxaphene	µg/Kg	190 U	420 U	200 U	200 U	200 U
Aroclor-1016	µg/Kg	36 U	82 U	39 U	39 U	40 U
Aroclor-1221	µg/Kg	73 U	170 U	79 U	79 U	80 U
Aroclor-1232	µg/Kg	36 U	82 U	39 U	39 U	40 U
Aroclor-1242	µg/Kg	36 U	82 U	39 U	39 U	40 U
Aroclor-1248	µg/Kg	36 U	82 U	39 U	39 U	40 U
Aroclor-1254	µg/Kg	36 U	82 U	39 U	39 U	40 U
Aroclor-1260	µg/Kg	36 U	82 U	39 U	39 U	40 U
<b>Herbicides</b>						
2,4-D	µg/Kg	56 U	63 U	60 U	59 U	61 U
2,4-DB	µg/Kg	56 U	63 U	60 U	59 U	61 U
2,4,5-T	µg/Kg	5.6 U	6.3 U	6 U	5.9 U	6.1 U
2,4,5-TP (Silvex)	µg/Kg	5.6 U	6.3 U	6 U	5.9 U	6.1 U
Dalapon	µg/Kg	140 U	150 U	150 U	150 U	150 U
Dicamba	µg/Kg	5.6 U	6.3 U	6 U	5.9 U	6.1 U
Dichloroprop	µg/Kg	56 U	63 U	60 U	59 U	61 U
Dinoseb	µg/Kg	28 U	32 U	30 U	30 U	31 U
MCPA	µg/Kg	5600 U	6300 U	6000 U	5900 U	6100 U
MCPP	µg/Kg	5600 U	6300 U	6000 U	5900 U	6100 U
<b>Metals</b>						
Aluminum	mg/Kg	17300	10800	14000	12100	11100
Antimony	mg/Kg	6.1 UJ	5.6 J	4.8 UJ	4.4 J	4 UJ
Arsenic	mg/Kg	3.2	4.9	4.9	4.9	5.1
Barium	mg/Kg	68.8	82.2	115	50.6	41.1
Beryllium	mg/Kg	0.81 J	0.81 J	0.78 J	0.55 J	0.53 J
Cadmium	mg/Kg	0.44 U	0.34 J	0.35 U	1.3	0.29 U
Calcium	mg/Kg	37100	18200	3780	60100 J	16000 J
Chromium	mg/Kg	31	21.8	21.2	19.9	18.6
Cobalt	mg/Kg	12.6	9	13.3	11.4	11
Copper	mg/Kg	23.3	48	28.1	24.1	19.9
Iron	mg/Kg	33400	22700	26900	24800	23100
Lead	mg/Kg	6	82.5	15.5	8.4	9.2
Magnesium	mg/Kg	7330	4410	4310	8210	7090
Manganese	mg/Kg	643	520	1290	571	501
Mercury	mg/Kg	0.05 U	0.1	0.04 U	0.04 U	0.03 U
Nickel	mg/Kg	43.6	31.4	29.8	34.1	31.3
Potassium	mg/Kg	1420	1090	1540	1110	894
Selenium	mg/Kg	0.82 J	0.71 J	0.37 J	0.87 J	0.25 J
Silver	mg/Kg	0.95 U	0.81 U	0.75 U	0.53 U	0.62 U
Sodium	mg/Kg	187 J	75 J	89.8 U	178 J	121 J
Thallium	mg/Kg	0.51 U	0.54 U	0.62 U	0.62 U	0.67 U
Vanadium	mg/Kg	22.4	18.1	26.4	16.7	15.2
Zinc	mg/Kg	74.9	308	115	103	83.5
Cyanide	mg/Kg	0.67 U	0.75 U	0.71 U	0.68 U	0.69 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II
		WATER	WATER	WATER	WATER	WATER	WATER	WATER
		PT-10	PT-10	PT-10	PT10	PT-11	PT-11	PT11
		01/06/92	01/06/92	01/06/92	08/23/93	01/15/92	01/15/92	07/10/93
		PT-1(1)	PT-10(2)	PT-10(2) Filtered	PT10	PT-11	PT-11 Filtered	PT11
		152259	182156	182199	187234	152674	182593	186728
Chloromethane	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Bromomethane	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Vinyl Chloride	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Chloroethane	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Methylene Chloride	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Acetone	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Carbon Disulfide	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,1-Dichloroethene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,1-Dichloroethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,2-Dichloroethene (total)	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Chloroform	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,2-Dichloroethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
2-Butanone	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
1,1,1-Trichloroethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Carbon Tetrachloride	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Vinyl Acetate	µg/L	NS	10 U	NS	NS	10 U	NS	NS
Bromodichloromethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,2-Dichloropropane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
cis-1,3-Dichloropropene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Trichloroethene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Dibromochloromethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,1,2-Trichloroethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Benzene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
trans-1,3-Dichloropropene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Bromoform	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
4-Methyl-2-Pentanone	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
2-Hexanone	µg/L	NS	10 U	NS	NS	10 U	NS	10 U
Tetrachloroethene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
1,1,2,2-Tetrachloroethane	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Toluene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Chlorobenzene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Ethylbenzene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Styrene	µg/L	NS	5 U	NS	NS	5 U	NS	10 U
Xylene (total)	µg/L	NS	5 U	NS	NS	4 J	NS	10 U

NOTE: "NS" - NOT SAMPLED

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE I WATER PT-10 01/06/92 PT-1(1) 152259	PHASE I WATER PT-10 01/06/92 PT-10C2 152155	PHASE I WATER PT-10 01/06/92 PT-10C2 Filtered 152199	PHASE II WATER PT10 08/23/93 107234	PHASE I WATER PT-11 01/15/92 PT-11 152574	PHASE I WATER PT-11 01/15/92 PT-11 Filtered 152593	PHASE II WATER PT11 07/10/93 PT11 158726
VOCs (504-2)							
Dichlorodifluoromethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Chloromethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	0.5 U	NS	NS	NS
Bromomethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Chloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Trichlorofluoroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	NS
Acetone	µg/L	NS	NS	5 U	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	0.5 U	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	0.5 U	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	NS
2-Butanone	µg/L	NS	NS	5 U	NS	NS	NS
Bromochloromethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Chloroform	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
Benzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Trichloroethene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
Dibromomethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Bromodichloromethane	µg/L	NS	NS	0.5 U	NS	NS	NS
cis-1,3-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	5 U	NS	NS	NS
Toluene	µg/L	NS	NS	0.5 U	NS	NS	NS
trans-1,3-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Tetrachloroethene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
2-Hexanone	µg/L	NS	NS	5 U	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
Biphenyl	µg/L	NS	NS	0.5 U	NS	NS	NS
Bromoform	µg/L	NS	NS	0.5 U	NS	NS	NS
Isopropylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
Bromobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
n-Propylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
2-Chlorotoluene	µg/L	NS	NS	0.5 U	NS	NS	NS
4-Chlorotoluene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
tert-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
sec-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
n-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	0.5 U	NS	NS	NS
Naphthalene	µg/L	NS	NS	0.5 U	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	NS
Xylene (total)	µg/L	NS	NS	0.5 U	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA PHASES I & II

COMPOUND	MATRIX LOCATION	PHASE I		PHASE II		PHASE I		PHASE II	
		WATER	PT-10	WATER	PT-10	WATER	PT-11	WATER	PT-11
SEMI-VOLATILES									
Phenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,2-Dichloroethane	J04	10 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Chlorophenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,3-Dichlorobenzene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,4-Dichlorobenzene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Benzyl Alcohol	J04	11 U	10 U	NS	NS	11 U	NS	NS	NS
1,2-Dichlorobenzene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Methyphenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Di(2-Chloroethoxy) ether	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,1-Dichloroethane	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
N-Nitrosodimethylamine	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Hexachloroethane	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Nitrobenzene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Isophorone	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Nitrophenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2,4-Dimethylphenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Benzoic acid	J04	82 U	NS	NS	NS	86 U	NS	NS	NS
Di(2-Chloroethoxy) methane	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,2-Dichloroethane	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
1,2,4-Trichlorobenzene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Naphthalene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
4-Chloroaniline	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Hexachlorobutadiene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
4-Chloro-3-methylphenol	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Methylnaphthalene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Hexachlorocyclopentadiene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2,4,6-Trichlorophenol	J04	64 U	NS	NS	NS	66 U	NS	NS	NS
1,2-Dichloroethane	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Chloroaniline	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2-Nitroaniline	J04	84 U	NS	NS	NS	86 U	NS	NS	NS
Dimethylphthalate	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
Acenaphthylene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
2,8-Dinitrofluorene	J04	11 U	10 U	NS	10 U	11 U	NS	10 U	10 U
3-Nitroaniline	J04	NS	NS	NS	NS	NS	NS	NS	NS
Acenaphthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	J04	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	J04	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrofluorene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	J04	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrofluorene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	J04	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl-phenyl ether	J04	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	J04	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitroaniline	J04	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	J04	NS	NS	NS	NS	NS	NS	NS	NS
N-Nitrosodimethylamine (1)	J04	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-Chloroethyl) dimethyl ether	J04	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Perchlorophenol	J04	NS	NS	NS	NS	NS	NS	NS	NS
Phenanthrene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Anthracene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	J04	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	J04	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-Ethoxyethyl) phthalate	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzofuran	J04	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Di(2-Ethoxyethyl) phthalate	J04	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octylphthalate	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzobifluoranthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzofluoranthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzofluoranthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)fluoranthene	J04	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	J04	NS	NS	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	PHASE I		PHASE I		PHASE II		PHASE II		PHASE I		PHASE II	
		DATE	ES ID	LAB ID	WATER	PT - 10	PT - 10	PT - 10	PT - 10	PT - 11	PT - 11	PT - 11	PT - 11
PESTICIDES/PCBS													
alpha-BHC	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
beta-BHC	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
delta-BHC	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
gamma-BHC (Lindane)	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Heptachlor	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aldrin	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Heptachlor epoxide	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Dieldrin I	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Dieldrin II	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
4,4'-DDE	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Endrin	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Endosulfan II	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
4,4'-DDD	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Endosulfan sulfate	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
4,4'-DDT	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Heptachlor epoxide thioether	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Endrin aldehyde	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
alpha-Chlordane	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
gamma-Chlordane	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Toxaphene	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1016	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1221	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1222	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1242	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1244	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1254	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
Aroclor-1260	µg/L	07/08/82	152259	152156	NS	NS	0.05 U	0.05 U	0.05 U	NS	NS	NS	NS
HERBICIDES													
2,4-D	µg/L	07/08/82	152259	152156	NS	NS	1.0	1.1 U	1.2 U	NS	NS	NS	NS
2,4-DB	µg/L	07/08/82	152259	152156	NS	NS	1.0	1.1 U	1.2 U	NS	NS	NS	NS
2,4,5-T	µg/L	07/08/82	152259	152156	NS	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS	NS
2,4,5-TP (Revest)	µg/L	07/08/82	152259	152156	NS	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS	NS
2,4,6-TP (Revest)	µg/L	07/08/82	152259	152156	NS	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS	NS
Dicamba	µg/L	07/08/82	152259	152156	NS	NS	0.11 U	0.11 U	0.11 U	NS	NS	NS	NS
Dichloroprop	µg/L	07/08/82	152259	152156	NS	NS	1.1 U	1.1 U	1.2 U	NS	NS	NS	NS
Dihoseb	µg/L	07/08/82	152259	152156	NS	NS	0.81 U	0.81 U	0.8 U	NS	NS	NS	NS
MCPA	µg/L	07/08/82	152259	152156	NS	NS	100 U	100 U	120 U	NS	NS	NS	NS
MCPP	µg/L	07/08/82	152259	152156	NS	NS	100 U	100 U	120 U	NS	NS	NS	NS
METALS													
Aluminum	µg/L	07/08/82	152259	152156	24.6 U	72 U	2960	2960	2960	24.4 U	24.4 U	24.4 U	24.4 U
Antimony	µg/L	07/08/82	152259	152156	86.1 U	48.0 U	6.0 U	6.0 U	6.0 U	82.8 U	82.8 U	82.8 U	82.8 U
Arsenic	µg/L	07/08/82	152259	152156	3.8 U	1.4 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Barium	µg/L	07/08/82	152259	152156	186 J	183 J	203	203	121	77 J	77 J	77 J	77 J
Beryllium	µg/L	07/08/82	152259	152156	1.4 R	2.6 R	2.6 R	2.6 R	2	1.3 R	1.3 R	1.3 R	1.3 R
Cadmium	µg/L	07/08/82	152259	152156	2.8 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	µg/L	07/08/82	152259	152156	66500 J	79100	68300	68300	124000	114000	114000	114000	114000
Chromium	µg/L	07/08/82	152259	152156	6.2 U	2.7 U	6.2 U	6.2 U	6.6 J	6.1 U	6.1 U	6.1 U	6.1 U
Cobalt	µg/L	07/08/82	152259	152156	20 U	6.4 U	20.3 U	20.3 U	20.5 U	20.3 U	20.3 U	20.3 U	20.3 U
Copper	µg/L	07/08/82	152259	152156	14.3 U	8.7 U	10.1 U	10.1 U	8.7 U	10.2 U	10.2 U	10.2 U	10.2 U
Iron	µg/L	07/08/82	152259	152156	6.4 U	68	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U
Lithium	µg/L	07/08/82	152259	152156	1.2 U	1.4 J	1.4 J	1.4 J	1.2 U	1.3 U	1.3 U	1.3 U	1.3 U
Magnesium	µg/L	07/08/82	152259	152156	32700 J	38900	32700	32700	37200	33900	33900	33900	33900
Manganese	µg/L	07/08/82	152259	152156	88.6	43.8	88.6	88.6	88.1	4.8 U	4.8 U	4.8 U	4.8 U
Mercury	µg/L	07/08/82	152259	152156	0.13 R	0.08 R	0.08 R	0.08 R	0.08 R	0.1 R	0.1 R	0.1 R	0.1 R
Nickel	µg/L	07/08/82	152259	152156	16 U	14.7 U	16 U	16 U	14.8 U	14.7 U	14.7 U	14.7 U	14.7 U
Potassium	µg/L	07/08/82	152259	152156	1300 J	1830 J	1300 J	1300 J	3490 J	1860 J	1860 J	1860 J	1860 J
Selenium	µg/L	07/08/82	152259	152156	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Silver	µg/L	07/08/82	152259	152156	8.1 U	3.4 U	8.1 U	8.1 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Sodium	µg/L	07/08/82	152259	152156	37700 J	36900	37700	37700	40300	37600	37600	37600	37600
Titanium	µg/L	07/08/82	152259	152156	30.8 U	6.7 U	30.8 U	30.8 U	6.7 U	6.4 U	6.4 U	6.4 U	6.4 U
Vanadium	µg/L	07/08/82	152259	152156	18.2 U	8.4 U	18.2 U	18.2 U	8.8 U	8.4 U	8.4 U	8.4 U	8.4 U
Zinc	µg/L	07/08/82	152259	152156	11.2 J	5.8 J	11.2 J	11.2 J	5.8 J	5.8 J	5.8 J	5.8 J	5.8 J
Cyanide	µg/L	07/08/82	152259	152156	NS	NS	NS	NS	NS	NS	NS	NS	NS



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	
DATE	ASH	ASH	PT-12	PT-12	PT-12	PT-12	PT12	
ES ID	07/13/93	07/10/93	01/17/92	01/17/92	01/17/92	01/17/92	07/15/93	
LAB ID	PT11	PT11	PT-12	PT-12	PT-3(1)	PT-3(1)Filtered	PT12	
COMPOUND	188805	188795	152704	152711	152703	152710	189112	
UNITS								
Chloromethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Bromomethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Vinyl Chloride	µg/L	NS	NS	4 J	NS	4 J	NS	98
Chloroethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Methylene Chloride	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Acetone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Carbon Disulfide	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
1,1-Dichloroethene	µg/L	NS	NS	5 U	NS	5 U	NS	3 J
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
1,2-Dichloroethene (total)	µg/L	NS	NS	180	NS	200	NS	1400
Chloroform	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
1,2-Dichloroethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
2-Butanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
1,1,1-Trichloroethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Carbon Tetrachloride	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Vinyl Acetate	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Bromodichloromethane	µg/L	NS	NS	5 U	NS	5 U	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
cis-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Trichloroethene	µg/L	NS	NS	180	NS	180	NS	970
Dibromochloromethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
1,1,2-Trichloroethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Benzene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
trans-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Bromoform	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
2-Hexanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Tetrachloroethene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Toluene	µg/L	NS	NS	5 U	NS	5 U	NS	2 J
Chlorobenzene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Ethylbenzene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Styrene	µg/L	NS	NS	5 U	NS	5 U	NS	10 U
Xylene (total)	µg/L	NS	NS	5 U	NS	5 U	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER
		ASH 07/13/93 PT11 188905	ASH 07/10/93 PT11 188795	PT-12 01/17/92 152704	PT-12 01/17/92 152711	PT-12 01/17/92 152703	PT-12 01/17/92 152710	PT-12 07/15/93 PT12 189112
VOC's (E04-2)								
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS	NS
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Chloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	NS
Acetone	µg/L	NS	NS	NS	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	NS
2-Butanone	µg/L	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Chloroform	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS	NS
Benzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	NS
Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	NS	NS
Toluene	µg/L	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	µg/L	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
Styrene	µg/L	NS	NS	NS	NS	NS	NS	NS
Bromoform	µg/L	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
2-Chloroluene	µg/L	NS	NS	NS	NS	NS	NS	NS
4-Chloroluene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	NS	NS
Naphthalene	µg/L	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	NS
Xylene (total)	µg/L	NS	NS	NS	NS	NS	NS	NS

SENECA ARMY DEP OT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER ASH 07/13/93 PT11 188805	PHASE II WATER ASH 07/10/93 PT11 188795	PHASE I WATER PT-12 01/17/92 PT-12 152704	PHASE I WATER PT-12 01/17/92 PT-12 Filtered 182711	PHASE I WATER PT-12 01/17/92 PT-3(1) 152703	PHASE I WATER PT-12 01/17/92 PT-3(1) Filtered 182710	PHASE II WATER PT12 07/15/93 PT12 189112
COMPOUND UNITS							
<b>SEMI-VOLATILES</b>							
Phenol	µg/L	NS	NS	11 U	NS	11 U	NS
bis(2-Chloroethyl) ether	µg/L	NS	NS	11 U	NS	11 U	NS
2-Chlorophenol	µg/L	NS	NS	11 U	NS	11 U	NS
1,3-Dichlorobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
1,4-Dichlorobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
Benzyl Alcohol	µg/L	NS	NS	11 U	NS	11 U	NS
1,2-Dichlorobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
2-Methylphenol	µg/L	NS	NS	11 U	NS	11 U	NS
bis(2-Chloroisopropyl) ether	µg/L	NS	NS	11 U	NS	11 U	NS
4-Methylphenol	µg/L	NS	NS	11 U	NS	11 U	NS
N-Nitroso-d-n-propylamine	µg/L	NS	NS	11 U	NS	11 U	NS
Hexachloroethane	µg/L	NS	NS	11 U	NS	11 U	NS
Nitrobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
Isophorone	µg/L	NS	NS	11 U	NS	11 U	NS
2-Nitrophenol	µg/L	NS	NS	11 U	NS	11 U	NS
2,4-Dimethylphenol	µg/L	NS	NS	11 U	NS	11 U	NS
Benzic acid	µg/L	NS	NS	85 U	NS	85 U	NS
bis(2-Chloroethoxy) methane	µg/L	NS	NS	11 U	NS	11 U	NS
2,4-Dichlorophenol	µg/L	NS	NS	11 U	NS	11 U	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
Naphthalene	µg/L	NS	NS	11 U	NS	11 U	NS
4-Chloroaniline	µg/L	NS	NS	11 U	NS	11 U	NS
Hexachlorobutadiene	µg/L	NS	NS	11 U	NS	11 U	NS
4-Chloro-3-methylphenol	µg/L	NS	NS	11 U	NS	11 U	NS
2-Methylnaphthalene	µg/L	NS	NS	11 U	NS	11 U	NS
Hexachlorocyclopentadiene	µg/L	NS	NS	11 U	NS	11 U	NS
2,4,6-Trichlorophenol	µg/L	NS	NS	11 U	NS	11 U	NS
2,4,5-Trichlorophenol	µg/L	NS	NS	85 U	NS	85 U	NS
2-Chloronaphthalene	µg/L	NS	NS	11 U	NS	11 U	NS
2-Nitroaniline	µg/L	NS	NS	85 U	NS	85 U	NS
Dimethylphthalate	µg/L	NS	NS	11 U	NS	11 U	NS
Acenaphthylene	µg/L	NS	NS	11 U	NS	11 U	NS
2,6-Dinitrotoluene	µg/L	NS	NS	11 U	NS	11 U	NS
3-Nitroaniline	µg/L	NS	NS	85 U	NS	85 U	NS
Acenaphthene	µg/L	NS	NS	11 U	NS	11 U	NS
2,4-Dinitrophenol	µg/L	NS	NS	85 U	NS	85 U	NS
4-Nitrophenol	µg/L	NS	NS	85 U	NS	85 U	NS
Dibenzofuran	µg/L	NS	NS	11 U	NS	11 U	NS
2,4-Dinitrotoluene	µg/L	NS	NS	11 U	NS	11 U	NS
Diethylphthalate	µg/L	NS	NS	11 U	NS	11 U	NS
4-Chlorophenyl-phenylether	µg/L	NS	NS	11 U	NS	11 U	NS
Fluorene	µg/L	NS	NS	11 U	NS	11 U	NS
4-Nitroaniline	µg/L	NS	NS	85 U	NS	85 U	NS
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	85 U	NS	85 U	NS
N-Nitrosodiphenylamine (1)	µg/L	NS	NS	11 U	NS	11 U	NS
4-Bromophenyl-phenylether	µg/L	NS	NS	11 U	NS	11 U	NS
Hexachlorobenzene	µg/L	NS	NS	11 U	NS	11 U	NS
Pentachlorophenol	µg/L	NS	NS	85 U	NS	85 U	NS
Phenanthrene	µg/L	NS	NS	11 U	NS	11 U	NS
Anthracene	µg/L	NS	NS	11 U	NS	11 U	NS
Carbazole	µg/L	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/L	NS	NS	11 U	NS	11 U	NS
Fluoranthene	µg/L	NS	NS	11 U	NS	11 U	NS
Pyrene	µg/L	NS	NS	11 U	NS	11 U	NS
Butylbenzylphthalate	µg/L	NS	NS	11 U	NS	11 U	NS
3,3'-Dichlorobenzidine	µg/L	NS	NS	11 U	NS	11 U	NS
Benz(a)anthracene	µg/L	NS	NS	22 U	NS	22 U	NS
Chrysene	µg/L	NS	NS	11 U	NS	11 U	NS
bis(2-Ethylhexyl)phthalate	µg/L	NS	NS	30 U	NS	11 U	NS
Di-n-octylphthalate	µg/L	NS	NS	11 U	NS	11 U	NS
Benzofluoranthene	µg/L	NS	NS	11 U	NS	11 U	NS
Benzofluoranthene	µg/L	NS	NS	11 U	NS	11 U	NS
Benz(a)pyrene	µg/L	NS	NS	11 U	NS	11 U	NS
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	11 U	NS	11 U	NS
Dibenz(a,h)anthracene	µg/L	NS	NS	11 U	NS	11 U	NS
Benz(g,h,i)perylene	µg/L	NS	NS	11 U	NS	11 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE E9 ID LAB ID UNITS	PHASE II	PHASE II	PHASE I	PHASE I	PHASE I	PHASE I	PHASE II
		WATER ASH 07/13/93 PT11 188908	WATER ASH 07/13/93 PT11 188795	WATER PT-12 01/17/92 PT-12 162704	WATER PT-12 01/17/92 PT-12 Filtered 162711	WATER PT-12 01/17/92 PT-3(1) 162703	WATER PT-12 01/17/92 PT-3(1) Filtered 182710	WATER PT12 07/18/93 PT12 169112
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
beta-BHC	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
delta-BHC	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
gamma-BHC (Lindane)	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
Heptachlor	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
Aldrin	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
Heptachlor epoxide	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
Endosulfan I	µg/L	0.06 UJ	NS	0.063 U	NS	0.056 U	NS	0.06 U
Dieldrin	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
4,4'-DDE	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
Endrin	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
Endosulfan II	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
4,4'-DDD	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
Endosulfan sulfate	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
4,4'-DDT	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
Methoxychlor	µg/L	0.6 UJ	NS	0.53 U	NS	0.58 U	NS	0.6 U
Endrin ketone	µg/L	0.1 UJ	NS	0.11 U	NS	0.12 U	NS	0.1 U
Endrin aldehyde	µg/L	0.1 UJ	NS	NS	NS	NS	NS	0.1 U
alpha-Chlordane	µg/L	0.06 UJ	NS	0.53 U	NS	0.58 U	NS	0.06 U
gamma-Chlordane	µg/L	0.06 UJ	NS	0.53 U	NS	0.58 U	NS	0.06 U
Toxaphene	µg/L	8 UJ	NS	1.1 U	NS	1.2 U	NS	8 U
Aroclor-1016	µg/L	1 UJ	NS	0.83 U	NS	0.88 U	NS	1 U
Aroclor-1221	µg/L	2 UJ	NS	0.83 U	NS	0.88 U	NS	2 U
Aroclor-1252	µg/L	1 UJ	NS	0.83 U	NS	0.88 U	NS	1 U
Aroclor-1242	µg/L	1 UJ	NS	0.83 U	NS	0.88 U	NS	1 U
Aroclor-1248	µg/L	1 UJ	NS	0.83 U	NS	0.88 U	NS	1 U
Aroclor-1254	µg/L	1 UJ	NS	1.1 U	NS	1.2 U	NS	1 U
Aroclor-1260	µg/L	1 UJ	NS	1.1 U	NS	1.2 U	NS	1 U
<b>HERBICIDES</b>								
2,4-D	µg/L	NS	1 R	1.4 U	NS	1 U	NS	1.1 U
2,4-DB	µg/L	NS	1 R	1.4 U	NS	1 U	NS	1.1 U
2,4,6-T	µg/L	NS	0.1 R	0.1 U	NS	0.1 U	NS	0.11 U
2,4,6-TP (Silvex)	µg/L	NS	0.1 R	0.1 U	NS	0.1 U	NS	0.11 U
Dalapon	µg/L	NS	2.3 R	3.2 U	NS	2.3 U	NS	3.8
Dicamba	µg/L	NS	0.1 R	0.1 U	NS	0.1 U	NS	0.11 U
Dichloroprop	µg/L	NS	1 R	1.4 U	NS	1 U	NS	1.1 U
Dinoseb	µg/L	NS	0.5 R	0.7 U	NS	0.8 U	NS	0.83 U
MCPA	µg/L	NS	100 R	140 U	NS	100 U	NS	110 U
MCPP	µg/L	NS	100 R	140 U	NS	100 U	NS	110 U
<b>METALS</b>								
Aluminum	µg/L	NS	3530	27300 J	24.8 U	18400 J	24.4 U	10100 J
Antimony	µg/L	NS	49.7 U	53.2 U	53.2 U	53.1 U	83 U	49.9 U
Arsenic	µg/L	NS	1.4 U	4.8 J	3.8 U	7.8 J	3.5 U	2.4 J
Barium	µg/L	NS	143 J	258	86.7 R	258	53.2 R	116 J
Beryllium	µg/L	NS	0.88 U	2.3 R	1.1 U	1.9 R	1.1 U	0.9 U
Cadmium	µg/L	NS	2.8 U	4.8 J	3 U	3.8 J	3 U	2.8 U
Calcium	µg/L	NS	128000	274000 J	180000	248000 J	175000	265000
Chromium	µg/L	NS	6.1 J	36.8	6.2 U	26.3	6.1 U	13.8 J
Cobalt	µg/L	NS	8.5 U	20.4 U	20.4 U	20.4 U	20.3 U	6.7 J
Copper	µg/L	NS	8.2 J	32.8	10.2 U	24.7 J	10.1 U	4.7 UJ
Iron	µg/L	NS	4370 J	35400 J	7 U	26900 J	6.9 U	14200 J
Lead	µg/L	NS	2.3 J	16.9 R	1.2 U	10 R	1.2 U	2.9 J
Magnesium	µg/L	NS	36200	41800 J	20800	37000 J	20000	36800
Manganese	µg/L	NS	191	1270 J	4.8 U	970 J	4.8 U	806
Mercury	µg/L	NS	0.09 UJ	0.03 U	0.03 U	0.03 U	0.03 U	0.09 U
Nickel	µg/L	NS	7.4 U	48.3	14.7 U	30 J	14.7 U	18 J
Potassium	µg/L	NS	3910 J	6120	1600 J	5690	1430 J	4900 J
Selenium	µg/L	NS	1.5 U	1 U J	1.7 J	1.9 J	1 U	0.99 UJ
Silver	µg/L	NS	5.8 U	3.4 U	3.4 U	3.4 U	3.4 U	5.5 U
Sodium	µg/L	NS	33300	33900	34900	33900	27200	133000
Thallium	µg/L	NS	2.6 U	3.2 U	3.2 U	3.2 U	3.2 U	2.6 U
Vanadium	µg/L	NS	8.3 J	35.8 J	8.8 U	25.3 J	9.4 U	14.8 J
Zinc	µg/L	NS	31.4	201 J	22.3 R	159 J	24.6 R	86.1 R
Cyanide	µg/L	NS	4.3 J	10 U J	NS	10 U J	NS	4.1 J

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER
DATE	PT12	PT-16	PT-15	PT-16	PT-15	PT-16	PT-15
ES ID	07/13/93	01/10-13/92	01/10-13/92	1/10-13/92	1/10-13/92	1/10-13/92	01/11/92
LAB ID	PT12	PT-16	PT-15	PT-16	PT-15	PT-16RE(4)	PT-16
UNITS	189113	182167	182167	182411	182411	182260	182293
Chloromethane	NS	NS	10 U	NS	NS	NS	NS
Bromomethane	µg/L	NS	NS	10 U	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	10 U	NS	NS	NS
Chloroethane	µg/L	NS	NS	10 U	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	5 U	NS	NS	NS
Acetone	µg/L	NS	NS	10 U	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	5 U	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
1,2-Dichloroethane (total)	µg/L	NS	NS	5 U	NS	NS	NS
Chloroform	µg/L	NS	NS	5 U	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
2-Butanone	µg/L	NS	NS	10 U	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	5 U	NS	NS	NS
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	NS
Bromodichloromethane	µg/L	NS	NS	5 U	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	5 U	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	NS
Trichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	5 U	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	NS
Benzene	µg/L	NS	NS	5 U	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	NS
Bromoform	µg/L	NS	NS	5 U	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	NS	NS
2-Hexanone	µg/L	NS	NS	10 U	NS	NS	NS
Tetrachloroethane	µg/L	NS	NS	5 U	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	5 U	NS	NS	NS
Toluene	µg/L	NS	NS	5 U	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	5 U	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	5 U	NS	NS	NS
Styrene	µg/L	NS	NS	5 U	NS	NS	NS
Xylene (total)	µg/L	NS	NS	5 U	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE II WATER PT12 07/13/93 PT12 189113	PHASE I WATER PT-16 01/10-13/92 PT-16 182167	PHASE I WATER PT-16 01/10-13/92 PT-16 182167	PHASE I WATER PT-16 1/10-13/92 PT-16 182411	PHASE I WATER PT-16 1/10-13/92 PT-16RE(4) 182411	PHASE I WATER PT-16 01/11/92 PT-16 182260	PHASE I WATER PT-16 01/10-13/92 PT-16R(RED) 182293
VOC's (824.2)							
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
Acetone	µg/L	NS	NS	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
2-Butanone	µg/L	NS	NS	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroform	µg/L	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
Benzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	NS
Toluene	µg/L	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
2-Hexanone	µg/L	NS	NS	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	NS	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Styrene	µg/L	NS	NS	NS	NS	NS	NS
Bromoform	µg/L	NS	NS	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Bromobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	NS
Naphthalene	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Xylene (total)	µg/L	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER
DATE	PT-12	PT-15	PT-15	PT-15	PT-15	PT-15	PT-15
ES ID	07/13/93	01/10-13/92	01/10-13/92	1/10-13/92	1/10-13/92	01/11/92	01/10-13/92
LAB ID	PT12	PT-15	PT-15	PT-15	PT-15RE(4)	PT-15	PT-15FRed
UNITS	189113	152157	152167	152411	152411	152250	152293
SEMI-VOLATILES							
Phenol	µg/L	NS	12 U	NS	NS	NS	NS
bis(2-Chloroethyl) ether	µg/L	NS	12 U	NS	NS	NS	NS
2-Chlorophenol	µg/L	NS	12 U	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	12 U	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	12 U	NS	NS	NS	NS
Benzyl Alcohol	µg/L	NS	12 U	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	12 U	NS	NS	NS	NS
2-Methylphenol	µg/L	NS	12 U	NS	NS	NS	NS
bis(p-Chloroisopropyl) ether	µg/L	NS	12 U	NS	NS	NS	NS
4-Methylphenol	µg/L	NS	12 U	NS	NS	NS	NS
N-Nitroso-di-n-propylamine	µg/L	NS	12 U	NS	NS	NS	NS
Hexachloroethane	µg/L	NS	12 U	NS	NS	NS	NS
Nitrobenzene	µg/L	NS	12 U	NS	NS	NS	NS
Isophorone	µg/L	NS	12 U	NS	NS	NS	NS
2-Nitrophenol	µg/L	NS	12 U	NS	NS	NS	NS
2,4-Dimethylphenol	µg/L	NS	12 U	NS	NS	NS	NS
Benzoic acid	µg/L	NS	60 U	NS	NS	NS	NS
bis(p-Chloroethoxy) methane	µg/L	NS	12 U	NS	NS	NS	NS
2,4-Dichlorophenol	µg/L	NS	12 U	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	12 U	NS	NS	NS	NS
Naphthalene	µg/L	NS	12 U	NS	NS	NS	NS
4-Chloroaniline	µg/L	NS	12 U	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	12 U	NS	NS	NS	NS
4-Chloro-3-methylphenol	µg/L	NS	12 U	NS	NS	NS	NS
2-Methylnaphthalene	µg/L	NS	12 U	NS	NS	NS	NS
Hexachlorocyclopentadiene	µg/L	NS	12 U	NS	NS	NS	NS
2,4,6-Trichlorophenol	µg/L	NS	12 U	NS	NS	NS	NS
2,4,6-Trichlorophenol	µg/L	NS	60 U	NS	NS	NS	NS
2-Chloronaphthalene	µg/L	NS	12 U	NS	NS	NS	NS
2-Nitroaniline	µg/L	NS	60 U	NS	NS	NS	NS
Dimethylphthalate	µg/L	NS	12 U	NS	NS	NS	NS
Acenaphthylene	µg/L	NS	12 U	NS	NS	NS	NS
2,6-Dinitrotoluene	µg/L	NS	12 U	NS	NS	NS	NS
3-Nitroaniline	µg/L	NS	60 U	NS	NS	NS	NS
Acenaphthene	µg/L	NS	12 U	NS	NS	NS	NS
2,4-Dinitrophenol	µg/L	NS	60 U	NS	NS	NS	NS
4-Nitrophenol	µg/L	NS	60 U	NS	NS	NS	NS
Dibenzofuran	µg/L	NS	12 U	NS	NS	NS	NS
2,4-Dinitrotoluene	µg/L	NS	12 U	NS	NS	NS	NS
Diethylphthalate	µg/L	NS	12 U	NS	NS	NS	NS
4-Chlorophenyl-phenylether	µg/L	NS	12 U	NS	NS	NS	NS
Fluorene	µg/L	NS	12 U	NS	NS	NS	NS
4-Nitroaniline	µg/L	NS	60 U	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	µg/L	NS	60 U	NS	NS	NS	NS
N-Nitrosodiphenylamine (1)	µg/L	NS	12 U	NS	NS	NS	NS
4-Bromophenyl-phenylether	µg/L	NS	12 U	NS	NS	NS	NS
Hexachlorobenzene	µg/L	NS	12 U	NS	NS	NS	NS
Pentachlorophenol	µg/L	NS	60 U	NS	NS	NS	NS
Phenanthrene	µg/L	NS	12 U	NS	NS	NS	NS
Anthracene	µg/L	NS	12 U	NS	NS	NS	NS
Carbazole	µg/L	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/L	NS	12 U	NS	NS	NS	NS
Fluoranthene	µg/L	NS	12 U	NS	NS	NS	NS
Pyrene	µg/L	NS	12 U	NS	NS	NS	NS
Butylbenzylphthalate	µg/L	NS	12 U	NS	NS	NS	NS
3,3'-Dichlorobenzidine	µg/L	NS	24 U	NS	NS	NS	NS
Benzo(a)anthracene	µg/L	NS	12 U	NS	NS	NS	NS
Chrysene	µg/L	NS	12 U	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	µg/L	NS	12 U	NS	NS	NS	NS
Di-n-octylphthalate	µg/L	NS	12 U	NS	NS	NS	NS
Benzo(b)fluoranthene	µg/L	NS	12 U	NS	NS	NS	NS
Benzo(k)fluoranthene	µg/L	NS	12 U	NS	NS	NS	NS
Benzo(e)pyrene	µg/L	NS	12 U	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	µg/L	NS	12 U	NS	NS	NS	NS
Dibenzo(a,h)anthracene	µg/L	NS	12 U	NS	NS	NS	NS
Benzo(g,h,i)perylene	µg/L	NS	12 U	NS	NS	NS	NS

SENECA ARMY DEP OT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER
DATE	PT12	PT-15	PT-15	PT-15	PT-15	PT-15	PT-15	PT-15
ES ID	07/13/93	01/10-13/92	01/10-13/92	01/10-13/92	1/10-13/92	1/10-13/92	1/10-13/92	01/11/92
LAB ID	PT12	PT-15	PT-15	PT-15	PT-15	PT-15	PT-15	PT-15
COMPOUND	189113	182187	182187	182187	182411	182411	182260	182293
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
beta-BHC	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
delta-BHC	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
gamma-BHC (Lindane)	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
Heptachlor	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
Aldrin	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
Heptachlor epoxide	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
Endosulfan I	µg/L	NS	NS	NS	0.05 U R	0.05 U J	NS	NS
Dieldrin	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
4,4'-DDE	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
Endrin	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
Endosulfan II	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
4,4'-DDD	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
Endosulfan sulfate	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
4,4'-DDT	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
Methoxychlor	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Endrin ketone	µg/L	NS	NS	NS	0.1 U R	0.1 U J	NS	NS
Endrin aldehyde	µg/L	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
gamma-Chlordane	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Toxaphene	µg/L	NS	NS	NS	1 U R	1 U J	NS	NS
Aroclor-1016	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Aroclor-1221	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Aroclor-1232	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Aroclor-1242	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Aroclor-1248	µg/L	NS	NS	NS	0.5 U R	0.5 U J	NS	NS
Aroclor-1254	µg/L	NS	NS	NS	1 U R	1 U J	NS	NS
Aroclor-1260	µg/L	NS	NS	NS	1 U R	1 U J	NS	NS
<b>HERBICIDES</b>								
2,4-D	µg/L	1 U	NS	NS	1 U	NS	NS	NS
2,4-DB	µg/L	1 U	NS	NS	1 U	NS	NS	NS
2,4,5-T	µg/L	0.1 U	NS	NS	0.1 U	NS	NS	NS
2,4,5-TP (Silvex)	µg/L	0.1 U	NS	NS	0.1 U	NS	NS	NS
Dalapon	µg/L	2.3 U	NS	NS	2.3 U	NS	NS	NS
Dicamba	µg/L	0.1 U	NS	NS	0.1 U	NS	NS	NS
Dichloroprop	µg/L	1 U	NS	NS	1 U	NS	NS	NS
Dinoseb	µg/L	0.5 U	NS	NS	0.5 U	NS	NS	NS
MCPA	µg/L	100 U	NS	NS	100 U	NS	NS	NS
MCPP	µg/L	100 U	NS	NS	100 U	NS	NS	NS
<b>METALS</b>								
Aluminum	µg/L	NS	NS	NS	NS	NS	389	24.6 U
Antimony	µg/L	NS	NS	NS	NS	NS	55.8 U J	53.4 U
Arsenic	µg/L	NS	NS	NS	NS	NS	3.5 U	3.5 U
Barium	µg/L	NS	NS	NS	NS	NS	93.5 J	79.7 J
Beryllium	µg/L	NS	NS	NS	NS	NS	1.7 R	2.4 R
Cadmium	µg/L	NS	NS	NS	NS	NS	2.9 U	3 U
Calcium	µg/L	NS	NS	NS	NS	NS	59500 J	59700
Chromium	µg/L	NS	NS	NS	NS	NS	6.2 U	6.2 U
Cobalt	µg/L	NS	NS	NS	NS	NS	19.9 U	20.5 U
Copper	µg/L	NS	NS	NS	NS	NS	14.5 U	10.2 U
Iron	µg/L	NS	NS	NS	NS	NS	673	7 U
Lead	µg/L	NS	NS	NS	NS	NS	1.2 U	1.2 U
Magnesium	µg/L	NS	NS	NS	NS	NS	16000 J	17500
Manganese	µg/L	NS	NS	NS	NS	NS	60.6	6 J
Mercury	µg/L	NS	NS	NS	NS	NS	0.13 R	0.1 R
Nickel	µg/L	NS	NS	NS	NS	NS	15.9 U	14.8 U
Potassium	µg/L	NS	NS	NS	NS	NS	1620 J	2030 J
Selenium	µg/L	NS	NS	NS	NS	NS	1 U	1 U
Silver	µg/L	NS	NS	NS	NS	NS	9.1 U	3.4 U
Sodium	µg/L	NS	NS	NS	NS	NS	29900	29600
Thallium	µg/L	NS	NS	NS	NS	NS	3.2 U	3.2 U
Vanadium	µg/L	NS	NS	NS	NS	NS	30.8 U	9.8 U
Zinc	µg/L	NS	NS	NS	NS	NS	17.4 B	8.5 U
Cyanide	µg/L	NS	NS	NS	NS	NS	10 U J	NS



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	
DATE	PT16	ASH	PT-16	PT-16	PT16	PT-17	PT-17	
ES ID	06/24/93	06/30/93	01/06/92	01/06/92	07/03/93	01/16/92	01/16/92	
LAB ID	PT16	PT-16	PT-16	PT-16#Filtered	PT16	PT-17	PT-17#Filtered	
UNITS	167343	167334	152158	152200	166260	152647	152671	
Chloroethane	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Bromomethane	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Vinyl Chloride	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Chloroethane	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Methylene Chloride	µg/L	NS	NS	8 U	NS	NS	6 U	NS
Acetone	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Carbon Disulfide	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,1-Dichloroethene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,1-Dichloroethene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,2-Dichloroethene (total)	µg/L	NS	NS	8 U	NS	NS	63	NS
Chloroform	µg/L	NS	NS	8 U	NS	NS	3 J	NS
1,2-Dichloroethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
2-Butanone	µg/L	NS	NS	10 U	NS	NS	14 U	NS
1,1,1-Trichloroethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Carbon Tetrachloride	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Bromodichloromethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,2-Dichloropropane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Trichloroethene	µg/L	NS	NS	8 U	NS	NS	260	NS
Dibromochloromethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,1,2-Trichloroethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Benzene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Bromoform	µg/L	NS	NS	8 U	NS	NS	7 U	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	NS	14 U	NS
2-Heptanone	µg/L	NS	NS	10 U	NS	NS	14 U	NS
Tetrachloroethene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Toluene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Chlorobenzene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Ethylbenzene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Styrene	µg/L	NS	NS	8 U	NS	NS	7 U	NS
Xylene (total)	µg/L	NS	NS	8 U	NS	NS	7 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	DATE	ES ID	LAB ID	PHASE II WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER
ES ID	PT16	06/24/93	PT16	PT16	ASH	PT-16	PT-16	PT16	PT-16	PT-16
LAB ID	187343	06/30/93	187344	187344	PT-16	162166	162200	166260	166260	166260
UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOC's (824.2)										
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS	0.6 U	NS	NS
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS	0.6 U	NS	NS
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS	0.6 U	NS	NS
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS	0.6 U	NS	NS
Chloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Trichlorofluoromethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1-Dichloroethene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Acetone	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Carbon Disulfide	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Methylene Chloride	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
trans-1,2-Dichloroethene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1-Dichloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
2,2-Dichloropropane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
cis-1,2-Dichloroethene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
2-Butanone	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Bromochloromethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Chloroform	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1,1-Trichloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Carbon Tetrachloride	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1-Dichloropropene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Benzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2-Dichloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Trichloroethene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2-Dichloropropane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Dibromomethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Bromodichloromethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
cis-1,3-Dichloropropene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
4-Methyl-2-Pentanone	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Toluene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
trans-1,3-Dichloropropene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1,2-Trichloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Tetrachloroethene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,3-Dichloropropane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
2-Hexanone	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Dibromochloromethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2-Dibromoethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Chlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Ethylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Styrene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Bromotorm	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Isopropylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Bromobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2,3-Trichloropropane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
n-Propylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
2-Chlorotoluene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
4-Chlorotoluene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,3,5-Trimethylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
tert-Butylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2,4-Trimethylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
sec-Butylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,3-Dichlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,4-Dichlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
p-Isopropyltoluene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2-Dichlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
n-Butylbenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2,4-Trichlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Hexachlorocyclohexadiene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Naphthalene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
1,2,3-Trichlorobenzene	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS
Xylene (total)	µg/L	0.6 U	NS	NS	NS	NS	NS	0.6 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER
DATE	PT18	ASH	PT-16	PT-16	PT18	PT-17	PT-17
ES ID	06/24/93	06/30/93	01/08/92	01/08/92	07/03/93	01/16/92	01/16/92
LAB ID	PT18	PT-16	PT-16	PT-16Filtered	PT18	PT-17	PT-17Filtered
UNITS	187343	187934	182188	182200	188280	182647	182671
SEMI-VOLATILES							
Phenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
bis(2-Chloroethyl) ether	µg/L	10 U	NS	11 U	NS	10 U	11 U
2-Chlorophenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
1,3-Dichlorobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
1,4-Dichlorobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzyl Alcohol	µg/L	NS	NS	11 U	NS	NS	11 U
1,2-Dichlorobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
2-Methylphenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
bis(2-Chloroisopropyl) ether	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Methylphenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
N-Nitrosodimethylamine	µg/L	10 U	NS	11 U	NS	10 U	11 U
Hexachloroethane	µg/L	10 U	NS	11 U	NS	10 U	11 U
Nitrobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
isophorone	µg/L	10 U	NS	11 U	NS	10 U	11 U
2-Nitrophenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4-Dimethylphenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzoic acid	µg/L	NS	NS	66 U	NS	NS	64 U
bis(2-Chloroethoxy) methane	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4-Dichlorophenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
1,2,4-Trichlorobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Naphthalene	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Chloroaniline	µg/L	10 U	NS	11 U	NS	10 U	11 U
Hexachlorobutadiene	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Chloro-3-methylphenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
2-Methylnaphthalene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Hexachlorocyclopentadiene	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4,6-Trichlorophenol	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4,6-Trichlorophenol	µg/L	26 U	NS	66 U	NS	26 U	64 U
2-Chloronaphthalene	µg/L	10 U	NS	11 U	NS	10 U	11 U
2-Nitroaniline	µg/L	26 U	NS	66 U	NS	26 U	64 U
Dimethylphthalate	µg/L	10 U	NS	11 U	NS	10 U	11 U
Acenaphthylene	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,6-Dinitrotoluene	µg/L	10 U	NS	11 U	NS	10 U	11 U
3-Nitroaniline	µg/L	26 U	NS	66 U	NS	26 U	64 U
Acenaphthene	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4-Dinitrophenol	µg/L	26 U	NS	66 U	NS	26 U	64 U
4-Nitrophenol	µg/L	26 U	NS	66 U	NS	26 U	64 U
Dibenzofuran	µg/L	10 U	NS	11 U	NS	10 U	11 U
2,4-Dinitrotoluene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Diethylphthalate	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Chlorophenyl-phenylether	µg/L	10 U	NS	11 U	NS	10 U	11 U
Fluorene	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Nitroaniline	µg/L	26 U	NS	66 U	NS	26 U	64 U
4,4-Dinitro-2-methylphenol	µg/L	26 U	NS	66 U	NS	26 U	64 U
N-Nitrosodimethylamine (I)	µg/L	10 U	NS	11 U	NS	10 U	11 U
4-Bromophenyl-phenylether	µg/L	10 U	NS	11 U	NS	10 U	11 U
Hexachlorobenzene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Pentachlorophenol	µg/L	26 U	NS	66 U	NS	26 U	64 U
Phenanthrene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Anthracene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Carbazole	µg/L	10 U	NS	11 U	NS	10 U	11 U
Di-n-butylphthalate	µg/L	10 U	NS	11 U	NS	10 U	11 U
Fluoranthene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Pyrene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Butylbenzylphthalate	µg/L	10 U	NS	11 U	NS	10 U	11 U
3,3'-Dichlorobenzidine	µg/L	10 U	NS	22 U	NS	10 U	21 U
Benzo(a)anthracene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Chrysene	µg/L	10 U	NS	11 U	NS	10 U	11 U
bis(2-Ethylhexyl)phthalate	µg/L	10 U	NS	11 U	NS	10 U	20 U
Di-n-octylphthalate	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzo(b)fluoranthene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzo(k)fluoranthene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzo(e)pyrene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Indeno(1,2,3-cd)pyrene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Dibenz(a,h)anthracene	µg/L	10 U	NS	11 U	NS	10 U	11 U
Benzo(g,h,i)perylene	µg/L	10 U	NS	11 U	NS	10 U	11 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER PT16 08/24/93 PT16 187343	PHASE II WATER ASH 08/30/93 PT-18 187934	PHASE I WATER PT-16 01/08/92 PT-16 152158	PHASE I WATER PT-16 01/08/92 PT-16F16red 152200	PHASE II WATER PT16 07/03/93 PT16 188260	PHASE I WATER PT-17 01/16/92 PT-17 152647	PHASE I WATER PT-17 01/16/92 PT-17F16red 152671
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
beta-BHC	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
delta-BHC	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
gamma-BHC (Lindane)	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
Heptachlor	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
Aldrin	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
Heptachlor epoxide	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
Endosulfan I	µg/L	NS	0.05 U	0.05 U	NS	0.05 U	0.055 U	NS
Dieldrin	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDE	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endrin	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endosulfan II	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDD	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endosulfan sulfate	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDT	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Methoxychlor	µg/L	NS	0.5 U	0.5 U	NS	0.5 U	0.55 U	NS
Endrin ketone	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endrin aldehyde	µg/L	NS	0.1 U	NS	NS	0.1 U	NS	NS
alpha-Chlordane	µg/L	NS	0.05 U	0.5 U	NS	0.05 U	0.55 U	NS
gamma-Chlordane	µg/L	NS	0.05 U	0.5 U	NS	0.05 U	0.55 U	NS
Toxaphene	µg/L	NS	5 U	1 U	NS	5 U	1.1 U	NS
Aroclor-1016	µg/L	NS	1 U	0.5 U	NS	1 U	0.55 U	NS
Aroclor-1221	µg/L	NS	2 U	0.5 U	NS	2 U	0.55 U	NS
Aroclor-1232	µg/L	NS	1 U	0.5 U	NS	1 U	0.55 U	NS
Aroclor-1242	µg/L	NS	1 U	0.5 U	NS	1 U	0.55 U	NS
Aroclor-1248	µg/L	NS	1 U	0.5 U	NS	1 U	0.55 U	NS
Aroclor-1254	µg/L	NS	1 U	1 U	NS	1 U	1.1 U	NS
Aroclor-1260	µg/L	NS	1 U	1 U	NS	1 U	1.1 U	NS
<b>HERBICIDES</b>								
2,4-D	µg/L	NS	1 U	1.2 U	NS	1.1 U	1 U	NS
2,4-DB	µg/L	NS	1 U	1.2 U	NS	1.1 U	1 U	NS
2,4,6-T	µg/L	NS	0.1 U	0.1 U	NS	0.11 U	0.1 U	NS
2,4,6-TP (Silvex)	µg/L	NS	0.1 U	0.1 U	NS	0.11 U	0.1 U	NS
Dalapon	µg/L	NS	2.3 U	2.7 U	NS	2.4 U	2.3 U	NS
Dicamba	µg/L	NS	0.1 U	0.1 U	NS	0.11 U	0.1 U	NS
Dichloroprop	µg/L	NS	1 U	1.2 U	NS	1.1 U	1 U	NS
Dinoseb	µg/L	NS	0.5 U	0.6 U	NS	0.53 U	0.5 U	NS
MCPA	µg/L	NS	100 U	120 U	NS	110 U	100 U	NS
MCPP	µg/L	NS	100 U	120 U	NS	110 U	100 U	NS
<b>METALS</b>								
Aluminum	µg/L	693	NS	1820	24.4 U	179 J	14200	24.6 U
Antimony	µg/L	49.8 UJ	NS	63.4 U	53 U	49.8 UJ	53.3 R	63.4 U
Arsenic	µg/L	1.4 UJ	NS	3.5 U J	3.5 U	1.4 UJ	3.5 J	3.5 U
Barium	µg/L	100 J	NS	75 J	36.8 R	48.8 J	131 J	69.5 R
Beryllium	µg/L	0.9 U	NS	2.1 R	2.3 R	0.89 U	2.5 R	1.1 U
Cadmium	µg/L	2.8 U	NS	2.9 U	3 U	2.6 U	3 U	3 U
Calcium	µg/L	68400	NS	129000 J	100000	162000	116000	106000
Chromium	µg/L	2.7 UJ	NS	7.2 J	6.2 U	2.7 UJ	20	6.2 U
Cobalt	µg/L	8.5 U	NS	19.9 U	20.4 U	8.5 U	20.3 U	20.5 U
Copper	µg/L	4.7 U	NS	14.5 U	10.1 U	4.7 U	11.9 J	10.2 U
Iron	µg/L	1400	NS	2790	6.9 U	119	21600	7 U
Lead	µg/L	1.7 J	NS	4.2	1.2 U	0.79 U	6.3	1.2 U
Magnesium	µg/L	17800	NS	14300 J	14300	14800	15700	10700
Manganese	µg/L	158	NS	483	4.8 U	24.6	820	4.8 U
Mercury	µg/L	0.08 UJ	NS	0.12 R	0.1 R	0.09 UJ	0.1 R	0.03 U
Nickel	µg/L	7.8 UJ	NS	16 U	14.7 U	7.4 UJ	21.3 J	14.6 U
Potassium	µg/L	2430 J	NS	633 U	287 U	1060 J	3200 J	289 U
Selenium	µg/L	0.98 UJ	NS	1 U	1 U	1.8 UJ	1.3 U	1 U
Silver	µg/L	5.5 U	NS	9.1 U	3.4 U	5.5 U	3.4 U	3.4 U
Sodium	µg/L	27800	NS	6890 J	6890	6360	29400	27800
Thallium	µg/L	2.6 U	NS	3.2 U	3.2 U	2.6 U	3.2 U	3.2 U
Vanadium	µg/L	6.8 UJ	NS	30.5 U	9.4 U	6.7 UJ	21.9 J	9.3 U
Zinc	µg/L	17.8 R	NS	24.1	8.4 U	9.2 J	69.4 R	20.5 R
Cyanide	µg/L	10 UJ	NS	10 U J	NS	10 UJ	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
 GROUNDWATER ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER
DATE	PT-18	PT-18	PT-18	PT-18	PT-18	PT-18	PT-18
ES ID	07/13/83	01/09/82	01/09/82	07/18/83	01/17/82	01/17/82	06/30/83
LAB ID	PT17	PT-18	PT-18	PT18	PT-18	PT-18	PT-18
UNITS	186908	152159	182201	189114	182705	182712	187305
Chloromethane	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Bromomethane	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Vinyl Chloride	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Chloroethane	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Methylene Chloride	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Acetone	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Carbon Disulfide	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
1,1-Dichloroethene	µg/L 10 U	330 U	NS	3 J	5 U	NS	NS
1,1-Dichloroethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
1,2-Dichloroethene (total)	µg/L 43	400	NS	730 J	5 U	NS	NS
Chloroform	µg/L 10 U	180 J	NS	210 J	5 U	NS	NS
1,2-Dichloroethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
2-Butanone	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
1,1,1-Trichloroethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Carbon Tetrachloride	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Vinyl Acetate	µg/L NS	670 U	NS	NS	10 U	NS	NS
Bromodichloromethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
1,2-Dichloropropane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
cis-1,2-Dichloropropene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Trichloroethene	µg/L 190	11000	NS	13000	5 U	NS	NS
Dibromochloromethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
1,1,2-Trichloroethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Benzene	µg/L 10 U	330 U	NS	1 J	5 U	NS	NS
trans-1,3-Dichloropropene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Bromoform	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
4-Methyl-2-Pentanone	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
2-Hexanone	µg/L 10 U	670 U	NS	10 U	10 U	NS	NS
Tetrachloroethene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
1,1,2,2-Tetrachloroethane	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Toluene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Chlorobenzene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Ethylbenzene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Styrene	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS
Xylene (total)	µg/L 10 U	330 U	NS	10 U	5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER
DATE	PT17	PT-18	PT-18	PT18	PT-19	PT-19	PT-19	PT-19
ES ID	07/13/93	01/09/92	01/09/92	01/09/92	07/16/93	01/17/92	01/17/92	05/30/93
LAB ID	PT17	PT-18	PT-18	PT-18	PT-19	PT-19	PT-18	PT-19
COMPOUND	189606	152159	152201	189114	182705	152722	187935	187935
VOC's (504.2)								
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Chloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Trichlorofluoromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Acetone	µg/L	NS	NS	NS	NS	NS	NS	5 U
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
2-Butanone	µg/L	NS	NS	NS	NS	NS	NS	5 U
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Chloroform	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Benzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Trichloroethene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Bromodichloromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
cis-1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	NS	5 U
Toluene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
trans-1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
2-Hexanone	µg/L	NS	NS	NS	NS	NS	NS	5 U
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2-Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Styrene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Bromoform	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Bromobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
2-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
4-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,3,5-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Naphthalene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS	0.5 U
Xylene (total)	µg/L	NS	NS	NS	NS	NS	NS	0.5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II
		WATER PT17 07/13/93 PT17 188806	WATER PT-18 01/09/92 PT-18 182189	WATER PT-18 01/09/92 PT-18 182201	WATER PT18 07/18/93 PT18 189114	WATER PT-19 01/17/92 PT-19 162705	WATER PT-19 01/17/92 PT-19 182712	WATER PT-19 06/30/93 PT-19 107935
SEMIVOLATILES								
Phenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
bis(2-Chloroethyl) ether	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2-Chlorophenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
1,3-Dichlorobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
1,4-Dichlorobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzyl Alcohol	µg/L	NS	11 U	NS	NS	11 U	NS	NS
1,2-Dichlorobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2-Methylphenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
bis(2-Chloroisopropyl) ether	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Methylphenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
N-Nitroso-di-n-propylamine	µg/L	10 U	11 U	NS	10 U	11 U	NS	2 J
Hexachloroethane	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Nitrobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Isophorone	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2-Nitrophenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4-Dimethylphenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzole acid	µg/L	NS	87 U	NS	NS	86 U	NS	NS
bis(2-Chloroethoxy) methane	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4-Dichlorophenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Naphthalene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Chloroaniline	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Hexachlorobutadiene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Chloro-3-methylphenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2-Methylnaphthalene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Hexachlorocyclopentadiene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4,6-Trichlorophenol	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4,6-Trichlorophenol	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
2-Chloronaphthalene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2-Nitroaniline	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
Dimethylphthalate	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Acenaphthylene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,6-Dinitrotoluene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
3-Nitroaniline	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
Acenaphthene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4-Dinitrophenol	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
4-Nitrophenol	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
Dibenzofuran	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
2,4-Dinitrotoluene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Diethylphthalate	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Chlorophenyl-phenylether	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Fluorene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Nitroaniline	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
4,6-Dinitro-2-methylphenol	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
N-Nitrosodiphenylamine (I)	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
4-Bromophenyl-phenylether	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Hexachlorobenzene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Pentachlorophenol	µg/L	26 U	87 U	NS	26 U	86 U	NS	26 U
Phenanthrene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Anthracene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Carbazole	µg/L	10 U	NS	NS	10 U	NS	NS	10 U
Di-n-butylphthalate	µg/L	3 J	11 U	NS	10 U	11 U	NS	10 U
Fluoranthene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Pyrene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Butylbenzylphthalate	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
3,3'-Dichlorobenzidine	µg/L	10 U	23 U	NS	10 U	22 U	NS	10 U
Benzo(a)anthracene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Chrysene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
bis(2-Ethylhexyl)phthalate	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Di-n-octylphthalate	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzo(b)fluoranthene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzo(k)fluoranthene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzo(e)pyrene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Indeno(1,2,3-cd)pyrene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Dibenz(a,h)anthracene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U
Benzo(g,h,i)perylene	µg/L	10 U	11 U	NS	10 U	11 U	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II
		WATER PT17 07/13/93 PT17 186906	WATER PT-18 01/09/92 PT-18 182159	WATER PT-18 01/09/92 PT-18Filtered 182201	WATER PT18 07/18/93 PT18 189114	WATER PT-19 01/17/92 PT-19 182705	WATER PT-19 01/17/92 PT-19Filtered 182712	WATER PT-19 06/30/93 PT-19 187935
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
beta-BHC	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
delta-BHC	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
gamma-BHC (Lindane)	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
Heptachlor	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
Aldrin	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
Heptachlor epoxide	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
Endosulfan I	µg/L	0.06 U	0.062 U	NS	0.06 U	0.061 U	NS	0.06 U
Dieldrin	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
4,4'-DDE	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
Endrin	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
Endosulfan II	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
4,4'-DDD	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
Endosulfan sulfate	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
4,4'-DDT	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
Methoxychlor	µg/L	0.6 U	0.62 U	NS	0.6 U	0.61 U	NS	0.6 U
Endrin ketone	µg/L	0.1 U	0.1 U	NS	0.1 U	0.12 U	NS	0.1 U
Endrin aldehyde	µg/L	0.1 U	NS	NS	0.1 U	NS	NS	0.1 U
alpha-Chlordane	µg/L	0.06 U	0.62 U	NS	0.06 U	0.61 U	NS	0.06 U
gamma-Chlordane	µg/L	0.06 U	0.62 U	NS	0.06 U	0.61 U	NS	0.06 U
Toxaphene	µg/L	8 U	1 U	NS	8 U	1.2 U	NS	8 U
Aroclor-1018	µg/L	1 U	0.62 U	NS	1 U	0.61 U	NS	1 U
Aroclor-1221	µg/L	2 U	0.62 U	NS	2 U	0.61 U	NS	2 U
Aroclor-1232	µg/L	1 U	0.62 U	NS	1 U	0.61 U	NS	1 U
Aroclor-1242	µg/L	1 U	0.62 U	NS	1 U	0.61 U	NS	1 U
Aroclor-1248	µg/L	1 U	0.62 U	NS	1 U	0.61 U	NS	1 U
Aroclor-1254	µg/L	1 U	1 U	NS	1 U	1.2 U	NS	1 U
Aroclor-1260	µg/L	1 U	1 U	NS	1 U	1.2 U	NS	1 U
<b>HERBICIDES</b>								
2,4-D	µg/L	1 U	1.1 U	NS	1 U	1 U	NS	1 U
2,4-DB	µg/L	1 U	1.1 U	NS	1 U	1 U	NS	1 U
2,4,5-T	µg/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
2,4,5-TP (Silvex)	µg/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
Dalapon	µg/L	2.3 U	2.4 U	NS	2.3 U	2.4 U	NS	2.3 U
Dicamba	µg/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
Dichloroprop	µg/L	1 U	1.1 U	NS	1 U	1 U	NS	1 U
Dinoseb	µg/L	0.6 U	0.6 U	NS	0.6 U	0.6 U	NS	0.6 U
MCPA	µg/L	100 U	110 U	NS	100 U	100 U	NS	100 U
MCPP	µg/L	100 U	110 U	NS	100 U	100 U	NS	100 U
<b>METALS</b>								
Aluminum	µg/L	72.6 U	1510	24.4 U	318 J	36100	24.6 U	207
Antimony	µg/L	69.8 R	58.5 U	52.9 U	49.7 U	53.3 U	55.1 U	49.6 UJ
Arsenic	µg/L	1.4 U	3.5 U	3.5 U	1.9 U	3.5 U	3.5 U	1.4 UJ
Barium	µg/L	84.6 J	53.9 J	37.4 R	40 J	217	59.4 R	58 J
Beryllium	µg/L	0.9 U	2.1 R	2.6 R	0.9 U	2.6 R	1.1 U	0.9 U
Cadmium	µg/L	2.6 U	2.9 U	3 U	2.6 U	6.1 J	3 U	2.6 U
Calcium	µg/L	114000	329000 J	271000	203000	110000	96300	114000
Chromium	µg/L	2.7 U	6.1 U	8.1 U	2.8 J	47.2	6.2 U	2.7 UJ
Cobalt	µg/L	8.6 U	19.8 U	20.3 U	6.9 J	20.6 U	20.4 U	8.6 U
Copper	µg/L	4.7 U	14.4 U	10.1 U	4.7 UJ	41.3	10.1 U	6.6 J
Iron	µg/L	106 U	2270	6.9 U	496 J	46300	7 U	409
Lead	µg/L	0.8 U	17.8	1.2 U	0.8 U	12.6 R	1.2 U	0.8 U
Magnesium	µg/L	11100	37000 J	39400	24900	24700 J	12900	14400
Manganese	µg/L	5.1 J	1530	964	782	543 J	6.6 J	361
Mercury	µg/L	0.09 UJ	0.42 R	0.12 R	0.06 U	0.04 R	0.03 U	0.22 J
Nickel	µg/L	7.8 U	18.9 U	14.7 U	7.8 UJ	60.7	14.7 U	7.5 UJ
Potassium	µg/L	1060 J	2280 J	2010 J	1360 J	7550	286 U	1900 J
Selenium	µg/L	1.6 U	1 U	1 U	0.96 UJ	1 U	1 U	1 UJ
Silver	µg/L	8.6 U	9 U	4.3 R	8.6 U	3.4 U	3.4 U	8.6 U
Sodium	µg/L	26300	114000 J	109000	93900	19700	16300	22100
Thallium	µg/L	2.6 U	3.2 U	3.2 U	2.6 U	3.2 U	3.2 U	2.6 U
Vanadium	µg/L	6.8 U	30.3 U	8.4 U	6.8 UJ	45.4 J	9.5 U	6.8 UJ
Zinc	µg/L	2.8 U	496	120	64.1 R	154 J	17.1 R	14.1 J
Cyanide	µg/L	3 J	10 U J	NS	1.4 J	10 U J	NS	10 UJ



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	PHASE I	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I	PHASE I
	LOCATION	WATER	WATER	WATER	WATER	WATER	WATER	WATER
	DATE	PT-20	PT-20	PT-20	PT20	PT20 RE	PT-21	PT-21
	ES ID	01/17/92	01/17/92	01/17/92	07/12/93	07/10/93	01/17/92	01/26/92 CK
LAB ID	PT-20(2,3)	PT-20RE(2,3,4)	PT-20(2,3) Filtered	PT-20	PT20 RE	PT-21	PT-21	
UNITS	182706	182706	182713	188796	188796R1	182707	183059	
Chloromethane	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Bromomethane	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Vinyl Chloride	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Chloroethane	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Methylene Chloride	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Acetone	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Carbon Disulfide	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,1-Dichloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,1-Dichloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,2-Dichloroethane (total)	µg/L	24	NS	NS	83	NS	16	NS
Chloroform	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,2-Dichloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
2-Butanone	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
1,1,1-Trichloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Carbon Tetrachloride	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Vinyl Acetate	µg/L	10 U	NS	NS	NS	NS	10 U	NS
Bromodichloromethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,2-Dichloropropane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
cis-1,3-Dichloropropene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Trichloroethene	µg/L	26	NS	NS	37	NS	2 J	NS
Dibromochloromethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,1,2-Trichloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Benzene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
trans-1,3-Dichloropropene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Bromoform	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
4-Methyl-2-Pentanone	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
2-Hexanone	µg/L	10 U	NS	NS	10 U	NS	10 U	NS
Tetrachloroethene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
1,1,2,2-Tetrachloroethane	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Toluene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Chlorobenzene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Ethylbenzene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Styrene	µg/L	5 U	NS	NS	10 U	NS	5 U	NS
Xylene (total)	µg/L	5 U	NS	NS	10 U	NS	5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE I WATER PT-20 01/17/92 PT-20(2,3) 152706	PHASE I WATER PT-20 01/17/92 PT-20RE(2,3,4) 152706	PHASE I WATER PT-20 01/17/92 PT-20(2,3)Filtered 152713	PHASE II WATER PT20 07/12/93 PT20 186796	PHASE II WATER PT20 RE 07/10/93 PT20 RE 186796R1	PHASE I WATER PT-21 01/17/92 PT-21 152707	PHASE I WATER PT-21 01/25/92 CK PT-21 153059
VOC's (594.3)							
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
Acetone	µg/L	NS	NS	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
2-Butanone	µg/L	NS	NS	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroform	µg/L	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
Benzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS
Bromochloroethane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	NS
Toluene	µg/L	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
2-Hexanone	µg/L	NS	NS	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	NS	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Styrene	µg/L	NS	NS	NS	NS	NS	NS
Bromoform	µg/L	NS	NS	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Bromobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	NS
Naphthalene	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Xylene (total)	µg/L	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I	PHASE I
		WATER PT-20 01/17/92 PT-20(2,3) 162706	WATER PT-20 01/17/92 PT-20RE(2,3,4) 162706	WATER PT-20 01/17/92 PT-20(2,3)Filtered 162713	WATER PT20 07/12/93 PT20 188796	WATER PT20 RE 07/10/93 PT20 RE 188796R1	WATER PT-21 01/17/92 PT-21 152707	WATER PT-21 01/26/92OK PT-21 153069
SEMI-VOLATILES								
Phenol	µg/L	25 R	10 U J	NS	10 U	NS	NS	10 U
bis(2-Chloroethyl) ether	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2-Chlorophenol	µg/L	34 R	10 U J	NS	10 U	NS	NS	10 U
1,3-Dichlorobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
1,4-Dichlorobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzyl Alcohol	µg/L	11 U R	10 U J	NS	NS	NS	NS	10 U
1,2-Dichlorobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2-Methylphenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
bis(2-Chloroisopropyl) ether	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Methylphenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
N-Nitrosodim-n-propylamine	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Hexachloroethane	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Nitrobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Isophorone	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2-Nitrophenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4-Dimethylphenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzoic acid	µg/L	64 U R	80 U J	NS	NS	NS	NS	80 U
bis(2-Chloroethoxy) methane	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4-Dichlorophenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
1,2,4-Trichlorobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Naphthalene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Chloroaniline	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Hexachlorobutadiene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Chloro-3-methylphenol	µg/L	21 R	10 U J	NS	10 U	NS	NS	10 U
2-Methylnaphthalene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Hexachlorocyclopentadiene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4,6-Trichlorophenol	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4,8-Trichlorophenol	µg/L	64 U R	80 U J	NS	25 U	NS	NS	80 U
2-Chloronaphthalene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2-Nitroaniline	µg/L	64 U R	80 U J	NS	25 U	NS	NS	80 U
Dimethylphthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Acenaphthylene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,6-Dinitroquene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
3-Nitroaniline	µg/L	64 U R	80 U J	NS	25 U	NS	NS	80 U
Acenaphthene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4-Dinitrophenol	µg/L	64 U R	80 U J	NS	25 U	NS	NS	80 U
4-Nitrophenol	µg/L	9 R	80 U J	NS	25 U	NS	NS	80 U
Dibenzofuran	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
2,4-Dinitroquene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Diethylphthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Chlorophenyl-phenylether	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Fluorene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Nitroaniline	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4,8-Dinitro-2-methylphenol	µg/L	64 U R	80 U J	NS	25 U	NS	NS	80 U
N-Nitrosodiphenylamine (1)	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
4-Bromophenyl-phenylether	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Hexachlorobenzene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Pentachlorophenol	µg/L	3 R	80 U J	NS	25 U	NS	NS	80 U
Phenanthrene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Anthracene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Carbazole	µg/L	NS	NS	NS	10 U	NS	NS	NS
Di-n-butylphthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Fluoranthene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Pyrene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Butylbenzylphthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
3,3'-Dichlorobenzidine	µg/L	22 U R	20 U J	NS	10 U	NS	NS	20 U
Benzo(a)anthracene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Chrysene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
bis(2-Ethylhexyl)phthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	38 U
Di-n-octylphthalate	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzo(b)fluoranthene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzo(k)fluoranthene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzo(a)pyrene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Indeno(1,2,3-cd)pyrene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Dibenz(a,h)anthracene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U
Benzo(g,h,i)perylene	µg/L	11 U R	10 U J	NS	10 U	NS	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I	PHASE I
		WATER PT-20 01/17/92 PT-20(2,3) 182708	WATER PT-20 01/17/92 PT-20RE(2,3,4) 182708	WATER PT-20 01/17/92 PT-20(2,3)Filtered 182713	WATER PT20 07/12/93 188796	WATER PT20 RE 07/10/93 PT20 RE 188796R1	WATER PT-21 01/17/92 PT-21 182707	WATER PT-21 01/28/92CK PT-21 183069
<b>PESTICIDES/PCBs</b>								
alpha-BHC	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
beta-BHC	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
delta-BHC	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
gamma-BHC (Lindane)	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
Heptachlor	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
Aldrin	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
Heptachlor epoxide	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
Endosulfan I	µg/L	0.066 U	NS	NS	0.08 U	NS	NS	NS
Dieldrin	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
4,4'-DDE	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
Endrin	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
Endosulfan II	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
4,4'-DDD	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
Endosulfan sulfate	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
4,4'-DDT	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
Methoxychlor	µg/L	0.58 U	NS	NS	0.8 U	NS	NS	NS
Endrin ketone	µg/L	0.11 U	NS	NS	0.1 U	NS	NS	NS
Endrin aldehyde	µg/L	NS	NS	NS	0.1 U	NS	NS	NS
alpha-Chlordane	µg/L	0.66 U	NS	NS	0.08 U	NS	NS	NS
gamma-Chlordane	µg/L	0.66 U	NS	NS	0.08 U	NS	NS	NS
Toxaphene	µg/L	1.1 U	NS	NS	8 U	NS	NS	NS
Aroclor-1016	µg/L	0.66 U	NS	NS	1 U	NS	NS	NS
Aroclor-1221	µg/L	0.66 U	NS	NS	2 U	NS	NS	NS
Aroclor-1232	µg/L	0.66 U	NS	NS	1 U	NS	NS	NS
Aroclor-1242	µg/L	0.66 U	NS	NS	1 U	NS	NS	NS
Aroclor-1248	µg/L	0.66 U	NS	NS	1 U	NS	NS	NS
Aroclor-1254	µg/L	1.1 U	NS	NS	1 U	NS	NS	NS
Aroclor-1260	µg/L	1.1 U	NS	NS	1 U	NS	NS	NS
<b>HERBICIDES</b>								
2,4-D	µg/L	1 U	NS	NS	1 R	1 R	NS	NS
2,4-DB	µg/L	1 U	NS	NS	1 R	1 R	NS	NS
2,4,6-T	µg/L	0.1 U	NS	NS	0.1 R	0.1 R	NS	NS
2,4,6-TP (Silvex)	µg/L	0.1 U	NS	NS	0.1 R	0.1 R	NS	NS
Dalapon	µg/L	2.3 U	NS	NS	2.3 R	2.3 R	NS	NS
Dicamba	µg/L	0.1 U	NS	NS	0.1 R	0.1 R	NS	NS
Dichloroprop	µg/L	1 U	NS	NS	1 R	1 R	NS	NS
Dinoseb	µg/L	0.8 U	NS	NS	0.8 R	0.8 R	NS	NS
MCPA	µg/L	100 U	NS	NS	100 R	100 R	NS	NS
MCPP	µg/L	100 U	NS	NS	100 R	100 R	NS	NS
<b>METALS</b>								
Aluminum	µg/L	10800	NS	24.4 U	124 J	NS	NS	14200
Antimony	µg/L	63.1 U	NS	62.9 U	62.1 R	NS	NS	62.9 U
Arsenic	µg/L	3.5 U	NS	3.5 U	1.4 U	NS	NS	3.5 U
Barium	µg/L	124 J	NS	66.3 R	73.9 J	NS	NS	230
Beryllium	µg/L	1.8 R	NS	1.1 U	0.8 U	NS	NS	1.7 R
Cadmium	µg/L	3 U	NS	3 U	2.8 U	NS	NS	4 J
Calcium	µg/L	146000	NS	126000	143000	NS	NS	165000
Chromium	µg/L	16.5	NS	6.1 U	2.7 U	NS	NS	18.6
Cobalt	µg/L	20.4 U	NS	20.3 U	6.8 U	NS	NS	20.3 U
Copper	µg/L	11.8 J	NS	10.1 U	4.7 U	NS	NS	17.9 J
Iron	µg/L	18000	NS	8.1 R	197 J	NS	NS	20100
Lead	µg/L	3.8 R	NS	1.2 U	0.8 U	NS	NS	7 R
Magnesium	µg/L	17400 J	NS	13600	14700	NS	NS	34300 J
Manganese	µg/L	378 J	NS	4.8 U	35.1	NS	NS	696 J
Mercury	µg/L	0.03 U	NS	0.03 U	0.08 UJ	NS	NS	0.03 U
Nickel	µg/L	17.1 J	NS	14.7 U	7.8 U	NS	NS	19.6 J
Potassium	µg/L	3440 J	NS	668 J	1800 J	NS	NS	6300
Selenium	µg/L	1 U J	NS	1 U	1.8 U	NS	NS	1 U J
Silver	µg/L	3.4 U	NS	3.4 U	5.8 U	NS	NS	3.4 U
Sodium	µg/L	35100	NS	33900	29700	NS	NS	47600
Thallium	µg/L	3.2 U	NS	3.2 U	2.6 U	NS	NS	3.2 U
Vanadium	µg/L	18.3 J	NS	9.4 U	6.8 U	NS	NS	21.1 J
Zinc	µg/L	80.7 R	NS	16.7 R	8.1 J	NS	NS	773 J
Cyanide	µg/L	10 U	NS	NS	1.2 U	NS	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	DATE	ES ID	LAB ID	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I
				WATER	WATER	WATER	WATER	WATER	WATER	WATER
DATE	PT-21	01/23/92	PT-21 Filtered	PT21	07/12/93	PT-22	01/09/92	PT-22	01/09/92	PT-22
ES ID	PT-21	PT-21	PT-21	PT21	PT21	PT-22	PT-22	PT-22	PT-22	PT-22
LAB ID	153080	153080	153080	188798	188798	182160	182202	188798	188798R1	152508
COMPOUND	UNITS									
Chloromethane	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Bromomethane	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Vinyl Chloride	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Chloroethane	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Methylene Chloride	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Acetone	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Carbon Disulfide	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,1-Dichloroethene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,1-Dichloroethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,2-Dichloroethene (total)	µg/L	NS	14	100	NS	150	NS	150	NS	5 U
Chloroform	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,2-Dichloroethane	µg/L	NS	10 U	4 J	NS	5 J	NS	5 J	NS	5 U
2-Butanone	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
1,1,1-Trichloroethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Carbon Tetrachloride	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	NS	NS	NS	10 U
Bromodichloromethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,2-Dichloropropane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
cis-1,3-Dichloropropene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Trichloroethene	µg/L	NS	3 J	50	NS	95	NS	95	NS	5 U
Dibromochloromethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,1,2-Trichloroethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Benzene	µg/L	NS	6 J	5 U	NS	10 U	NS	10 U	NS	5 U
trans-1,3-Dichloropropene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Bromoform	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
4-Methyl-2-Pentanone	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
2-Hexanone	µg/L	NS	10 U	10 U	NS	10 U	NS	10 U	NS	10 U
Tetrachloroethene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Toluene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Chlorobenzene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Ethylbenzene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Styrene	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U
Xylene (total)	µg/L	NS	10 U	5 U	NS	10 U	NS	10 U	NS	5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER PT - 21 01/23/92 PT - 21Filered 153060	PHASE II WATER PT21 07/12/93 156796	PHASE I WATER PT - 22 01/06/92 PT - 22 152180	PHASE I WATER PT - 22 01/06/92 PT - 22Filered 152202	PHASE II WATER PT22 07/12/93 156799	PHASE II WATER PT22RE 07/12/93 156799R1	PHASE I WATER PT - 23 01/14/92 PT - 23 152506
COMPOUND	UNITS						
VOC's (624.2)							
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloromethane	µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	NS
Bromomethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichlorofluoroethane	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
Acetone	µg/L	NS	NS	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	NS
2-Butanone	µg/L	NS	NS	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
Chloroform	µg/L	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
Benzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
Dibromomethane	µg/L	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/L	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	NS
Toluene	µg/L	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	NS
2-Hexanone	µg/L	NS	NS	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	NS	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Styrene	µg/L	NS	NS	NS	NS	NS	NS
Bromoform	µg/L	NS	NS	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	NS
Bromobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	NS
Naphthalene	µg/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	NS
Xylene (total)	µg/L	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE II WATER	PHASE I WATER
DATE	PT-21	PT21	PT-22	PT-22	PT22	PT22RE	PT-23
ES ID	01/23/92	07/12/93	01/09/92	01/09/92	07/12/93	07/12/93	01/14/92
LAB ID	PT-21F#red	PT21	PT-22	PT-22F#red	PT22	PT22RE	PT-23
COMPOUND	183060	188798	182160	182202	188799	188799R1	182608
UNITS							
<b>SEMI-VOLATILES</b>							
Phenol	µg/L	NS	NS	11 U	NS	10 U	NS
bis(2-Chloroethyl) ether	µg/L	NS	NS	11 U	NS	0.8 J	NS
2-Chlorophenol	µg/L	NS	NS	11 U	NS	10 U	NS
1,3-Dichlorobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
1,4-Dichlorobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
Benzyl Alcohol	µg/L	NS	NS	11 U	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
2-Methylphenol	µg/L	NS	NS	11 U	NS	10 U	NS
bis(2-Chloroisopropyl) ether	µg/L	NS	NS	11 U	NS	10 U	NS
4-Methylphenol	µg/L	NS	NS	11 U	NS	10 U	NS
N-Nitroso-d-n-propylamine	µg/L	NS	NS	11 U	NS	10 U	NS
Hexachloroethane	µg/L	NS	NS	11 U	NS	10 U	NS
Nitrobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
Isophorone	µg/L	NS	NS	11 U	NS	10 U	NS
2-Nitrophenol	µg/L	NS	NS	11 U	NS	10 U	NS
2,4-Dimethylphenol	µg/L	NS	NS	11 U	NS	10 U	NS
Benzoic acid	µg/L	NS	NS	64 U	NS	NS	61 U
bis(2-Chloroethoxy) methane	µg/L	NS	NS	11 U	NS	10 U	NS
2,4-Dichlorophenol	µg/L	NS	NS	11 U	NS	10 U	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
Naphthalene	µg/L	NS	NS	11 U	NS	10 U	NS
4-Chloroaniline	µg/L	NS	NS	11 U	NS	10 U	NS
Hexachlorobutadiene	µg/L	NS	NS	11 U	NS	10 U	NS
4-Chloro-3-methylphenol	µg/L	NS	NS	11 U	NS	10 U	NS
2-Methylnaphthalene	µg/L	NS	NS	11 U	NS	10 U	NS
Hexachlorocyclopentadiene	µg/L	NS	NS	11 U	NS	10 U	NS
2,4,6-Trichlorophenol	µg/L	NS	NS	11 U	NS	10 U	NS
2,4,8-Trichlorophenol	µg/L	NS	NS	64 U	NS	24 U	NS
2-Chloronaphthalene	µg/L	NS	NS	11 U	NS	10 U	NS
2-Nitroaniline	µg/L	NS	NS	64 U	NS	24 U	NS
Dimethylphthalate	µg/L	NS	NS	11 U	NS	10 U	NS
Acenaphthylene	µg/L	NS	NS	11 U	NS	10 U	NS
2,6-Dinitrotoluene	µg/L	NS	NS	11 U	NS	10 U	NS
3-Nitroaniline	µg/L	NS	NS	64 U	NS	24 U	NS
Acenaphthene	µg/L	NS	NS	11 U	NS	10 U	NS
2,4-Dinitrophenol	µg/L	NS	NS	64 U	NS	24 U	NS
4-Nitrophenol	µg/L	NS	NS	64 U	NS	24 U	NS
Dibenzofuran	µg/L	NS	NS	11 U	NS	10 U	NS
2,4-Dinitrotoluene	µg/L	NS	NS	11 U	NS	10 U	NS
Diethylphthalate	µg/L	NS	NS	11 U	NS	10 U	NS
4-Chlorophenyl-phenylether	µg/L	NS	NS	11 U	NS	10 U	NS
Fluorene	µg/L	NS	NS	11 U	NS	10 U	NS
4-Nitroaniline	µg/L	NS	NS	64 U	NS	24 U	NS
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	64 U	NS	24 U	NS
N-Nitrosodiphenylamine (1)	µg/L	NS	NS	11 U	NS	10 U	NS
4-Bromophenyl-phenylether	µg/L	NS	NS	11 U	NS	10 U	NS
Hexachlorobenzene	µg/L	NS	NS	11 U	NS	10 U	NS
Pentachlorophenol	µg/L	NS	NS	64 U	NS	24 U	NS
Phenanthrene	µg/L	NS	NS	11 U	NS	10 U	NS
Anthracene	µg/L	NS	NS	11 U	NS	10 U	NS
Carbazole	µg/L	NS	NS	NS	NS	10 U	NS
Di-n-butylphthalate	µg/L	NS	NS	11 U	NS	3 J	NS
Fluoranthene	µg/L	NS	NS	11 U	NS	10 U	NS
Pyrene	µg/L	NS	NS	11 U	NS	10 U	NS
Butylbenzylphthalate	µg/L	NS	NS	11 U	NS	10 U	NS
3,3'-Dichlorobenzidine	µg/L	NS	NS	22 U	NS	10 U	NS
Benzo(a)anthracene	µg/L	NS	NS	11 U	NS	10 U	NS
Chrysene	µg/L	NS	NS	11 U	NS	10 U	NS
bis(2-Ethylhexyl)phthalate	µg/L	NS	NS	11 U	NS	10 U	NS
Di-n-octylphthalate	µg/L	NS	NS	11 U	NS	10 U	NS
Benzo(b)fluoranthene	µg/L	NS	NS	11 U	NS	10 U	NS
Benzo(k)fluoranthene	µg/L	NS	NS	11 U	NS	10 U	NS
Benzo(a)pyrene	µg/L	NS	NS	11 U	NS	10 U	NS
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	11 U	NS	10 U	NS
Dibenz(a,h)anthracene	µg/L	NS	NS	11 U	NS	10 U	NS
Benzo(g,h,i)perylene	µg/L	NS	NS	11 U	NS	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I
		WATER PT-21 01/23/92 PT-21 Filtered 153060	WATER PT21 07/12/93 PT21 188798	WATER PT-22 01/08/92 PT-22 162160	WATER PT-22 01/08/92 PT-22 Filtered 152202	WATER PT22 07/12/93 PT22 188799	WATER PT22RE 07/10/93 PT22RE 168795R1	WATER PT-23 01/14/92 PT-23 162506
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
beta-BHC	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
delta-BHC	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
gamma-BHC (Lindane)	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
Heptachlor	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
Aldrin	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
Heptachlor epoxide	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
Endosulfan I	µg/L	NS	NS	0.052 U	NS	0.05 U	NS	0.061 U
Dieldrin	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
4,4'-DDE	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
Endrin	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
Endosulfan II	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
4,4'-DDD	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
Endosulfan sulfate	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
4,4'-DDT	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
Methoxychlor	µg/L	NS	NS	0.52 U	NS	0.5 U	NS	0.61 U
Endrin ketone	µg/L	NS	NS	0.1 U	NS	0.1 U	NS	0.12 U
Endrin aldehyde	µg/L	NS	NS	NS	NS	0.1 U	NS	NS
alpha-Chlordane	µg/L	NS	NS	0.52 U	NS	0.05 U	NS	0.61 U
gamma-Chlordane	µg/L	NS	NS	0.52 U	NS	0.05 U	NS	0.61 U
Toxaphene	µg/L	NS	NS	1 U	NS	5 U	NS	1.2 U
Aroclor-1018	µg/L	NS	NS	0.52 U	NS	1 U	NS	0.61 U
Aroclor-1221	µg/L	NS	NS	0.52 U	NS	2 U	NS	0.61 U
Aroclor-1232	µg/L	NS	NS	0.52 U	NS	1 U	NS	0.61 U
Aroclor-1242	µg/L	NS	NS	0.52 U	NS	1 U	NS	0.61 U
Aroclor-1248	µg/L	NS	NS	0.52 U	NS	1 U	NS	0.61 U
Aroclor-1254	µg/L	NS	NS	1 U	NS	1 U	NS	1.2 U
Aroclor-1260	µg/L	NS	NS	1 U	NS	1 U	NS	1.2 U
<b>HERBICIDES</b>								
2,4-D	µg/L	NS	NS	1 U	NS	1 R	1 R	1 U
2,4-DB	µg/L	NS	NS	1 U	NS	1 R	1 R	1 U
2,4,5-T	µg/L	NS	NS	0.1 U	NS	0.1 R	0.1 R	0.1 U
2,4,5-TP (Silvex)	µg/L	NS	NS	0.1 U	NS	0.1 R	0.1 R	0.1 U
Dalapon	µg/L	NS	NS	2.4 U	NS	2.3 R	6.4 J	2.4 U
Dicamba	µg/L	NS	NS	0.1 U	NS	0.1 R	0.1 R	0.1 U
Dichloroprop	µg/L	NS	NS	1 U	NS	1 R	1 R	1 U
Dinoseb	µg/L	NS	NS	0.5 U	NS	0.5 R	0.51 R	0.5 U
MCPA	µg/L	NS	NS	100 U	NS	100 R	100 R	100 U
MCPP	µg/L	NS	NS	100 U	NS	100 R	100 R	100 U
<b>METALS</b>								
Aluminum	µg/L	24.4 U	NS	4090	24.4 U	178 J	NS	2000
Antimony	µg/L	52.9 U	NS	55.8 U J	53 U	60 U	NS	53 U
Arsenic	µg/L	3.8 U	NS	3.5 U	3.5 U	1.4 U	NS	3.5 U
Barium	µg/L	105 R	NS	148 J	42.4 R	69.8 J	NS	45.4 R
Beryllium	µg/L	1.1 U	NS	2.3 R	2.4 R	0.9 U	NS	2.1 R
Cadmium	µg/L	3 U	NS	2.9 U	3 U	2.5 U	NS	3 U
Calcium	µg/L	130000	NS	197000 J	126000	147000	NS	98200
Chromium	µg/L	6.1 U	NS	8.5 J	8.2 U	2.7 U	NS	6.8 J
Cobalt	µg/L	20.3 U	NS	19.9 U	20.4 U	5.5 U	NS	20.4 U
Copper	µg/L	10.1 U	NS	14.4 U	10.1 U	4.7 U	NS	10.1 U
Iron	µg/L	25.2 R	NS	6010	6.9 U	214 J	NS	2510
Lead	µg/L	1.2 U	NS	10.5	1.2 U	0.78 J	NS	1.2 U
Magnesium	µg/L	25600	NS	18200 J	16800	17400	NS	11200
Manganese	µg/L	86.8	NS	1140	4.8 U	57.9	NS	80.4
Mercury	µg/L	0.03 U	NS	0.18 R	0.12 R	0.09 UJ	NS	0.11 R
Nickel	µg/L	14.7 U	NS	15.9 U	14.7 U	7.5 U	NS	14.7 U
Potassium	µg/L	4760 J	NS	632 U	380 J	1840 J	NS	1080 J
Selenium	µg/L	1 U	NS	1 U	1 U	1.5 U	NS	1.3 U
Silver	µg/L	3.4 U	NS	9.1 U	3.4 U	5.5 U	NS	3.4 U
Sodium	µg/L	44400	NS	52900 J	54100	64900	NS	4780 J
Thallium	µg/L	3.2 U	NS	3.2 U	3.2 U	2.6 U	NS	3.2 U
Vanadium	µg/L	9.4 U	NS	30.5 U	9.4 U	6.8 U	NS	9.4 U
Zinc	µg/L	170 R	NS	75.6 R	6.4 U	9.6 J	NS	47.8 R
Cyanide	µg/L	NS	NS	10 U	NS	1.2 U	NS	10 U



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE II WATER	PHASE I WATER	
DATE	PT-23	PT23	PT-24	PT-24	PT24	PT24RE	PT-25	
ES ID	01/14/92	06/24/93	01/14/92	01/14/92	07/10/93	07/10/93	01/15/92	
LAB ID	PT-23Filtered	PT23	PT-24	PT-24Filtered	PT24	PT24RE	PT-25	
UNITS	152511	167344	152507	152512	166729	166729	152575	
COMPOUND								
Chloromethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Bromomethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Vinyl Chloride	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Chloroethane	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Methylene Chloride	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Acetone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Carbon Disulfide	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,1-Dichloroethene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,2-Dichloroethene (total)	µg/L	NS	NS	100	NS	52	NS	5 U
Chloroform	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,2-Dichloroethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
2-Butanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
1,1,1-Trichloroethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Carbon Tetrachloride	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	NS	10 U
Bromochloromethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,2-Dichloropropane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
cis-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Trichloroethene	µg/L	NS	NS	4 J	NS	4 J	NS	5 U
Dibromochloromethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,1,2-Trichloroethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Benzene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
trans-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Bromoform	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
2-Hexanone	µg/L	NS	NS	10 U	NS	10 U	NS	10 U
Tetrachloroethene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Toluene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Chlorobenzene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Ethylbenzene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Styrene	µg/L	NS	NS	5 U	NS	10 U	NS	5 U
Xylene (total)	µg/L	NS	NS	5 U	NS	10 U	NS	5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I
		WATER	WATER	WATER	WATER	WATER	WATER	WATER
DATE	ES ID	PT - 23	PT 23	PT - 24	PT - 24	PT 24	PT 24RE	PT - 25
LAB ID	LAB ID	01/14/92	06/24/93	01/14/92	01/14/92	07/10/93	07/10/93	01/15/92
UNITS	UNITS	PT - 23Filtered	PT 23	PT - 24	PT - 24Filtered	PT 24	PT 24RE	PT - 25
		162611	187344	162507	162612	166729	166729	162675
VOC's (604.2)								
Dichlorodifluoromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Chloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Bromomethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Chloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Trichlorofluoromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Acetone	µg/L	NS	5 U	NS	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
2-Butanone	µg/L	NS	5 U	NS	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Chloroform	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Benzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Trichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Dibromomethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Bromodichloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	5 U	NS	NS	NS	NS	NS
Toluene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
2-Hexanone	µg/L	NS	5 U	NS	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Styrene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Bromoform	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Bromobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
2-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
4-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Naphthalene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS	NS
Xylene (total)	µg/L	NS	0.5 U	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE II	PHASE I
		WATER PT-23 01/14/92 PT-23Filtered 182611	WATER PT23 06/24/93 187344	WATER PT-24 01/14/92 182607	WATER PT-24 01/14/92 PT-24Filtered 182612	WATER PT-24 07/10/93 186729	WATER PT24RE 07/10/93 186729	WATER PT-26 01/15/92 PT-26 152676
SEMI-VOLATILES								
Phenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
bis(2-Chloroethyl) ether	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2-Chlorophenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
1,3-Dichlorobenzene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
1,4-Dichlorobenzene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Benzyl Alcohol	µg/L	N9	NS	11 U	NS	NS	NS	11 U
1,2-Dichlorobenzene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
2-Methylphenol	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
bis(2-Chloroisopropyl) ether	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
4-Methylphenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
N-Nitroso-D-n-propylamine	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Hexachloroethane	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Nitrobenzene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Isophorone	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2-Nitrophenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,4-Dimethylphenol	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Benzic acid	µg/L	NS	NS	85 U	NS	NS	NS	85 U
bis(2-Chloroethoxy) methane	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,4-Dichlorophenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
1,2,4-Trichlorobenzene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Naphthalene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
4-Chloroaniline	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Hexachlorobutadiene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
4-Chloro-3-methylphenol	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
2-Methylnaphthalene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Hexachlorocyclopentadiene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
2,4,6-Trichlorophenol	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,4,6-Trichlorophenol	µg/L	N9	25 U	85 U	NS	25 U	25 U	85 U
2-Chloronaphthalene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
2-Nitroaniline	µg/L	N9	25 U	85 U	NS	25 U	25 U	85 U
Dimethylphthalate	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Acenaphthylene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,6-Dinitrotoluene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
3-Nitroaniline	µg/L	N9	25 U	85 U	NS	25 U	25 U	85 U
Acenaphthene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,4-Dinitrophenol	µg/L	N9	25 U	85 U	NS	25 U	25 U	85 U
4-Nitrophenol	µg/L	NS	25 U	85 U	NS	25 U	25 U	85 U
Dibenzofuran	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
2,4-Dinitrotoluene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Diethylphthalate	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
4-Chlorophenyl-phenylether	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Fluorene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
4-Nitroaniline	µg/L	NS	25 U	85 U	N9	25 U	25 U	85 U
4,6-Dinitro-2-methylphenol	µg/L	NS	25 U	85 U	NS	25 U	25 U	85 U
N-Nitrosodiphenylamine (1)	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
4-Bromophenyl-phenylether	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Hexachlorobenzene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Pentachlorophenol	µg/L	NS	25 U	85 U	NS	25 U	25 U	85 U
Phenanthrene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Anthracene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Carbazole	µg/L	NS	10 U	NS	NS	10 U	10 U	NS
Di-n-butylphthalate	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Fluoranthene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Pyrene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Bis(4-bromophenyl)phthalate	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
3,3'-Dichlorobenzidine	µg/L	NS	10 U	22 U	NS	10 U	10 U	22 U
Benzo(a)anthracene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Chrysene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
bis(2-Ethylhexyl)phthalate	µg/L	NS	10 U	11 U	N9	46 U	10 U	11 U
Di-n-octylphthalate	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Benzo(b)fluoranthene	µg/L	N9	10 U	11 U	NS	10 U	10 U	11 U
Benzo(k)fluoranthene	µg/L	NS	10 U	11 U	N9	10 U	10 U	11 U
Benzo(a)pyrene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Indeno(1,2,3-cd)pyrene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Dibenz(a,h)anthracene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U
Benzo(g,h,i)perylene	µg/L	NS	10 U	11 U	NS	10 U	10 U	11 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER PT-23 01/14/92 182511	PHASE II WATER PT23 06/24/93 187344	PHASE I WATER PT-24 01/14/92 182607	PHASE I WATER PT-24 01/14/92 182612	PHASE II WATER PT24 07/10/93 188729	PHASE II WATER PT24RE 07/10/93 188729	PHASE I WATER PT-25 01/15/92 182576
COMPOUND UNITS							
<b>PESTICIDES/PCBS</b>							
alpha-BHC	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
beta-BHC	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
delta-BHC	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
gamma-BHC (Lindane)	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
Heptachlor	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
Aldrin	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
Heptachlor epoxide	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
Endosulfan I	µg/L NS	0.056 U	0.057 U	NS	0.06 U	NS	0.054 U
Dieldrin	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
4,4'-DDE	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
Endrin	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
Endosulfan II	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
4,4'-DDD	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
Endosulfan sulfate	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
4,4'-DDT	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
Methoxychlor	µg/L NS	0.56 U	0.57 U	NS	0.5 U	NS	0.54 U
Endrin ketone	µg/L NS	0.11 U	0.11 U	NS	0.1 U	NS	0.11 U
Endrin aldehyde	µg/L NS	0.11 U	NS	NS	0.1 U	NS	NS
alpha-Chlordane	µg/L NS	0.056 U	0.57 U	NS	0.06 U	NS	0.54 U
gamma-Chlordane	µg/L NS	0.056 U	0.57 U	NS	0.06 U	NS	0.54 U
Toxaphene	µg/L NS	5.6 U	1.1 U	NS	5 U	NS	1.1 U
Aroclor-1016	µg/L NS	1.1 U	0.57 U	NS	1 U	NS	0.54 U
Aroclor-1221	µg/L NS	2.2 U	0.57 U	NS	2 U	NS	0.54 U
Aroclor-1232	µg/L NS	1.1 U	0.57 U	NS	1 U	NS	0.54 U
Aroclor-1242	µg/L NS	1.1 U	0.57 U	NS	1 U	NS	0.54 U
Aroclor-1248	µg/L NS	1.1 U	0.57 U	NS	1 U	NS	0.54 U
Aroclor-1254	µg/L NS	1.1 U	1.1 U	NS	1 U	NS	1.1 U
Aroclor-1260	µg/L NS	1.1 U	1.1 U	NS	1 U	NS	1.1 U
<b>HERBICIDES</b>							
2,4-D	µg/L NS	1 U	1 U	NS	1 U	NS	1 U
2,4-DB	µg/L NS	1 U	1 U	NS	1 U	NS	1 U
2,4,5-T	µg/L NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
2,4,5-TP (Silvex)	µg/L NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
Dialapron	µg/L NS	2.3 U	2.4 U	NS	2.3 U	NS	2.4 U
Dicamba	µg/L NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
Dichloroprop	µg/L NS	1 U	1 U	NS	1 U	NS	1 U
Dinoseb	µg/L NS	0.5 U	0.5 U	NS	0.5 U	NS	0.5 U
MCPA	µg/L NS	100 U	100 U	NS	100 U	NS	100 U
MCPP	µg/L NS	100 U	100 U	NS	100 U	NS	100 U
<b>METALS</b>							
Aluminum	µg/L 24.4 U	208	18800	24.4 U	150 J	NS	24000
Antimony	µg/L 53 U	49.8 UJ	53.1 U	53 U	49.7 UJ	NS	52.9 U
Arsenic	µg/L 3.5 U	1.4 UJ	3.5 U	3.5 U	1.4 UJ	NS	3.5 U
Barium	µg/L 34 R	46.9 J	132 J	46.7 R	46.4 J	NS	135 J
Beryllium	µg/L 1.4 R	0.9 U	2.7 R	1.3 R	0.89 U	NS	3 R
Cadmium	µg/L 3 U	2.8 U	3 U	3 U	2.8 U	NS	3.2 J
Calcium	µg/L 85200	118000	138000	108000	117000	NS	75300
Chromium	µg/L 6.2 U	2.7 UJ	27.1	6.2 U	2.7 UJ	NS	32.2
Cobalt	µg/L 20.4 U	6.8 U	20.4 U	20.4 U	6.8 U	NS	20.3 U
Copper	µg/L 10.1 U	4.7 U	11.1 J	10.1 U	4.7 U	NS	22.5 J
Iron	µg/L 7 U	253	26000	7 U	161	NS	35000
Lead	µg/L 1.2 U	0.79 U	9	1.2 U	0.59 U	NS	5.6
Magnesium	µg/L 9510	13000	18100	12200	13200	NS	16800
Manganese	µg/L 4.8 U	39.2	423	4.8 U	36.4	NS	595
Mercury	µg/L 0.08 R	0.09 UJ	0.12 R	0.1 R	0.09 UJ	NS	0.11 R
Nickel	µg/L 14.7 U	7.5 UJ	25.1 J	14.7 U	7.5 UJ	NS	40.6
Potassium	µg/L 904 B	1440 J	4530 J	500 J	617 J	NS	4620 J
Selenium	µg/L 1 U	0.99 UJ	1.3 U	1.7 J	1.8 UJ	NS	1.3 U
Silver	µg/L 3.4 U	5.5 U	3.4 U	4.1 R	5.5 U	NS	3.4 U
Sodium	µg/L 4840 J	4820 J	14890	13900	15400	NS	15300
Thallium	µg/L 3.2 U	2.8 U	3.2 U	3.2 U	2.6 U	NS	3.2 U
Vanadium	µg/L 8.4 U	8.8 UJ	25.5 J	8.4 U	8.8 UJ	NS	31.4 J
Zinc	µg/L 14.7 J	11.6 R	92.9 R	8.4 U	6.7 R	NS	119
Cyanide	µg/L NS	10 UJ	10 U	NS	3 UJ	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER PT-26 DATE 01/15/92 ES ID PT-26Filtered LAB ID 152594	PHASE II WATER PT-26 DATE 06/30/93 ES ID PT-26 LAB ID 157936	PHASE I WATER PT-26 DATE 01/17/92 ES ID PT-26 LAB ID 152708	PHASE I WATER PT-26 DATE 01/17/92 ES ID PT-26Filtered LAB ID 152714	PHASE II WATER PT26 DATE 07/03/93 ES ID PT26 LAB ID 158262	PHASE I WATER MW-27 DATE 01/15/92 ES ID MW-27 LAB ID 152641	PHASE I WATER MW-27 DATE 01/15/92 ES ID MW-27 LAB ID 152670
COMPOUND	UNITS						
Chloromethane	µg/L	NS	NS	10 U	NS	NS	10 U
Bromomethane	µg/L	NS	NS	10 U	NS	NS	10 U
Vinyl Chloride	µg/L	NS	NS	10 U	NS	NS	10 U
Chloroethane	µg/L	NS	NS	10 U	NS	NS	10 U
Methylene Chloride	µg/L	NS	NS	5 U	NS	NS	5 U
Acetone	µg/L	NS	NS	10 U	NS	NS	10 U
Carbon Disulfide	µg/L	NS	NS	5 U	NS	NS	5 U
1,1-Dichloroethene	µg/L	NS	NS	5 U	NS	NS	5 U
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U
1,2-Dichloroethene (total)	µg/L	NS	NS	5 U	NS	NS	5 U
Chloroform	µg/L	NS	NS	5 U	NS	NS	5 U
1,2-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U
2-Butanone	µg/L	NS	NS	10 U	NS	NS	10 U
1,1,1-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U
Carbon Tetrachloride	µg/L	NS	NS	5 U	NS	NS	5 U
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	10 U
Bromodichloromethane	µg/L	NS	NS	5 U	NS	NS	5 U
1,2-Dichloropropane	µg/L	NS	NS	5 U	NS	NS	5 U
cis-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	5 U
Trichloroethene	µg/L	NS	NS	5 U	NS	NS	5 U
Dibromochloromethane	µg/L	NS	NS	5 U	NS	NS	5 U
1,1,2-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U
Benzene	µg/L	NS	NS	5 U	NS	NS	5 U
trans-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	5 U
Bromoform	µg/L	NS	NS	5 U	NS	NS	5 U
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	NS	10 U
2-Hexanone	µg/L	NS	NS	10 U	NS	NS	10 U
Tetrachloroethene	µg/L	NS	NS	5 U	NS	NS	5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	5 U	NS	NS	5 U
Toluene	µg/L	NS	NS	5 U	NS	NS	5 U
Chlorobenzene	µg/L	NS	NS	5 U	NS	NS	5 U
Ethylbenzene	µg/L	NS	NS	5 U	NS	NS	5 U
Styrene	µg/L	NS	NS	5 U	NS	NS	5 U
Xylene (total)	µg/L	NS	NS	5 U	NS	NS	5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE I WATER PT-26 01/15/92 PT-26Filt red 162694	PHASE II WATER PT-26 06/30/93 PT-26 167936	PHASE I WATER PT-26 01/17/92 152706	PHASE I WATER PT-26 01/17/92 PT-26Filt red 152714	PHASE II WATER PT26 07/03/93 166262	PHASE I WATER MW-27 01/15/92 MW-27 152641	PHASE I WATER MW-27 01/15/92 MW-27 162670	
								UNITS
VOC's (804.5)								
Dichlorodifluoromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Chloromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Vinyl Chloride	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Bromomethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Chloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Trichlorofluoromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1-Dichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Acetone	µg/L	NS	5 U	NS	NS	5 U	NS	NS
Carbon Disulfide	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Methylene Chloride	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
trans-1,2-Dichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1-Dichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
2,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
cis-1,2-Dichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
2-Butanone	µg/L	NS	5 U	NS	NS	5 U	NS	NS
Bromochloromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Chloroform	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1,1-Trichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Carbon Tetrachloride	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1-Dichloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Benzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2-Dichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Trichloroethene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Dibromomethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Bromodichloromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
cis-1,2-Dichloropropene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	5 U	NS	NS	5 U	NS	NS
Toluene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1,2-Trichloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Tetrachloroethene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,3-Dichloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
2-Hexanone	µg/L	NS	5 U	NS	NS	5 U	NS	NS
Dibromochloromethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2-Dibromoethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Chlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Ethylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Styrene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Bromoform	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Isopropylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Bromobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2,3-Trichloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
n-Propylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
2-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
4-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
tert-Butylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
sec-Butylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,3-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,4-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
p-Isopropyltoluene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
n-Butylbenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Hexachlorobutadiene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Naphthalene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS
Xylene (total)	µg/L	NS	0.5 U	NS	NS	0.5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER PT-25 01/18/92 PT-25Filtred 182694	PHASE II WATER PT-25 06/30/93 PT-25 187936	PHASE I WATER PT-26 01/17/92 PT-26 182706	PHASE I WATER PT-26 01/17/92 PT-26Filtred 182714	PHASE II WATER PT26 07/03/93 188262	PHASE I WATER MW-27 01/18/92 MW-27 182641	PHASE I WATER MW-27 01/18/92 MW-27 182670
COMPOUND							
SEMIVOLATILES							
Phenol	µg/L NS	10	11 U	NS	10 U	NS	12 U
bis(2-Chloroethyl) ether	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2-Chlorophenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
1,3-Dichlorobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
1,4-Dichlorobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzyl Alcohol	µg/L NS	NS	11 U	NS	NS	NS	12 U
1,2-Dichlorobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2-Methylphenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
bis(2-Chloroisopropyl) ether	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Methylphenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
N-Nitrosodimethylpropylamine	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Hexachloroethane	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Nitrobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Isophorone	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2-Nitrophenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4-Dimethylphenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzic acid	µg/L NS	NS	86 U	NS	NS	NS	61 U
bis(2-Chloroethoxy) methane	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4-Dichlorophenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
1,2,4-Trichlorobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Naphthalene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Chloroaniline	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Hexachlorobutadiene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Chloro-3-methylphenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2-Methylnaphthalene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Hexachlorocyclopentadiene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4,6-Trichlorophenol	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4,6-Trichlorophenol	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
2-Chloronaphthalene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2-Nitroaniline	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
Dimethylphthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Acenaphthylene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,6-Dinitrotoluene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
3-Nitroaniline	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
Acenaphthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4-Dinitrophenol	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
4-Nitrophenol	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
Dibenzofuran	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
2,4-Dinitrotoluene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Diethylphthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Chlorophenyl-phenylether	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Fluorene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Nitroaniline	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
4,6-Dinitro-2-methylphenol	µg/L NS	26 U	86 U	NS	26 U	NS	61 U
N-Nitrosodiphenylamine (1)	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
4-Bromophenyl-phenylether	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Hexachlorobenzene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Pentachlorophenol	µg/L NS	25 U	86 U	NS	25 U	NS	61 U
Phenanthrene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Anthracene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Carbazole	µg/L NS	10 U	NS	NS	10 U	NS	NS
Di-n-butylphthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Fluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Pyrene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Butylbenzylphthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
3,3'-Dichlorobenzidine	µg/L NS	10 U	22 U	NS	10 U	NS	26 U
Benzofluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Chrysene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
bis(2-Ethylhexyl)phthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Di-n-octylphthalate	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzofluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzofluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzofluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Indeno(1,2,3-cd)pyrene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Dibenz(a,h)anthracene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U
Benzofluoranthene	µg/L NS	10 U	11 U	NS	10 U	NS	12 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I
		WATER PT-26 01/15/82 PT-26 Filtered 152594	WATER PT-26 06/30/83 PT-26 167936	WATER PT-26 01/17/82 152706	WATER PT-26 01/17/82 PT-26 Filtered 152714	WATER PT-26 07/03/83 166262	WATER MW-27 01/15/82 152641	WATER MW-27 01/15/82 152570
<b>PESTICIDES/PCBS</b>								
beta-BHC	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
beta-BHC	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
delta-BHC	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
gamma-BHC (Lindane)	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
Heptachlor	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
Aldrin	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
Heptachlor epoxide	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
Endosulfan I	µg/L	NS	0.05 U	0.059 U	NS	0.05 U	NS	0.055 U
Dieldrin	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
4,4'-DDE	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
Endrin	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
Endosulfan II	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
4,4'-DDD	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
Endosulfan sulfate	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
4,4'-DDT	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
Methoxychlor	µg/L	NS	0.5 U	0.59 U	NS	0.5 U	NS	0.55 U
Endrin ketone	µg/L	NS	0.1 U	0.12 U	NS	0.1 U	NS	0.11 U
Endrin aldehyde	µg/L	NS	0.1 U	NS	NS	0.1 U	NS	NS
alpha-Chlordane	µg/L	NS	0.05 U	0.59 U	NS	0.05 U	NS	0.55 U
gamma-Chlordane	µg/L	NS	0.05 U	0.59 U	NS	0.05 U	NS	0.55 U
Toxaphene	µg/L	NS	5 U	1.2 U	NS	5 U	NS	1.1 U
Aroclor-1016	µg/L	NS	1 U	0.59 U	NS	1 U	NS	0.55 U
Aroclor-1221	µg/L	NS	2 U	0.59 U	NS	2 U	NS	0.55 U
Aroclor-1232	µg/L	NS	1 U	0.59 U	NS	1 U	NS	0.55 U
Aroclor-1242	µg/L	NS	1 U	0.59 U	NS	1 U	NS	0.55 U
Aroclor-1248	µg/L	NS	1 U	0.59 U	NS	1 U	NS	0.55 U
Aroclor-1254	µg/L	NS	1 U	1.2 U	NS	1 U	NS	1.1 U
Aroclor-1260	µg/L	NS	1 U	1.2 U	NS	1 U	NS	1.1 U
<b>HERBICIDES</b>								
2,4-D	µg/L	NS	1 U	1.1 U	NS	1 U	NS	1 U
2,4-DB	µg/L	NS	1 U	1.1 U	NS	1 U	NS	1 U
2,4,5-T	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
2,4,5-TP (Silvex)	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
Dasapron	µg/L	NS	2.3 U	2.4 U	NS	2.3 U	NS	2.4 U
Dicamba	µg/L	NS	0.1 U	0.1 U	NS	0.1 U	NS	0.1 U
Dichloroprop	µg/L	NS	1 U	1.1 U	NS	1 U	NS	1 U
Dinoseb	µg/L	NS	0.5 U	0.5 U	NS	0.5 U	NS	0.5 U
MCPA	µg/L	NS	100 U	110 U	NS	100 U	NS	100 U
MCPP	µg/L	NS	100 U	110 U	NS	100 U	NS	100 U
<b>METALS</b>								
Aluminum	µg/L	24.5 U	316	306000	24.5 U	43600	6590	NS
Antimony	µg/L	63.3 U	49.7 UJ	63.8 R	63.1 U	56.9 J	53.4 U	NS
Arsenic	µg/L	3.5 U	1.4 UJ	3.5 U	3.5 U	2.4 J	3.5 U	NS
Barium	µg/L	50.9 R	40.9 J	1800	97.8 R	378	50.9 J	NS
Beryllium	µg/L	1.1 U	0.88 U	12.2 R	1.1 U	2.5 J	2.4 R	NS
Cadmium	µg/L	3 U	2.8 U	64.6 J	3 U	2.5 U	3 U	NS
Calcium	µg/L	72100	101000	1790000	83700	385000	102000	NS
Chromium	µg/L	6.2 U	2.7 UJ	416	6.2 U	69.7 J	10.4	NS
Cobalt	µg/L	20.4 U	5.5 U	198	20.4 U	33.4 J	20.5 U	NS
Copper	µg/L	10.2 U	4.7 U	412	10.1 U	62.2	10.2 U	NS
Iron	µg/L	7 U	360	610000	7 U	78400	10500	NS
Lead	µg/L	1.1 U	0.8 U	103	1.5 U	17.5	3.2	NS
Magnesium	µg/L	8220	10700	267000 J	37600	74600	13800	NS
Manganese	µg/L	4.8 U	26	11400	4.8 U	1790	355	NS
Mercury	µg/L	0.03 U	0.09 UJ	0.05 R	0.03 U	0.09 UJ	0.11 R	NS
Nickel	µg/L	14.8 U	7.5 UJ	622	14.7 U	106 J	14.8 U	NS
Potassium	µg/L	289 U	1210 J	23200	1080 J	6540	4160 J	NS
Selenium	µg/L	1 U	1 UJ	8 U J	1.4 J	1.5 UJ	1.3 U	NS
Silver	µg/L	3.4 U	5.5 U	8.8 R	3.4 U	5.5 U	3.4 U	NS
Sodium	µg/L	15000	21800	40600	36800	31600	26300	NS
Thallium	µg/L	3.2 U	2.6 U	32 U	3.2 U	2.8 U	3.2 U	NS
Vanadium	µg/L	9.5 U	6.9 UJ	355	9.4 U	64.7 J	10 J	NS
Zinc	µg/L	19 R	8 J	1750 J	18 R	277	35.9 R	NS
Cyanide	µg/L	NS	10 UJ	10 U J	NS	10 UJ	10 U	NS



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-27 01/15/92 MW-27 Filtered 152965	PHASE II WATER MW27 07/01/93 MW27 188122	PHASE I WATER MW-28 01/15/92 MW-28 152571	PHASE I WATER MW-28 01/15/92 MW-28RE(4) 152571	PHASE I WATER MW-28 01/15/92 MW-28 Filtered 152590	PHASE I WATER MW-28 01/15/92 PT-2(1) 152573	PHASE I WATER MW-28 01/15/92 PT-2(1) Filtered 152582	
COMPOUND	UNIT							
Chloromethane	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Bromomethane	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Vinyl Chloride	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Chloroethane	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Methylene Chloride	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Acetone	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Carbon Disulfide	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethene (total)	µg/L	NS	NS	50	NS	NS	52	NS
Chloroform	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
2-Butanone	µg/L	NS	NS	10 U	NS	NS	10 U	NS
1,1,1-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Carbon Tetrachloride	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Vinyl Acetate	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Bromodichloromethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloropropane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Trichloroethene	µg/L	NS	NS	32	NS	NS	33	NS
Dibromochloromethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,1,2-Trichloroethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Benzene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Bromoform	µg/L	NS	NS	5 U	NS	NS	5 U	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	10 U	NS	NS	10 U	NS
2-Hexanone	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Tetrachloroethene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Toluene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Chlorobenzene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Ethylbenzene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Styrene	µg/L	NS	NS	5 U	NS	NS	5 U	NS
Xylene (total)	µg/L	NS	NS	5 U	NS	NS	5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-27 01/15/92 MW-27Filered 152666	PHASE II WATER MW27 07/01/93 MW27 168122	PHASE I WATER MW-26 01/15/92 MW-26 182571	PHASE I WATER MW-26 01/15/92 MW-26RE(4) 182571	PHASE I WATER MW-26 01/15/92 MW-26Filered 182590	PHASE I WATER MW-26 01/15/92 PT-2(1) 182573	PHASE I WATER MW-26 01/15/92 PT-2(1)Filered 182592
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
VOC's (824.2)							
Dichlorodifluoromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Chloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Vinyl Chloride	µg/L	NS	0.5 U	NS	NS	NS	NS
Bromomethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Chloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Trichlorofluoromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS
Acetone	µg/L	NS	5 U	NS	NS	NS	NS
Carbon Disulfide	µg/L	NS	0.5 U	NS	NS	NS	NS
Methylene Chloride	µg/L	NS	0.5 U	NS	NS	NS	NS
trans-1,2-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1-Dichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
2,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS
cis-1,2-Dichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS
2-Butanone	µg/L	NS	5 U	NS	NS	NS	NS
Bromochloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Chloroform	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Carbon Tetrachloride	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS
Benzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2-Dichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Trichloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS
Dibromomethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Bromodichloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	NS	5 U	NS	NS	NS	NS
Toluene	µg/L	NS	0.5 U	NS	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Tetrachloroethene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,3-Dichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS
2-Hexanone	µg/L	NS	5 U	NS	NS	NS	NS
Dibromochloromethane	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2-Dibromoethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Chlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
Ethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
Styrene	µg/L	NS	0.5 U	NS	NS	NS	NS
Bromoform	µg/L	NS	0.5 U	NS	NS	NS	NS
Isopropylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
Bromobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS
n-Propylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
2-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	NS	NS
4-Chlorotoluene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,3,5-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
tert-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2,4-Trimethylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
sec-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
p-Isopropyltoluene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
n-Butylbenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	0.5 U	NS	NS	NS	NS
Naphthalene	µg/L	NS	0.5 U	NS	NS	NS	NS
1,2,3-Trichlorobenzene	µg/L	NS	0.5 U	NS	NS	NS	NS
Xylene (total)	µg/L	NS	0.5 U	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-27 01/18/92 MW-27Filtered 152966	PHASE II WATER MW27 07/01/93 168122	PHASE I WATER MW-26 01/15/92 MW-26 152671	PHASE I WATER MW-26 01/15/92 MW-26RE(4) 152671	PHASE I WATER MW-26 01/15/92 MW-26Filtered 152690	PHASE I WATER MW-26 01/15/92 PT-2(1) 152673	PHASE I WATER MW-26 01/15/92 PT-2(1)Filtered 152692	
COMPOUND UNITS								
<b>SEMVOLATILES</b>								
Phenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
bis(2-Chloroethyl) ether	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2-Chlorophenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
1,3-Dichlorobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
1,4-Dichlorobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzyl Alcohol	µg/L	NS	NS	11 U	NS	NS	11 U	NS
1,2-Dichlorobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2-Methylphenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
bis(2-Chloroisopropyl) ether	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Methylphenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
N-Nitroso-dl-n-propylamine	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Hexachloroethane	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Nitrobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Isophorone	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2-Nitrophenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4-Dimethylphenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzic acid	µg/L	NS	NS	64 U	NS	NS	66 U	NS
bis(2-Chloroethyl) methane	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4-Dichlorophenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
1,2,4-Trichlorobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Naphthalene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Chloroaniline	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Hexachlorobutadiene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Chloro-3-methylphenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2-Methylnaphthalene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Hexachlorocyclopentadiene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4,6-Trichlorophenol	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4,5-Trichlorophenol	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
2-Chloronaphthalene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2-Nitroaniline	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
Dimethylphthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Acenaphthylene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,6-Dinitrotoluene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
3-Nitroaniline	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
Acenaphthene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4-Dinitrophenol	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
4-Nitrophenol	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
Dibenzofuran	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
2,4-Dinitrotoluene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Diethylphthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Chlorophenyl-phenylether	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Fluorine	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Nitroaniline	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
4,6-Dinitro-2-methylphenol	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
N-Nitrosodiphenylamine (1)	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
4-Bromophenyl-phenylether	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Hexachlorobenzene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Perchlorophenol	µg/L	NS	27 U	64 U	NS	NS	66 U	NS
Phenanthrene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Anthracene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Carbazole	µg/L	NS	11 U	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Fluoranthene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Pyrene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Butylbenzylphthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
3,3'-Dichlorobenzidine	µg/L	NS	11 U	22 U	NS	NS	22 U	NS
Benzo(a)anthracene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Chrysene	µg/L	NS	27 U	11 U	NS	NS	11 U	NS
bis(2-Ethylhexyl)phthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Di-n-octylphthalate	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzo(b)fluoranthene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzo(k)fluoranthene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzo(i)pyrene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Indeno(1,2,3-cd)pyrene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Dibenz(a,h)anthracene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS
Benzo(g,h,i)perylene	µg/L	NS	11 U	11 U	NS	NS	11 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-27 01/15/92 MW-27F1I1Red 152056	PHASE II WATER MW27 07/01/93 MW27 180122	PHASE I WATER MW-28 01/15/92 MW-28 152571	PHASE I WATER MW-28 01/15/92 MW-28RE(4) 152571	PHASE I WATER MW-28 01/15/92 MW-28F1I1Red 152590	PHASE I WATER MW-28 01/15/92 PT-2(1) 152573	PHASE I WATER MW-28 01/15/92 PT-2(1)F1I1Red 152592	
COMPOUND UNITS								
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
beta-BHC	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
delta-BHC	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
gamma-BHC (Lindane)	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
Heptachlor	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
Aldrin	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
Heptachlor epoxide	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
Endosulfan I	µg/L	NS	0.06 U	0.065 U	0.061 U	NS	0.054 U	NS
Dieldrin	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
4,4'-DDE	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
Endrin	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
Endosulfan II	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
4,4'-DDD	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
Endosulfan sulfate	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
4,4'-DDT	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
Methoxychlor	µg/L	NS	0.5 U	0.55 U	0.51 U	NS	0.54 U	NS
Endrin ketone	µg/L	NS	0.1 U	0.11 U	0.1 U	NS	0.11 U	NS
Endrin aldehyde	µg/L	NS	0.1 U	NS	NS	NS	NS	NS
alpha-Chlordane	µg/L	NS	0.06 U	0.55 U	0.51 U	NS	0.54 U	NS
gamma-Chlordane	µg/L	NS	0.06 U	0.55 U	0.51 U	NS	0.54 U	NS
Toxaphene	µg/L	NS	5 U	1.1 U	1 U	NS	1.1 U	NS
Aroclor-1016	µg/L	NS	1 U	0.55 U	0.51 U	NS	0.54 U	NS
Aroclor-1221	µg/L	NS	2 U	0.55 U	0.51 U	NS	0.54 U	NS
Aroclor-1232	µg/L	NS	1 U	0.55 U	0.51 U	NS	0.54 U	NS
Aroclor-1242	µg/L	NS	1 U	0.55 U	0.51 U	NS	0.54 U	NS
Aroclor-1246	µg/L	NS	1 U	0.55 U	0.51 U	NS	0.54 U	NS
Aroclor-1254	µg/L	NS	1 U	1.1 U	1 U	NS	1.1 U	NS
Aroclor-1260	µg/L	NS	1 U	3.8 R	1 U	NS	1.1 U	NS
<b>HERBICIDES</b>								
2,4-D	µg/L	NS	1 U	1 U	NS	NS	1.1 U	NS
2,4-DB	µg/L	NS	1 U	1 U	NS	NS	1.1 U	NS
2,4,6-T	µg/L	NS	0.1 U	0.1 U	NS	NS	0.1 U	NS
2,4,6-TP (Silvex)	µg/L	NS	0.1 U	0.1 U	NS	NS	0.1 U	NS
Dalapon	µg/L	NS	2.3 U	2.3 U	NS	NS	2.5 U	NS
Dicamba	µg/L	NS	0.1 U	0.1 U	NS	NS	0.1 U	NS
Dichloroprop	µg/L	NS	1 U	1 U	NS	NS	1.1 U	NS
Dinoseb	µg/L	NS	0.5 U	0.5 U	NS	NS	0.5 U	NS
MCPA	µg/L	NS	100 U	100 U	NS	NS	110 U	NS
MCPP	µg/L	NS	100 U	100 U	NS	NS	110 U	NS
<b>METALS</b>								
Aluminum	µg/L	24.4 U	3670	41100 J	NS	24.5 U	27000 J	24.5 U
Antimony	µg/L	82.9 U	49.6 UJ	54.3 R	NS	53.3 U	53 U	53.3 U
Arsenic	µg/L	3.5 U	1.4 UJ	4.4 J	NS	3.5 U	3.5 U	3.5 U
Barium	µg/L	89.9 R	105 J	200	NS	41.1 R	154 J	38.4 R
Beryllium	µg/L	1.1 U	0.89 U	3.7 R	NS	1.4 R	3.2 R	1.4 R
Cadmium	µg/L	3 U	2.8 U	8.1	NS	3 U	8.2	3 U
Calcium	µg/L	85300	137000	170000 J	NS	111000	152000 J	111000
Chromium	µg/L	8.1 U	6.9 J	83.1 J	NS	8.2 U	34.6 J	8.2 U
Cobalt	µg/L	20.3 U	8.5 U	20.5 U	NS	20.5 U	20.3 U	20.5 U
Copper	µg/L	10.1 U	4.7 U	33.9	NS	10.2 U	27.6	10.2 U
Iron	µg/L	6.9 U	6530	60300 J	NS	7 U	46500 J	7 U
Lead	µg/L	1.2 U	0.85 J	10.7	NS	1.2 U	8.9	1.2 U
Magnesium	µg/L	10900	19000	26900	NS	123000	23400	11800
Manganese	µg/L	88	567	1610 J	NS	4.8 U	1100 J	4.8 U
Mercury	µg/L	0.03 U	0.09 UJ	0.11 R	NS	0.11 R	0.11 R	0.1
Nickel	µg/L	14.7 U	7.4 UJ	72.5	NS	14.8 U	82.9	14.8 U
Potassium	µg/L	2400 J	5190	6910 J	NS	347 J	4020 J	289 U
Selenium	µg/L	1 U	1.5 UJ	1.3 U	NS	1 U	1.3 U	1 U
Silver	µg/L	3.4 U	5.5 U	3.4 U	NS	3.4 U	3.4 U	3.4 U
Sodium	µg/L	27200	17800	9460	NS	8560	9250	8570
Thallium	µg/L	3.2 U	2.8 U	3.2 U	NS	3.2 U	3.2 U	3.2 U
Vanadium	µg/L	9.4 U	6 J	46.7 J	NS	9.5 U	32.7 J	9.5 U
Zinc	µg/L	22.1 R	37.7	185 J	NS	8.5 U	124 J	8.5 U
Cyanide	µg/L	NS	1.2 R	10 U	NS	NS	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW28 07/10/93 MW28 186719	PHASE I WATER MW-29 01/15/92 MW-29 152572	PHASE I WATER MW-29 01/15/92 MW-29 Filtered 152591	PHASE II WATER MW29 07/08/93 MW29 186587	PHASE I WATER MW-30 01/15/92 MW-30 152642	PHASE I WATER MW-30 01/15/92 MW-30 Filtered 152667	PHASE II WATER MW30 07/01/93 MW30 188123	
COMPOUND UNITS								
Chloromethane	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Bromomethane	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Vinyl Chloride	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Chloroethane	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Methylene Chloride	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Acetone	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Carbon Disulfide	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,1-Dichloroethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,1-Dichloroethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,2-Dichloroethane (total)	µg/L	53	71	NS	97	5 U	NS	NS
Chloroform	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,2-Dichloroethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
2-Butanone	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
1,1,1-Trichloroethane	µg/L	10 U	5 U	NS	2 J	5 U	NS	NS
Carbon Tetrachloride	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Vinyl Acetate	µg/L	NS	10 U	NS	NS	10 U	NS	NS
Bromodichloromethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,2-Dichloropropane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
cis-1,3-Dichloropropene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Trichloroethene	µg/L	38	1 J	NS	2 J	5 U	NS	NS
Dibromochloromethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,1,2-Trichloroethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Benzene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
trans-1,3-Dichloropropene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Bromoform	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
4-Methyl-2-Pentanone	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
2-Hexanone	µg/L	10 U	10 U	NS	10 U	10 U	NS	NS
Tetrachloroethene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Toluene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Chlorobenzene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Ethylbenzene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Styrene	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS
Xylene (total)	µg/L	10 U	5 U	NS	10 U	5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW28 07/10/93 188718	PHASE I WATER MW-29 01/15/92 MW-29 182872	PHASE I WATER MW-29 01/15/92 MW-29 Filtered 182591	PHASE II WATER MW29 07/08/93 188687	PHASE I WATER MW-30 01/14/92 MW-30 182642	PHASE I WATER MW-30 01/18/92 MW-30 Filtered 182687	PHASE II WATER MW30 07/01/93 MW30 188123
COMPOUND UNITS							
VOC's (824.2)							
Dichlorodifluoromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Chloromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Vinyl Chloride	µg/L	NS	NS	NS	NS	NS	0.5 U
Bromomethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Chloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Trichlorofluoromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloroethene	µg/L	NS	NS	NS	NS	NS	0.5 U
Acetone	µg/L	NS	NS	NS	NS	NS	5 U
Carbon Disulfide	µg/L	NS	NS	NS	NS	NS	0.5 U
Methylene Chloride	µg/L	NS	NS	NS	NS	NS	0.5 U
trans-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
2,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
cis-1,2-Dichloroethene	µg/L	NS	NS	NS	NS	NS	0.5 U
2-Butanone	µg/L	NS	NS	NS	NS	NS	5 U
Bromochloromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Chloroform	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1,1-Trichloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Carbon Tetrachloride	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1-Dichloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
Benzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2-Dichloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Trichloroethene	µg/L	NS	NS	NS	NS	NS	1
1,2-Dichloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
Dibromomethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Bromodichloromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
cis-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	0.5 U
4-Methyl-2-Pentanone	µg/L	NS	NS	NS	NS	NS	5 U
Toluene	µg/L	NS	NS	NS	NS	NS	0.5 U
trans-1,3-Dichloropropene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1,2-Trichloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Tetrachloroethene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,3-Dichloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
2-Hexanone	µg/L	NS	NS	NS	NS	NS	5 U
Dibromochloromethane	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2-Dibromoethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Chlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
Ethylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
Styrene	µg/L	NS	NS	NS	NS	NS	0.5 U
Bromoform	µg/L	NS	NS	NS	NS	NS	0.5 U
Isopropylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
Bromobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2,3-Trichloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
n-Propylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
2-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	0.5 U
4-Chlorotoluene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
tert-Butylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2,4-Trimethylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
sec-Butylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,3-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,4-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
p-Isopropyltoluene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2-Dichlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
n-Butylbenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
Hexachlorobutadiene	µg/L	NS	NS	NS	NS	NS	0.5 U
Naphthalene	µg/L	NS	NS	NS	NS	NS	0.5 U
1,2,3-Trichlorobenzene	µg/L	NS	NS	NS	NS	NS	0.5 U
Xylene (total)	µg/L	NS	NS	NS	NS	NS	0.5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX DATE	PHASE II WATER MW#28 07/10/93 MW#29 185719	PHASE I WATER MW-28 01/18/92 MW-29 182672	PHASE I WATER MW-28 01/18/92 MW-29 182691	PHASE II WATER MW#28 07/08/93 MW#29 188867	PHASE I WATER MW-30 01/18/92 MW-30 182642	PHASE I WATER MW-30 01/18/92 MW-30 182687	PHASE II WATER MW#30 07/01/93 MW#30 189123
	ES ID	LAB ID	UNITS					
SEMIVOLATILES								
Acetone	J9L		10 U	NS	10 U	11 U	NS	10 U
1,1-Dichloroethane	J9L		11 U	NS	10 U	11 U	NS	10 U
2-Chloroethanol	J9L		11 U	NS	10 U	11 U	NS	10 U
1,3-Dichlorobenzene	J9L		10 U	NS	10 U	11 U	NS	10 U
1,4-Dichlorobenzene	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzyl Alcohol	J9L		NS	NS	NS	11 U	NS	NS
1,2-Dichlorobenzene	J9L		10 U	NS	10 U	11 U	NS	10 U
2-Methylphenol	J9L		10 U	NS	10 U	11 U	NS	10 U
1,2-Dichloroethane	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Methylphenol	J9L		10 U	NS	10 U	11 U	NS	10 U
1,1,1-Trichloroethane	J9L		10 U	NS	10 U	11 U	NS	10 U
Hexachlorocyclopentadiene	J9L		10 U	NS	10 U	11 U	NS	10 U
Hexachlorocyclohexane	J9L		10 U	NS	10 U	11 U	NS	10 U
Nitrobenzene	J9L		10 U	NS	10 U	11 U	NS	10 U
Isophorone	J9L		10 U	NS	10 U	11 U	NS	10 U
8-Nitrophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
2,4-Dimethylphenol	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzoic acid	J9L		NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	J9L		10 U	NS	10 U	11 U	NS	10 U
2,4-Dichlorophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
1,1,1-Trichloroethane	J9L		10 U	NS	10 U	11 U	NS	10 U
Hexachlorocyclopentadiene	J9L		10 U	NS	10 U	11 U	NS	10 U
Hexachlorocyclohexane	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Chlorophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
Hezachlorobutadiene	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Chloro-3-methylphenol	J9L		10 U	NS	10 U	11 U	NS	10 U
3-Methylnaphthalene	J9L		10 U	NS	10 U	11 U	NS	10 U
Hezachlorocyclopentadiene	J9L		10 U	NS	10 U	11 U	NS	10 U
2,4,6-Trichlorophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
1,1,1-Trichloroethane	J9L		10 U	NS	10 U	11 U	NS	10 U
2-Nitrophenol	J9L		NS	NS	NS	NS	NS	NS
2-Nitrophenol	J9L		NS	NS	NS	NS	NS	NS
Dimethylphthalate	J9L		10 U	NS	10 U	11 U	NS	10 U
Acenaphthylene	J9L		10 U	NS	10 U	11 U	NS	10 U
2,6-Dibromobenzene	J9L		10 U	NS	10 U	11 U	NS	10 U
3-Nitroaniline	J9L		10 U	NS	10 U	11 U	NS	10 U
Acenaphthene	J9L		10 U	NS	10 U	11 U	NS	10 U
2,4-Dibromophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
1-Nitrophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
2,4-Dibromophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
Diethylphthalate	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Chlorophenyl-phenylether	J9L		10 U	NS	10 U	11 U	NS	10 U
Fluorene	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Nitroaniline	J9L		10 U	NS	10 U	11 U	NS	10 U
2,6-Dibromo-2-methylphenol	J9L		NS	NS	NS	NS	NS	NS
N-Nitrosodiphenylamine (1)	J9L		10 U	NS	10 U	11 U	NS	10 U
4-Bromophenyl-phenylether	J9L		10 U	NS	10 U	11 U	NS	10 U
1-Nitrophenol	J9L		10 U	NS	10 U	11 U	NS	10 U
Phenanthrene	J9L		10 U	NS	10 U	11 U	NS	10 U
Phenanthrene	J9L		10 U	NS	10 U	11 U	NS	10 U
Anthracene	J9L		10 U	NS	10 U	11 U	NS	10 U
Carbazole	J9L		NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	J9L		10 U	NS	10 U	11 U	NS	10 U
Fluoranthene	J9L		10 U	NS	10 U	11 U	NS	10 U
Pyrene	J9L		10 U	NS	10 U	11 U	NS	10 U
2,3-Dichlorobenzidine	J9L		10 U	NS	10 U	11 U	NS	10 U
1,2-Dichlorobenzidine	J9L		10 U	NS	10 U	11 U	NS	10 U
Chloroantrene	J9L		10 U	NS	10 U	11 U	NS	10 U
1,2-Ethylhexylphthalate	J9L		10 U	NS	10 U	11 U	NS	10 U
Di-n-octylphthalate	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzo(b)fluoranthene	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzo(k)fluoranthene	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzo(a)pyrene	J9L		10 U	NS	10 U	11 U	NS	10 U
Indeno(1,2,3-cd)pyrene	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzo(a)anthracene	J9L		10 U	NS	10 U	11 U	NS	10 U
Benzo(b)anthracene	J9L		10 U	NS	10 U	11 U	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE II WATER MW26 07/10/93 MW26 18871 B	PHASE I WATER MW-29 01/15/92 MW-29 152572	PHASE I WATER MW-29 01/16/92 MW-29 Filtered 152591	PHASE II WATER MW29 07/09/93 MW29 188587	PHASE I WATER MW-30 01/16/92 MW-30 152642	PHASE I WATER MW-30 01/16/92 MW-30 Filtered 152667	PHASE II WATER MW30 07/01/93 MW30 188123	
UNITS								
<b>PESTICIDES/PCBS</b>								
alpha-BHC	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
beta-BHC	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
delta-BHC	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
gamma-BHC (Lindane)	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
Heptachlor	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
Aldrin	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
Heptachlor epoxide	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
Endosulfan I	µg/L	0.06 U	0.066 U	NS	0.06 U	0.061 U	NS	NS
Endrin	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
4,4'-DDE	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
Endrin	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
Endosulfan II	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
4,4'-DDD	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
Endosulfan sulfate	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
4,4'-DDT	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
Methoxychlor	µg/L	0.6 U	0.66 U	NS	0.6 U	0.61 U	NS	NS
Endrin ketone	µg/L	0.1 U	0.11 U	NS	0.1 U	0.1 U	NS	NS
Endrin aldehyde	µg/L	0.1 U	NS	NS	0.1 U	NS	NS	NS
alpha-Chlordane	µg/L	0.06 U	0.66 U	NS	0.06 U	0.61 U	NS	NS
gamma-Chlordane	µg/L	0.06 U	0.66 U	NS	0.06 U	0.61 U	NS	NS
Toxaphene	µg/L	8 U	1.1 U	NS	8 U	1 U	NS	NS
Aroclor-1016	µg/L	1 U	0.66 U	NS	1 U	0.61 U	NS	NS
Aroclor-1221	µg/L	2 U	0.66 U	NS	2 U	0.61 U	NS	NS
Aroclor-1232	µg/L	1 U	0.66 U	NS	1 U	0.61 U	NS	NS
Aroclor-1242	µg/L	1 U	0.66 U	NS	1 U	0.61 U	NS	NS
Aroclor-1246	µg/L	1 U	0.66 U	NS	1 U	0.61 U	NS	NS
Aroclor-1254	µg/L	1 U	1.1 U	NS	1 U	1 U	NS	NS
Aroclor-1260	µg/L	1 U	1.1 U	NS	1 U	1 U	NS	NS
<b>HERBICIDES</b>								
2,4-D	µg/L	1 U	NS	NS	1 U	1 U	NS	NS
2,4-DB	µg/L	1 U	NS	NS	1 U	1 U	NS	NS
2,4,6-T	µg/L	0.1 U	NS	NS	0.1 U	0.1 U	NS	NS
2,4,6-TP (Silvex)	µg/L	0.1 U	NS	NS	0.1 U	0.1 U	NS	NS
Dalapon	µg/L	2.3 U	NS	NS	2.3 U	2.3 U	NS	NS
Dicamba	µg/L	0.1 U	NS	NS	0.1 U	0.1 U	NS	NS
Dichloroprop	µg/L	1 U	NS	NS	1 U	1 U	NS	NS
Dinoseb	µg/L	0.6 U	NS	NS	0.6 U	0.6 U	NS	NS
MCPA	µg/L	100 U	NS	NS	100 U	100 U	NS	NS
MCPP	µg/L	100 U	NS	NS	100 U	100 U	NS	NS
<b>METALS</b>								
Aluminum	µg/L	6960	65700	24.4 U	65600	11200	24.5 U	186 J
Antimony	µg/L	49.6 UJ	63.3 U	63 U	66.2 J	63.3 U	63.2 U	49.6 UJ
Arsenic	µg/L	1.4 UJ	3.8 U	3.8 U	2.4 J	3.5 U	3.8 U	1.4 UJ
Barium	µg/L	78.9 J	418	46.8 R	362	93.3 J	63.1 R	66.5 J
Beryllium	µg/L	0.89 U	5.8 R	1.3 R	3 J	2.4 R	1.1 U	0.89 U
Cadmium	µg/L	2.8 U	17	3 U	2.8 U	3 U	3 U	2.8 U
Calcium	µg/L	121000	246000	124000	234000	106000	102000	121000
Chromium	µg/L	9.6 J	122	6.2 U	63.8 J	13.2	6.2 U	2.9 J
Cobalt	µg/L	6.4 U	63.8	20.4 U	67.8	20.6 U	20.4 U	6.5 U
Copper	µg/L	6.1 J	111	10.1 U	64.5	10.6 J	10.2 U	4.7 U
Iron	µg/L	66300	169000	7 U	92000	16900	7 U	261
Lead	µg/L	2.2 J	36.4	1.2 U	26.8	3.5	1.2 U	0.69 U
Magnesium	µg/L	13900	68400	14700	48800	18900	14700	16300
Manganese	µg/L	271	4110	4.8 U	3270	250	4.8 U	11.8 J
Mercury	µg/L	0.09 UJ	0.14 R	0.09 R	0.09 UJ	0.1 R	0.03 U	0.09 UJ
Nickel	µg/L	8.2 J	182	14.7 U	122 J	16.8 J	14.7 U	7.4 UJ
Potassium	µg/L	2670 J	10800	663 J	9460	3460 J	1120 J	2910 J
Selenium	µg/L	1.6 UJ	13 U	1.4 J	1.8 J	1.3 U	1 U	1.6 UJ
Silver	µg/L	6.4 U	3.4 U	6.8 R	6.8 U	3.4 U	3.4 U	6.5 U
Sodium	µg/L	10100	26200	25000	25600	16400	17800	26900
Thallium	µg/L	2.6 U	3.2 U	3.2 U	2.6 U	3.2 U	3.2 U	2.6 U
Vanadium	µg/L	12.6 J	96.3	9.4 U	79.2 J	18.5 J	9.5 U	6.7 UJ
Zinc	µg/L	26.8 R	603	6.4 U	300	65.4 R	20.1 R	10.2 J
Cyanide	µg/L	1.7 UJ	10 U	NS	1.2 R	10 U	NS	NS



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I	
LOCATION	WATER	WATER	WATER	WATER	WATER	WATER	WATER	
DATE	MW-31	MW-31	MW31	MW-32	MW-32	MW32	MW-33	
EA ID	01/16/92	01/16/92	07/01/93	01/16/92	01/16/92	07/09/93	01/16/92	
LAB ID	MW-31	MW-31 Filtered	MW31	MW-32	MW-32 Filtered	MW32	MW-33	
COMPOUND	152643	152658	188124	152644	152659	188591	152645	
UNITS								
Chloromethane	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Bromomethane	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Vinyl Chloride	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Chloroethane	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Methylene Chloride	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Acetone	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Carbon Disulfide	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,1-Dichloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,1-Dichloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,2-Dichloroethane (total)	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Chloroform	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,2-Dichloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
2-Butanone	µg/L	10 U	NS	NS	10 U	NS	NS	NS
1,1,1-Trichloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Carbon Tetrachloride	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Vinyl Acetate	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Bromodichloromethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,2-Dichloropropane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
cis-1,3-Dichloropropene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Trichloroethene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Dibromochloromethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,1,2-Trichloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Benzene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
trans-1,3-Dichloropropene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Bromoform	µg/L	5 U	NS	NS	5 U	NS	NS	NS
4-Methyl-2-Pentanone	µg/L	10 U	NS	NS	10 U	NS	NS	NS
2-Hexanone	µg/L	10 U	NS	NS	10 U	NS	NS	NS
Tetrachloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Toluene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Chlorobenzene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Ethylbenzene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Styrene	µg/L	5 U	NS	NS	5 U	NS	NS	NS
Xylene (total)	µg/L	5 U	NS	NS	5 U	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I
		WATER MW-31 01/16/92 MW-31 152643	WATER MW-31 01/16/92 MW-31 Filtered 152669	WATER MW31 07/01/93 MW31 166124	WATER MW-32 01/16/92 MW-32 152644	WATER MW-32 01/16/92 MW-32 Filtered 152669	WATER MW32 07/06/93 MW32 166591	WATER MW-33 01/16/92 MW-33 152646
VOC's (B24.2)								
Dichlorodifluoromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Chloromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Vinyl Chloride	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Bromomethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Chloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Trichlorofluoromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Acetone	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Carbon Disulfide	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Methylene Chloride	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
trans-1,2-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
2,2-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
cis-1,2-Dichloroethene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
2-Butanone	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Bromochloromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Chloroform	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1,1-Trichloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Carbon Tetrachloride	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Benzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Trichloroethene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Dibromomethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Bromodichloromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
cis-1,3-Dichloropropene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
4-Methyl-2-Pentanone	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Toluene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
trans-1,3-Dichloropropene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1,2-Trichloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Tetrachloroethene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,3-Dichloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
2-Hexanone	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Dibromochloromethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dibromoethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Chlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Ethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Styrene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Bromoform	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Isopropylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Bromobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2,3-Trichloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
n-Propylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
2-Chlorotoluene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
4-Chlorotoluene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,3,5-Trimethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
tert-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2,4-Trimethylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
sec-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,3-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,4-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
p-Isopropyltoluene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
n-Butylbenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Hexachlorocyclopentadiene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Naphthalene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
1,2,3-Trichlorobenzene	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS
Xylene (total)	µg/L	NS	NS	0.5 U	NS	NS	0.5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-31 01/16/92 MW-31 152643	PHASE I WATER MW-31 01/16/92 MW-31 Filtered 152668	PHASE II WATER MW31 07/01/93 MW31 198124	PHASE I WATER MW-32 01/16/92 MW-32 152644	PHASE I WATER MW-32 01/16/92 MW-32 Filtered 152669	PHASE II WATER MW32 07/09/93 MW32 198591	PHASE I WATER MW-33 01/16/92 MW-33 152645	
COMPOUND	UNITS							
<b>SEMI-VOLATILES</b>								
Phenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
bis(2-Chloroethyl) ether	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2-Chlorophenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
1,3-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
1,4-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzyl Alcohol	µg/L	10 U	NS	NS	10 U	NS	NS	11 U
1,2-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2-Methylphenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
bis(2-Chloroisopropyl) ether	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Methylphenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
N-Nitroso-d-n-propylamine	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Hexachloroethane	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Nitrobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Isophorone	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2-Nitrophenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4-Dimethylphenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzoic acid	µg/L	52 U	NS	NS	50 U	NS	NS	55 U
bis(2-Chloroethoxy) methane	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4-Dichlorophenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
1,2,4-Trichlorobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Naphthalene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Chloroaniline	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Hexachlorobutadiene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Chloro-3-methylphenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2-Methylnaphthalene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Hexachlorocyclopentadiene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4,6-Trichlorophenol	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4,5-Trichlorophenol	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
2-Chloronaphthalene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2-Nitroaniline	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
Dimethylphthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Acenaphthylene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,6-Dinitrotoluene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
3-Nitroaniline	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
Acenaphthene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4-Dinitrophenol	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
4-Nitrophenol	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
Dibenzofuran	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
2,4-Dinitrotoluene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Diethylphthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Chlorophenyl-phenylether	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Fluorene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Nitroaniline	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
4,6-Dinitro-2-methylphenol	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
N-Nitrosodiphenylamine (1)	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
4-Bromophenyl-phenylether	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Hexachlorobenzene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Pentachlorophenol	µg/L	52 U	NS	25 U	50 U	NS	25 U	55 U
Phenanthrene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Anthracene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Carbazole	µg/L	NS	NS	10 U	NS	NS	10 U	NS
Di-n-butylphthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Fluoranthene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Pyrene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Butylbenzylphthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
3,3'-Dichlorobenzidine	µg/L	21 U	NS	10 U	20 U	NS	10 U	22 U
Benzo(a)anthracene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Chrysene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
bis(2-Ethylhexyl)phthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Di-n-octylphthalate	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzo(b)fluoranthene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzo(k)fluoranthene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzo(a)pyrene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Indeno(1,2,3-cd)pyrene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Dibenz(a,h)anthracene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U
Benzo(g,h,i)perylene	µg/L	10 U	NS	10 U	10 U	NS	10 U	11 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	LOCATION	PHASE I		PHASE II		PHASE I		PHASE II		PHASE I		PHASE II		PHASE I		PHASE II	
			DATE	ES ID	LAB ID	WATER	UNITS	WATER	UNITS	WATER	UNITS	WATER	UNITS	WATER	UNITS	WATER	UNITS	WATER
PESTICIDES/PCBS																		
alpha-BHC	ADL		0.06 U			NS					NS							
beta-BHC	ADL		0.06 U			NS					NS							
delta-BHC	ADL		0.06 U			NS					NS							
gamma-BHC (Lindane)	ADL		0.06 U			NS					NS							
Heptachlor	ADL		0.06 U			NS					NS							
Aldrin	ADL		0.06 U			NS					NS							
Heptachlor epoxide	ADL		0.06 U			NS					NS							
Dieldrin	ADL		0.06 U			NS					NS							
Endosulfan I	ADL		0.1 U			NS					NS							
4,4'-DDE	ADL		0.1 U			NS					NS							
Endosulfan II	ADL		0.1 U			NS					NS							
4,4'-DDD	ADL		0.1 U			NS					NS							
4,4'-DDE	ADL		0.1 U			NS					NS							
Endosulfan sulfate	ADL		0.1 U			NS					NS							
Methoxychlor	ADL		0.6 U			NS					NS							
Endrin ketone	ADL		0.1 U			NS					NS							
Endrin	ADL		0.1 U			NS					NS							
alpha-Chlordane	ADL		0.8 U			NS					NS							
gamma-Chlordane	ADL		0.8 U			NS					NS							
Toxaphene	ADL		1 U			NS					NS							
Aroclor-1016	ADL		0.8 U			NS					NS							
Aroclor-1221	ADL		0.8 U			NS					NS							
Aroclor-1232	ADL		0.8 U			NS					NS							
Aroclor-1242	ADL		0.8 U			NS					NS							
Aroclor-1248	ADL		0.8 U			NS					NS							
Aroclor-1254	ADL		0.8 U			NS					NS							
Aroclor-1260	ADL		1 U			NS					NS							
HERBICIDES																		
2,4-D	ADL		1 U			NS					NS							
2,4-DB	ADL		1 U			NS					NS							
2,4,6-T	ADL		0.1 U			NS					NS							
2,4,6-TP (Silver)	ADL		0.1 U			NS					NS							
Alachlor	ADL		0.1 U			NS					NS							
Diuron	ADL		0.1 U			NS					NS							
Diclorozop	ADL		1 U			NS					NS							
Diflufenican	ADL		0.8 U			NS					NS							
MCPA	ADL		100 U			NS					NS							
MCPP	ADL		100 U			NS					NS							
METALS																		
Aluminum	ADL		64600			24.6 U					35800							
Antimony	ADL		3.8 U			3.8 U					1800							
As	ADL		3.8 U			3.8 U					1800							
Barium	ADL		397			96.8 R					183							
Beryllium	ADL		6.7			1.1 U					1.1 U							
Cadmium	ADL		13.9			2.8 U					2.8 U							
Calcium	ADL		171000			82300					156000							
Chromium	ADL		109			6.2 U					6.2 U							
Cobalt	ADL		46.2			20.8 U					20.8 U							
Copper	ADL		86.1			10.2 U					10.2 U							
Copper	ADL		14700			14700					14700							
Iron	ADL		14700			14700					14700							
Lead	ADL		48000			11900					17900							
Manganese	ADL		26300			4.8 U					327							
Mercury	ADL		0.14			0.03 U					0.14							
Nickel	ADL		167			14.8 U					67.3							
Potassium	ADL		11700			487					6290							
Selenium	ADL		13 U			1.8 U					1.8 U							
Silver	ADL		3.4 U			3.4 U					3.4 U							
Sodium	ADL		16600			14700					17100							
Titanium	ADL		47.2 U			47.2 U					47.2 U							
Vanadium	ADL		412			16.8 U					16.8 U							
Zinc	ADL		10 U			10 U					10 U							
Cyanide	ADL		10 U			NS					NS							

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	PHASE I	PHASE I	PHASE II	
		WATER	WATER	WATER	
		MW-33	MW-33	MW33	
		02/03/82 OK	01/16/82	07/10/83	
		MW-33	MW-33 Filtered	MW33	
		183418	182870	188721	
		UNITS			
Chloromethane		µg/L	10 U	NS	NS
Bromomethane		µg/L	10 U	NS	NS
Vinyl Chloride		µg/L	10 U	NS	NS
Chloroethane		µg/L	10 U	NS	NS
Methylene Chloride		µg/L	5 U	NS	NS
Acetone		µg/L	10 U	NS	NS
Carbon Disulfide		µg/L	5 U	NS	NS
1,1-Dichloroethane		µg/L	5 U	NS	NS
1,1-Dichloroethane		µg/L	5 U	NS	NS
1,2-Dichloroethane (total)		µg/L	5 U	NS	NS
Chloroform		µg/L	5 U	NS	NS
1,2-Dichloroethane		µg/L	5 U	NS	NS
2-Butanone		µg/L	10 U	NS	NS
1,1,1-Trichloroethane		µg/L	5 U	NS	NS
Carbon Tetrachloride		µg/L	5 U	NS	NS
Vinyl Acetate		µg/L	10 U	NS	NS
Bromodichloromethane		µg/L	5 U	NS	NS
1,2-Dichloropropane		µg/L	5 U	NS	NS
cis-1,2-Dichloropropene		µg/L	5 U	NS	NS
Trichloroethene		µg/L	5 U	NS	NS
Dibromochloromethane		µg/L	5 U	NS	NS
1,1,2-Trichloroethane		µg/L	5 U	NS	NS
Benzene		µg/L	5 U	NS	NS
trans-1,3-Dichloropropene		µg/L	5 U	NS	NS
Bromoform		µg/L	5 U	NS	NS
4-Methyl-2-Pentanone		µg/L	10 U	NS	NS
2-Hexanone		µg/L	10 U	NS	NS
Tetrachloroethane		µg/L	5 U	NS	NS
1,1,2,2-Tetrachloroethane		µg/L	5 U	NS	NS
Toluene		µg/L	5 U	NS	NS
Chlorobenzene		µg/L	5 U	NS	NS
Ethylbenzene		µg/L	5 U	NS	NS
Styrene		µg/L	5 U	NS	NS
Xylene (total)		µg/L	5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE II
		WATER MW-33 02/03/92 CK MW-33 153416	WATER MW-33 01/18/92 MW-33/Red 152670	WATER MW33 07/10/93 MW33 186721
VOC's (S&S)				
Dichlorodifluoromethane	µg/L	NS	NS	0.5 U
Chloromethane	µg/L	NS	NS	0.5 U
Vinyl Chloride	µg/L	NS	NS	0.5 U
Bromomethane	µg/L	NS	NS	0.5 U
Chloroethane	µg/L	NS	NS	0.5 U
Trichlorofluoromethane	µg/L	NS	NS	0.5 U
1,1-Dichloroethene	µg/L	NS	NS	0.5 U
Acetone	µg/L	NS	NS	5 U
Carbon Disulfide	µg/L	NS	NS	0.5 U
Methylene Chloride	µg/L	NS	NS	0.5 U
trans-1,2-Dichloroethene	µg/L	NS	NS	0.5 U
1,1-Dichloroethane	µg/L	NS	NS	0.5 U
2,2-Dichloropropane	µg/L	NS	NS	0.5 U
cis-1,2-Dichloroethene	µg/L	NS	NS	0.5 U
2-Butanone	µg/L	NS	NS	5 U
Bromochloromethane	µg/L	NS	NS	0.5 U
Chloroform	µg/L	NS	NS	0.5 U
1,1,1-Trichloroethane	µg/L	NS	NS	0.5 U
Carbon Tetrachloride	µg/L	NS	NS	0.5 U
1,1-Dichloropropane	µg/L	NS	NS	0.5 U
Benzene	µg/L	NS	NS	0.5 U
1,2-Dichloroethane	µg/L	NS	NS	0.5 U
Trichloroethene	µg/L	NS	NS	0.5 U
1,2-Dichloropropane	µg/L	NS	NS	0.5 U
Dibromomethane	µg/L	NS	NS	0.5 U
Bromodichloromethane	µg/L	NS	NS	0.5 U
cis-1,3-Dichloropropene	µg/L	NS	NS	0.5 U
4-Methyl-2-Pentanone	µg/L	NS	NS	5 U
Toluene	µg/L	NS	NS	0.5 U
trans-1,3-Dichloropropene	µg/L	NS	NS	0.5 U
1,1,2-Trichloroethane	µg/L	NS	NS	0.5 U
Tetrachloroethene	µg/L	NS	NS	0.5 U
1,3-Dichloropropane	µg/L	NS	NS	0.5 U
2-Hexanone	µg/L	NS	NS	5 U
Dibromochloromethane	µg/L	NS	NS	0.5 U
1,2-Dibromoethane	µg/L	NS	NS	0.5 U
Chlorobenzene	µg/L	NS	NS	0.5 U
1,1,1,2-Tetrachloroethane	µg/L	NS	NS	0.5 U
Ethylbenzene	µg/L	NS	NS	0.5 U
Styrene	µg/L	NS	NS	0.5 U
Bromoform	µg/L	NS	NS	0.5 U
Isopropylbenzene	µg/L	NS	NS	0.5 U
Bromobenzene	µg/L	NS	NS	0.5 U
1,1,2,2-Tetrachloroethane	µg/L	NS	NS	0.5 U
1,2,3-Trichloropropane	µg/L	NS	NS	0.5 U
n-Propylbenzene	µg/L	NS	NS	0.5 U
2-Chlorotoluene	µg/L	NS	NS	0.5 U
4-Chlorotoluene	µg/L	NS	NS	0.5 U
1,3,5-Trimethylbenzene	µg/L	NS	NS	0.5 U
tert-Butylbenzene	µg/L	NS	NS	0.5 U
1,2,4-Trimethylbenzene	µg/L	NS	NS	0.5 U
sec-Butylbenzene	µg/L	NS	NS	0.5 U
1,3-Dichlorobenzene	µg/L	NS	NS	0.5 U
1,4-Dichlorobenzene	µg/L	NS	NS	0.5 U
p-Isopropyltoluene	µg/L	NS	NS	0.5 U
1,2-Dichlorobenzene	µg/L	NS	NS	0.5 U
n-Butylbenzene	µg/L	NS	NS	0.5 U
1,2-Dibromo-3-Chloropropane	µg/L	NS	NS	0.5 U
1,2,4-Trichlorobenzene	µg/L	NS	NS	0.5 U
Hexachlorobutadiene	µg/L	NS	NS	0.5 U
Naphthalene	µg/L	NS	NS	0.5 U
1,2,3-Trichlorobenzene	µg/L	NS	NS	0.5 U
Xylene (total)	µg/L	NS	NS	0.5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE E6 ID LAB ID UNITS	PHASE I	PHASE I	PHASE II
		WATER MW-33 02/03/82 OK MW-33 153416	WATER MW-33 01/16/82 MW-33 Filtered 152670	WATER MW33 07/10/83 MW33 168721
SEMI-VOLATILES				
Phenol	µg/L	NS	NS	NS
bis(2-Chloroethyl) ether	µg/L	NS	NS	NS
2-Chlorophenol	µg/L	NS	NS	NS
1,3-Dichlorobenzene	µg/L	NS	NS	NS
1,4-Dichlorobenzene	µg/L	NS	NS	NS
Benzyl Alcohol	µg/L	NS	NS	NS
1,2-Dichlorobenzene	µg/L	NS	NS	NS
2-Methylphenol	µg/L	NS	NS	NS
bis(2-Chloroisopropyl) ether	µg/L	NS	NS	NS
4-Methylphenol	µg/L	NS	NS	NS
N-Nitrosodipropylamine	µg/L	NS	NS	NS
Hexachloroethane	µg/L	NS	NS	NS
Nitrobenzene	µg/L	NS	NS	NS
Isophorone	µg/L	NS	NS	NS
2-Nitrophenol	µg/L	NS	NS	NS
2,4-Dimethylphenol	µg/L	NS	NS	NS
Benzic acid	µg/L	NS	NS	NS
bis(2-Chloroethoxy) methane	µg/L	NS	NS	NS
2,4-Dichlorophenol	µg/L	NS	NS	NS
1,2,4-Trichlorobenzene	µg/L	NS	NS	NS
Naphthalene	µg/L	NS	NS	NS
4-Chloroaniline	µg/L	NS	NS	NS
Hexachlorobutadiene	µg/L	NS	NS	NS
4-Chloro-3-methylphenol	µg/L	NS	NS	NS
2-Methylnaphthalene	µg/L	NS	NS	NS
Hexachlorocyclopentadiene	µg/L	NS	NS	NS
2,4,6-Trichlorophenol	µg/L	NS	NS	NS
2,4,6-Trichlorophenol	µg/L	NS	NS	NS
2-Chloronaphthalene	µg/L	NS	NS	NS
2-Nitroaniline	µg/L	NS	NS	NS
Dimethylphthalate	µg/L	NS	NS	NS
Acenaphthylene	µg/L	NS	NS	NS
2,6-Dinitrotoluene	µg/L	NS	NS	NS
3-Nitroaniline	µg/L	NS	NS	NS
Acenaphthene	µg/L	NS	NS	NS
2,4-Dinitrophenol	µg/L	NS	NS	NS
4-Nitrophenol	µg/L	NS	NS	NS
Dibenzofuran	µg/L	NS	NS	NS
2,4-Dinitrotoluene	µg/L	NS	NS	NS
Diethylphthalate	µg/L	NS	NS	NS
4-Chlorophenyl-phenylether	µg/L	NS	NS	NS
Fluorene	µg/L	NS	NS	NS
4-Nitroaniline	µg/L	NS	NS	NS
4,6-Dinitro-2-methylphenol	µg/L	NS	NS	NS
N-Nitrosodiphenylamine (1)	µg/L	NS	NS	NS
4-Bromophenyl-phenylether	µg/L	NS	NS	NS
Hexachlorobenzene	µg/L	NS	NS	NS
Pentachlorophenol	µg/L	NS	NS	NS
Phenanthrene	µg/L	NS	NS	NS
Anthracene	µg/L	NS	NS	NS
Carbazole	µg/L	NS	NS	NS
Di-n-butylphthalate	µg/L	NS	NS	NS
Fluoranthene	µg/L	NS	NS	NS
Pyrene	µg/L	NS	NS	NS
Butylbenzylphthalate	µg/L	NS	NS	NS
3,3'-Dichlorobenzidine	µg/L	NS	NS	NS
Benz(a)anthracene	µg/L	NS	NS	NS
Chrysene	µg/L	NS	NS	NS
bis(2-Ethylhexyl)phthalate	µg/L	NS	NS	NS
Di-n-octylphthalate	µg/L	NS	NS	NS
Benz(b)fluoranthene	µg/L	NS	NS	NS
Benz(b)fluoranthene	µg/L	NS	NS	NS
Benz(a)pyrene	µg/L	NS	NS	NS
Indeno(1,2,3-cd)pyrene	µg/L	NS	NS	NS
Dibenz(a,h)anthracene	µg/L	NS	NS	NS
Benz(g,h,i)perylene	µg/L	NS	NS	NS





SENECA ARMY DEP OT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	
DATE	MW-34	MW-34	MW-34	MW-34	MW34	MW-36D	MW-36D	
ES ID	MW-34	MW-34/Fire	PT-1(1)	PT-1(1)/Fire	MW34	MW-36D	MW-36DF	
LAB ID	152257	152290	152259	152292	157340	152503	152505	
COMPOUND	UNITS							
Chloromethane	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Bromomethane	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Vinyl Chloride	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Chloroethane	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Methylene Chloride	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Acetone	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Carbon Disulfide	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethane (total)	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Chloroform	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
2-Butanone	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
1,1,1-Trichloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Carbon Tetrachloride	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Vinyl Acetate	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Bromodichloromethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,2-Dichloropropane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
cis-1,3-Dichloropropene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Trichloroethene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Dibromochloromethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,1,2-Trichloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Benzene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
trans-1,3-Dichloropropene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Bromoform	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
4-Methyl-2-Pentanone	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
2-Hexanone	ug/L	10 U	NS	10 U	NS	NS	10 U	NS
Tetrachloroethene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
1,1,2,2-Tetrachloroethane	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Toluene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Chlorobenzene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Ethylbenzene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Styrene	ug/L	5 U	NS	5 U	NS	NS	5 U	NS
Xylenes (total)	ug/L	5 U	NS	5 U	NS	NS	5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I
		WATER MW-34 01/10/92 MW-34 152257	WATER MW-34 01/10/92 MW-34 Filtered 152290	WATER MW-34 01/10/92 PT-1(1) 152259	WATER MW-34 01/10/92 PT-1(1) Filter 152292	WATER MW-34 06/24/93 MW-34 157340	WATER MW-36D 01/14/92 MW-38D 152503	WATER MW-38D 01/14/92 MW-38D Filter 152505
VOC's (B34.2)								
Dichlorodifluoromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Chloromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Vinyl Chloride	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Bromomethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Chloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Trichlorofluoromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1-Dichloroethene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Acetone	ug/L	NS	NS	NS	NS	5 U	NS	NS
Carbon Disulfide	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Methylene Chloride	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
trans-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1-Dichloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
2,2-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
cis-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
2-Butanone	ug/L	NS	NS	NS	NS	5 U	NS	NS
Bromochloromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Chloroform	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1,1-Trichloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Carbon Tetrachloride	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Benzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2-Dichloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Trichloroethene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Dibromomethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Bromodichloromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
cis-1,3-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
4-Methyl-2-Pentanone	ug/L	NS	NS	NS	NS	5 U	NS	NS
Toluene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
trans-1,3-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1,2-Trichloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Tetrachloroethene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,3-Dichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
2-Hexanone	ug/L	NS	NS	NS	NS	5 U	NS	NS
Dibromochloromethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2-Dibromoethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Chlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1,1,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Ethylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Styrene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Bromoform	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Isopropylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Bromobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2,3-Trichloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
n-Propylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
2-Chlorotoluene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
4-Chlorotoluene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,3,5-Trimethylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
tert-Butylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2,4-Trimethylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
sec-Butylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,3-Dichlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,4-Dichlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
p-Isopropyltoluene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2-Dichlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
n-Butylbenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2,4-Trichlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Hexachlorobutadiene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Naphthalene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
1,2,3-Trichlorobenzene	ug/L	NS	NS	NS	NS	0.5 U	NS	NS
Xylene (total)	ug/L	NS	NS	NS	NS	0.5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-34 01/10/92 MW-34 152287	PHASE I WATER MW-34 01/10/92 MW-34 Filtered 152290	PHASE I WATER MW-34 01/10/92 PT-1(1) 152289	PHASE I WATER MW-34 01/10/92 PT-1(1)Filter 152292	PHASE II WATER MW34 06/24/93 MW34 187340	PHASE I WATER MW-35D 01/14/92 MW-35D 152503	PHASE I WATER MW-35D 01/14/92 MW-35DF8 152506	
COMPOUND UNITS								
SEMIVOLATILES								
Phenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
bis(2-Chloroethyl) ether	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2-Chlorophenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
1,3-Dichlorobenzene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
1,4-Dichlorobenzene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Benzyl Alcohol	ug/L	11 U	NS	NS	NS	NS	10 U	NS
1,2-Dichlorobenzene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2-Methylphenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
bis(2-Chloroisopropyl) ether	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
4-Methylphenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
N-Nitroso-d-n-propylamine	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Hexachloroethane	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Nitrobenzene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Isophorone	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2-Nitrophenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,4-Dimethylphenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Benzic acid	ug/L	84 U	NS	NS	NS	NS	80 U	NS
bis(2-Chloroethoxy) methane	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,4-Dichlorophenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
1,2,4-Trichlorobenzene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Naphthalene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
4-Chloroaniline	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Hexachlorobutadiene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
4-Chloro-3-methylphenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2-Methylnaphthalene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Hexachlorocyclopentadiene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,4,6-Trichlorophenol	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,4,6-Trichlorophenol	ug/L	84 U	NS	NS	NS	25 U	80 U	NS
2-Chloronaphthalene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2-Nitroaniline	ug/L	84 U	NS	NS	NS	25 U	80 U	NS
Dimethylphthalate	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
Acenaphthylene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,6-Dinitrotoluene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
3-Nitroaniline	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
Acenaphthene	ug/L	11 U	NS	NS	NS	10 U	10 U	NS
2,4-Dinitrophenol	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
4-Nitrophenol	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
Dibenzofuran	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
2,4-Dinitrotoluene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Diethylphthalate	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
4-Chlorophenyl-phenylether	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Fluorene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
4-Nitroaniline	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
4,6-Dinitro-2-methylphenol	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
N-Nitrosodiphenylamine (1)	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
4-Bromophenyl-phenylether	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Hexachlorobenzene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Pentachlorophenol	ug/L	84 U	NS	84 U	NS	25 U	80 U	NS
Phenanthrene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Anthracene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Carbazole	ug/L	NS	NS	NS	NS	10 U	NS	NS
Di-n-butylphthalate	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Fluoranthene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Pyrene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Butylbenzylphthalate	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
3,3'-Dichlorobenzidine	ug/L	21 U	NS	22 U	NS	10 U	20 U	NS
Benzo(a)anthracene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Chrysene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
bis(2-Ethylhexyl)phthalate	ug/L	11 U	NS	11 U	NS	12 U	10 U	NS
Di-n-octylphthalate	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Benzo(b)fluoranthene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Benzo(k)fluoranthene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Benzo(a)pyrene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Indeno(1,2,3-cd)pyrene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Dibenz(a,h)anthracene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS
Benzo(g,h,i)perylene	ug/L	11 U	NS	11 U	NS	10 U	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-34 01/10/92 MW-34 182287	PHASE I WATER MW-34 01/10/92 MW-34R/red 182290	PHASE I WATER MW-34 01/10/92 PT-1(I) 182289	PHASE I WATER MW-34 01/10/92 PT-1(I)FIR 182292	PHASE II WATER MW34 08/24/93 MW34 187340	PHASE I WATER MW-3SD 01/14/92 MW-3SD 182503	PHASE I WATER MW-3SD 01/14/92 MW-3SDFI 182508	
COMPOUND UNITS								
<b>PESTICIDES/PCBS</b>								
alpha-BHC	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
beta-BHC	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
delta-BHC	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
gamma-BHC (Lindane)	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
Heptachlor	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
Aldrin	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
Heptachlor epoxide	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
Endosulfan I	ug/L	0.067 U	NS	NS	NS	0.06 U	0.06 U	NS
Dieldrin	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
4,4'-DDE	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
Endrin	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
Endosulfan II	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
4,4'-DDD	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
Endosulfan sulfate	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
4,4'-DDT	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
Methoxychlor	ug/L	0.87 U	NS	NS	NS	0.8 U	0.8 U	NS
Endrin ketone	ug/L	0.11 U	NS	NS	NS	0.1 U	0.12 U	NS
Endrin aldehyde	ug/L	NS	NS	NS	NS	0.1 U	NS	NS
alpha-Chlordane	ug/L	0.87 U	NS	NS	NS	0.8 U	0.8 U	NS
gamma-Chlordane	ug/L	0.87 U	NS	NS	NS	0.8 U	0.8 U	NS
Toxaphene	ug/L	1.1 U	NS	NS	NS	1 U	1.2 U	NS
Aroclor-1016	ug/L	0.87 U	NS	NS	NS	1 U	0.8 U	NS
Aroclor-1221	ug/L	0.87 U	NS	NS	NS	2 U	0.8 U	NS
Aroclor-1232	ug/L	0.87 U	NS	NS	NS	1 U	0.8 U	NS
Aroclor-1242	ug/L	0.87 U	NS	NS	NS	1 U	0.8 U	NS
Aroclor-1248	ug/L	0.87 U	NS	NS	NS	1 U	0.8 U	NS
Aroclor-1254	ug/L	1.1 U	NS	NS	NS	1 U	1.2 U	NS
Aroclor-1260	ug/L	1.1 U	NS	NS	NS	1 U	1.2 U	NS
<b>HERBICIDES</b>								
2,4-D	ug/L	1 U	NS	1 U	NS	1 U	1.2 U	NS
2,4-DB	ug/L	1 U	NS	1 U	NS	1 U	1.2 U	NS
2,4,6-T	ug/L	0.1 U	NS	0.1 U	NS	0.1 U	0.1 U	NS
2,4,6-TP (Silvex)	ug/L	0.1 U	NS	0.1 U	NS	0.1 U	0.1 U	NS
Dalapon	ug/L	2.4 U	NS	2.3 U	NS	2.3 U	2.9 U	NS
Dicamba	ug/L	0.1 U	NS	0.1 U	NS	0.1 U	0.1 U	NS
Dichloroprop	ug/L	1 U	NS	1 U	NS	1 U	1.2 U	NS
Dinoseb	ug/L	0.8 U	NS	0.8 U	NS	0.8 U	0.8 U	NS
MCPA	ug/L	100 U	NS	100 U	NS	100 U	120 U	NS
MCPP	ug/L	100 U	NS	100 U	NS	100 U	120 U	NS
<b>METALS</b>								
Aluminum	ug/L	8260 J	24.4 U	7310 J	24.5 U	263	23200	24.5 U
Antimony	ug/L	86.9 U J	53 U	86.9 U J	53.2 U	49.8 U J	53.2 U	53.1 U
Arsenic	ug/L	3.8 U	3.8 U	3.8 U	3.8 U	1.4 U J	3.8 U	4.3 J
Barium	ug/L	226	51.9 R	181 J	45.7 R	82.5 J	318	104 J
Beryllium	ug/L	2.7 R	2.8 R	2.7 R	2.6 R	0.9 U	3.2 R	1.2 R
Cadmium	ug/L	2.9 U	3 U	2.9 U	3 U	2.8 U	5.4	3 U
Calcium	ug/L	352000 J	106000	269000 J	114000	122000	41100	14600
Chromium	ug/L	10.3	6.2 U	12	6.2 U	2.7 U J	34.9	6.2 U
Cobalt	ug/L	20 U	20.3 U	20 U	20.4 U	5.6 U	20.4 U	20.4 U
Copper	ug/L	14.8 U	10.1 U	14.9 J	10.2 U	4.7 U	22.5 J	10.1 U
Iron	ug/L	10600 J	8.9 U	11300 J	7 U	398	33600	7 U
Lead	ug/L	8.2	1.2 U	7.4	1.2 U	0.79 U	6	1.2 U
Magnesium	ug/L	32100	20200	26300 J	20500	17400	13300	4590 J
Manganese	ug/L	2200	132	1690 J	127	135	862	110
Mercury	ug/L	0.18 R	0.11 R	0.14 R	0.1 R	0.09 U J	0.1 R	0.12 R
Nickel	ug/L	17.6 J	14.7 U	18 J	14.7 U	7.5 U J	49.7	14.7 U
Potassium	ug/L	6910	7960	9780	7210	1270 J	6230	2780 J
Selenium	ug/L	1 U	1 U	1 U	1 U	0.99 U J	1.3 U	1 U
Silver	ug/L	9.1 U	4.3 R	9.1 U	3.4 U	5.6 U	3.4 U	3.4 U
Sodium	ug/L	24900 J	31200	36500 J	25100	16200	130000	110000
Thallium	ug/L	3.2 U	3.2 U	3.2 U	3.2 U	2.8 U	3.2 U	3.2 U
Vanadium	ug/L	30.8 U	9.4 U	30.8 U	9.8 U	6.6 U J	32.7 J	9.4 U
Zinc	ug/L	81.9	9.4 U	47.8 R	8.5 U	13.1 R	72.7 R	8.5 U
Cyanide	ug/L	10 U J	NS	10 U J	NS	10 U J	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	
DATE	MW-36D	MW-36	MW-36	MW-36	MW-36	MW-37	MW-37	
ES ID	MW36D	MW-36	MW-36RE(4)	MW-36F1e	MW36	MW-37	MW-37	
LAB ID	188267	182604	182604	182609	188268	182648	182266	
COMPOUND	UNITS							
Chloromethane	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Bromomethane	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Vinyl Chloride	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Chloroethane	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Methylene Chloride	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Acetone	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Carbon Disulfide	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,1-Dichloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,1-Dichloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,2-Dichloroethane (total)	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Chloroform	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,2-Dichloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
2-Butanone	ug/L	NS	10 U	NS	NS	NS	10 U	NS
1,1,1-Trichloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Carbon Tetrachloride	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Vinyl Acetate	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Bromodichloromethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,2-Dichloropropane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
cis-1,3-Dichloropropene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Trichloroethene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Dibromochloromethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,1,2-Trichloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Benzene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
trans-1,3-Dichloropropene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Bromoform	ug/L	NS	5 U	NS	NS	NS	5 U	NS
4-Methyl-2-Pentanone	ug/L	NS	10 U	NS	NS	NS	10 U	NS
2-Hexanone	ug/L	NS	10 U	NS	NS	NS	10 U	NS
Tetrachloroethene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Toluene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Chlorobenzene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Ethylbenzene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Styrene	ug/L	NS	5 U	NS	NS	NS	5 U	NS
Xylene (total)	ug/L	NS	5 U	NS	NS	NS	5 U	NS

SENECA ARMY DEP OT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW36D 07/03/93 MW36D 186267	PHASE I WATER MW-36 01/14/92 MW-36 182504	PHASE I WATER MW-36 01/14/92 MW-36RE(4) 182504	PHASE I WATER MW-36 01/14/92 MW-36F(4) 182509	PHASE II WATER MW36 07/03/93 186266	PHASE I WATER MW-37 01/10/92 MW-37 182646	PHASE I WATER MW-37 01/10/92 MW-37 182266
COMPOUND	UNITS						
VOC's (24)							
Dichlorodifluoromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Chloromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Vinyl Chloride	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Bromomethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Chloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Trichlorofluoromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1-Dichloroethene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Acetone	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Carbon Disulfide	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Methylene Chloride	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
trans-1,2-Dichloroethene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1-Dichloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
2,2-Dichloropropane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
cis-1,2-Dichloroethene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
2-Butanone	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Bromochloromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Chloroform	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1,1-Trichloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Carbon Tetrachloride	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1-Dichloropropene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Benzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2-Dichloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Trichloroethene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2-Dichloropropane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Dibromomethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Bromodichloromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
cis-1,3-Dichloropropene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
4-Methyl-2-Pentanone	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Toluene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
trans-1,3-Dichloropropene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1,2-Trichloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Tetrachloroethene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,3-Dichloropropane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
2-Hexanone	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Dibromochloromethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2-Dibromoethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Chlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1,1,2-Tetrachloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Ethylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Styrene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Bromoform	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Isopropylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Bromobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2,3-Trichloropropane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
n-Propylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
2-Chlorotoluene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
4-Chlorotoluene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,3,5-Trimethylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
tert-Butylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2,4-Trimethylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
sec-Butylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,3-Dichlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,4-Dichlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
p-Isopropyltoluene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2-Dichlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
n-Butylbenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2,4-Trichlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Hexachlorobutadiene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Naphthalene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
1,2,3-Trichlorobenzene	ug/L	0.6 U	NS	NS	0.6 U	NS	NS
Xylene (total)	ug/L	0.6 U	NS	NS	0.6 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE I	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I
		WATER MW38D 07/03/93 MW38D 18257	WATER MW-36 01/14/92 MW-36 182504	WATER MW-36 01/14/92 MW-36RE(4) 152504	WATER MW-36 01/14/92 MW-36FILE 182509	WATER MW36 07/03/93 MW36 18256	WATER MW-37 01/10/92 MW-37 182546	WATER MW-37 01/10/92 MW-37 182558
SEMIVOLATILES								
Phenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
bis(2-Chloroethyl) ether	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2-Chlorophenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
1,3-Dichlorobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
1,4-Dichlorobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzyl Alcohol	ug/L	NS	12 U	NS	NS	NS	NS	11 U
1,2-Dichlorobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
3-Methylphenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
bis(2-Chloroisopropyl) ether	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Methylphenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
N-Nitroso-di-n-propylamine	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Hexachloroethane	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Nitrobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Isophorone	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2-Nitrophenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4-Dimethylphenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzoic acid	ug/L	NS	60 U	NS	NS	NS	NS	65 U
bis(2-Chloroethoxy) methane	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4-Dichlorophenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
1,2,4-Trichlorobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Naphthalene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Chloroaniline	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Hexachlorobutadiene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Chloro-3-methylphenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2-Methylnaphthalene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Hexachlorocyclopentadiene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4,6-Trichlorophenol	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4,6-Trichlorophenol	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
2-Chloronaphthalene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2-Nitroaniline	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
Dimethylphthalate	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Acenaphthylene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,6-Dinitrotoluene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
3-Nitroaniline	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
Acenaphthene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4-Dinitrophenol	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
4-Nitrophenol	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
Dibenzofuran	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
2,4-Dinitrotoluene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Diethylphthalate	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Chlorophenyl-phenylether	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Fluorene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Nitroaniline	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
4,6-Dinitro-2-methylphenol	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
N-Nitrosodiphenylamine (1)	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
4-Bromophenyl-phenylether	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Hexachlorobenzene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Pentachlorophenol	ug/L	25 U	60 U	NS	NS	25 U	NS	55 U
Phenanthrene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Anthracene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Carbazole	ug/L	10 U	NS	NS	NS	10 U	NS	NS
Di-n-butylphthalate	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Fluoranthene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Pyrene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Butylbenzylphthalate	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
3,3'-Dichlorobenzidine	ug/L	10 U	24 U	NS	NS	10 U	NS	22 U
Benzo(a)anthracene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Chrysene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
bis(2-Ethylhexyl)phthalate	ug/L	71 B	12 U	NS	NS	10 U	NS	11 U
Di-n-octylphthalate	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzo(b)fluoranthene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzo(k)fluoranthene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzo(a)pyrene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Dibenz(a,h)anthracene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U
Benzo(g,h,i)perylene	ug/L	10 U	12 U	NS	NS	10 U	NS	11 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE II WATER MW3SD 07/03/83 MW3SD 182257	PHASE I WATER MW-36 01/14/82 MW-36 182264	PHASE I WATER MW-36 01/14/82 MW-36RE(4) 182264	PHASE I WATER MW-36 01/14/82 MW-36RE(4) 182269	PHASE II WATER MW36 07/03/83 182266	PHASE I WATER MW-37 01/10/82 182246	PHASE I WATER MW-37 01/10/82 182269	
PESTICIDES/PCBS								
alpha-BHC	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
beta-BHC	ug/L 0.08 U	0.064 U J	0.052 U	NS	0.053 U	NS	0.061 U	
delta-BHC	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
gamma-BHC (Lindane)	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
Heptachlor	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
Aldrin	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
Heptachlor epoxide	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
Endosulfan I	ug/L 0.05 U	0.054 U J	0.052 U	NS	0.053 U	NS	0.061 U	
Dieldrin	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
4,4'-DDE	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
Endrin	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
Endosulfan II	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
4,4'-DDD	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
Endosulfan sulfate	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
4,4'-DDT	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
Methoxychlor	ug/L 0.8 U	0.84 U J	0.82 U	NS	0.83 U	NS	0.81 U	
Endrin ketone	ug/L 0.1 U	0.11 U J	0.1 U	NS	0.11 U	NS	0.12 U	
Endrin aldehyde	ug/L 0.1 U	NS	NS	NS	0.11 U	NS	NS	
alpha-Chlordane	ug/L 0.05 U	0.04 U J	0.02 U	NS	0.053 U	NS	0.051 U	
gamma-Chlordane	ug/L 0.05 U	0.04 U J	0.02 U	NS	0.053 U	NS	0.051 U	
Toxaphene	ug/L 8 U	1.1 U J	1 U	NS	8.3 U	NS	1.2 U	
Aroclor-1016	ug/L 1 U	0.84 U J	0.82 U	NS	1.1 U	NS	0.81 U	
Aroclor-1221	ug/L 2 U	0.84 U J	0.82 U	NS	2.1 U	NS	0.81 U	
Aroclor-1222	ug/L 1 U	0.84 U J	0.82 U	NS	1.1 U	NS	0.81 U	
Aroclor-1242	ug/L 1 U	0.84 U J	0.82 U	NS	1.1 U	NS	0.81 U	
Aroclor-1248	ug/L 1 U	0.84 U J	0.82 U	NS	1.1 U	NS	0.81 U	
Aroclor-1254	ug/L 1 U	1.1 U J	1 U	NS	1.1 U	NS	1.2 U	
Aroclor-1260	ug/L 1 U	1.1 U J	1 U	NS	1.1 U	NS	1.2 U	
HERBICIDES								
2,4-D	ug/L 1 U	1 U	NS	NS	1 U	NS	1 U	
2,4-DB	ug/L 1 U	1 U	NS	NS	1 U	NS	1 U	
2,4,5-T	ug/L 0.1 U	0.1 U	NS	NS	0.1 U	NS	0.1 U	
2,4,5-TP (Silvex)	ug/L 0.1 U	0.1 U	NS	NS	0.1 U	NS	0.1 U	
Dalapon	ug/L 2.3 U	2.4 U	NS	NS	2.3 U	NS	2.4 U	
Dicamba	ug/L 0.1 U	0.1 U	NS	NS	0.1 U	NS	0.1 U	
Dichloroprop	ug/L 1 U	1 U	NS	NS	1 U	NS	1 U	
Dinoseb	ug/L 0.5 U	0.5 U	NS	NS	0.5 U	NS	0.5 U	
MCPA	ug/L 100 U	100 U	NS	NS	100 U	NS	100 U	
MCPP	ug/L 100 U	100 U	NS	NS	100 U	NS	100 U	
METALS								
Aluminum	ug/L 72.2 U	15800	NS	24.4 U	1080	NS	19100	
Antimony	ug/L 49.7 UJ	53.1 U	NS	52.9 U	49.7 UJ	NS	55.9 U J	
Arsenic	ug/L 1.4 UJ	3.5 U	NS	3.5 U	1.4 UJ	NS	3.5 U	
Barium	ug/L 108 J	167 J	NS	59.2 R	78.6 J	NS	329	
Beryllium	ug/L 0.89 U	2.6 R	NS	1.4 R	0.8 U	NS	3.8 R	
Cadmium	ug/L 2.8 U	3.6 J	NS	3 U	2.6 U	NS	2.9 U	
Calcium	ug/L 28900	182000	NS	117000	135000	NS	278000 J	
Chromium	ug/L 2.7 UJ	27.1	NS	8.1 U	2.7 UJ	NS	29.8	
Cobalt	ug/L 5.5 U	20.4 U	NS	20.3 U	5.5 U	NS	26 J	
Copper	ug/L 4.7 U	19.8 J	NS	10.1 U	4.7 U	NS	25.3	
Iron	ug/L 40.9 J	29000	NS	6.9 U	1260	NS	27800	
Lead	ug/L 0.6 U	8	NS	1.2 U	0.6 U	NS	8	
Magnesium	ug/L 8220	31000	NS	17400	19300	NS	28600	
Manganese	ug/L 81.8	656	NS	44.9	138	NS	2190	
Mercury	ug/L 0.14 J	0.1 R	NS	0.11 R	0.09 UJ	NS	0.15 R	
Nickel	ug/L 7.8 UJ	39.1 J	NS	14.7 U	7.8 UJ	NS	36.9 J	
Potassium	ug/L 2590 J	3310 J	NS	1620 J	2110 J	NS	4470 J	
Selenium	ug/L 1.8 UJ	1.3 U	NS	1 U	1.8 J	NS	1 U	
Silver	ug/L 5.5 U	3.4 U	NS	3.4 U	5.5 U	NS	9.1 U	
Sodium	ug/L 61600	21300	NS	19600	21300	NS	11900 J	
Thallium	ug/L 2.8 U	3.2 U	NS	3.2 U	2.8 U	NS	3.2 U	
Vanadium	ug/L 8.8 UJ	23.2 J	NS	8.4 U	6.8 UJ	NS	30.4 U	
Zinc	ug/L 3.1 J	120	NS	8.4 U	9.3 J	NS	55.8	
Cyanide	ug/L 10 UJ	10 U	NS	NS	10 UJ	NS	10 U J	



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	
DATE	MW-37	MW37	MW-38D	MW-38D	MW38D	MW-38	MW-38	
ES ID	MW-37File	MW37	MW-38D	MW-38DFI	MW38D	MW-38	MW-38File	
LAB ID	152291	157342	152154	152197	155259	152505	152510	
COMPOUND	UNITS							
Chloromethane	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Bromomethane	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Vinyl Chloride	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Chloroethane	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Methylene Chloride	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Acetone	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Carbon Disulfide	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,1-Dichloroethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethene (total)	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Chloroform	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloroethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
2-Butanone	ug/L	NS	NS	10 U	NS	NS	10 U	NS
1,1,1-Trichloroethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Carbon Tetrachloride	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Vinyl Acetate	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Bromodichloromethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,2-Dichloropropane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
cis-1,3-Dichloropropene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Trichloroethene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Dibromochloromethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,1,2-Trichloroethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Benzene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
trans-1,3-Dichloropropene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Bromoform	ug/L	NS	NS	5 U	NS	NS	5 U	NS
4-Methyl-2-Pentanone	ug/L	NS	NS	10 U	NS	NS	10 U	NS
2-Hexanone	ug/L	NS	NS	10 U	NS	NS	10 U	NS
Tetrachloroethene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Toluene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Chlorobenzene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Ethylbenzene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Styrene	ug/L	NS	NS	5 U	NS	NS	5 U	NS
Xylene (total)	ug/L	NS	NS	5 U	NS	NS	5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE I WATER	PHASE I WATER
DATE	MW-37	MW37	MW-38D	MW-38D	MW38D	MW-39	MW-39
ES ID	01/10/92	06/24/93	01/06/92	01/06/92	07/03/93	01/14/92	01/14/92
LAB ID	MW-37FRe	MW37	MW-38D	MW-38DFI	MW38D	MW-39	MW-39FRe
COMPOUND	182291	187342	152154	152197	186259	152505	152510
VOC's (624.2)							
Dichlorodifluoromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Chloromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Vinyl Chloride	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Bromomethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Chloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Trichlorofluoromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloroethene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Acetone	ug/L	NS	5 U	NS	NS	5 U	NS
Carbon Disulfide	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Methylene Chloride	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
trans-1,2-Dichloroethene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
2,2-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
cis-1,2-Dichloroethene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
2-Butanone	ug/L	NS	5 U	NS	NS	5 U	NS
Bromochloromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Chloroform	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1,1-Trichloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Carbon Tetrachloride	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Benzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Trichloroethene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Dibromomethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Bromodichloromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
cis-1,3-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
4-Methyl-2-Pentanone	ug/L	NS	5 U	NS	NS	5 U	NS
Toluene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
trans-1,3-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1,2-Trichloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Tetrachloroethene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,3-Dichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
2-Hexanone	ug/L	NS	5 U	NS	NS	5 U	NS
Dibromochloromethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dibromoethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Chlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1,1,2-Tetrachloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Ethylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Styrene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Bromoform	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Isopropylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Bromobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2,3-Trichloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
n-Propylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
2-Chlorotoluene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
4-Chlorotoluene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,3,5-Trimethylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
tert-Butylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2,4-Trimethylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
sec-Butylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,3-Dichlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,4-Dichlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
p-Isopropyltoluene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dichlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
n-Butylbenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2,4-Trichlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Hexachlorobutadiene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Naphthalene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
1,2,3-Trichlorobenzene	ug/L	NS	0.5 U	NS	NS	0.5 U	NS
Xylene (total)	ug/L	NS	0.5 U	NS	NS	0.5 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-37 01/10/82 MW-37File 182281	PHASE II WATER MW37 08/24/83 MW37 187342	PHASE I WATER MW-38D 01/08/82 MW-38D 182154	PHASE I WATER MW-38D 01/08/82 MW-38DFI 182197	PHASE II WATER MW38D 07/03/83 MW38D 188259	PHASE I WATER MW-38 01/14/82 MW-38 182805	PHASE I WATER MW-38 01/14/82 MW-38File 182810	
COMPOUND	UNITS							
SEMI-VOLATILES								
Phenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
bis(2-Chloroethyl) ether	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2-Chlorophenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
1,3-Dichlorobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
1,4-Dichlorobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzyl Alcohol	ug/L	NS	NS	12 U	NS	NS	11 U	NS
1,2-Dichlorobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2-Methylphenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
bis(2-Chloroisopropyl) ether	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Methylphenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
N-Nitroso-d-n-propylamine	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Hexachloroethane	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Nitrobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Isophorone	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2-Nitrophenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4-Dimethylphenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzoic acid	ug/L	NS	NS	60 U	NS	NS	66 U	NS
bis(2-Chloroethoxy) methane	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4-Dichlorophenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
1,2,4-Trichlorobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Naphthalene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Chloroaniline	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Hexachlorobutadiene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Chloro-3-methylphenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2-Methylnaphthalene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Hexachlorocyclopentadiene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4,6-Trichlorophenol	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4,6-Trichlorophenol	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
2-Chloronaphthalene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2-Nitroaniline	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
Dimethylphthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Acenaphthylene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,6-Dinitrotoluene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
3-Nitroaniline	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
Acenaphthene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4-Dinitrophenol	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
4-Nitrophenol	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
Dibenzofuran	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
2,4-Dinitrotoluene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Diethylphthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Chlorophenyl-phenylether	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Fluorene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Nitroaniline	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
4,6-Dinitro-2-methylphenol	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
N-Nitrosodiphenylamine (1)	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
4-Bromophenyl-phenylether	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Hexachlorobenzene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Pentachlorophenol	ug/L	NS	25 U	60 U	NS	25 U	66 U	NS
Phenanthrene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Anthracene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Carbazole	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Di-n-butylphthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Fluoranthene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Pyrene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Bis(4-benzyl)phthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
3,3'-Dichlorobenzidine	ug/L	NS	10 U	24 U	NS	10 U	22 U	NS
Benzo(a)anthracene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Chrysene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
bis(2-Ethylhexyl)phthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Di-n-octylphthalate	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzo(b)fluoranthene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzo(k)fluoranthene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzo(a)pyrene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Indeno(1,2,3-cd)pyrene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Dibenz(a,h)anthracene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS
Benzo(g,h,i)perylene	ug/L	NS	10 U	12 U	NS	10 U	11 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE I WATER MW-37 01/10/92 MW-37FRe 152291	PHASE II WATER MW37 08/24/93 MW37 187342	PHASE I WATER MW-38D 01/08/92 MW-38D 152154	PHASE I WATER MW-38D 01/08/92 MW-38DFR 152197	PHASE II WATER MW38D 07/03/93 MW38D 188259	PHASE I WATER MW-39 01/14/92 MW-39 152505	PHASE I WATER MW-39 01/14/92 MW-39FRe 152510	
COMPOUND	UNITS							
<b>PESTICIDES/PCBS</b>								
alpha-BHC	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
beta-BHC	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
delta-BHC	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
gamma-BHC (Lindane)	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
Heptachlor	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
Aldrin	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
Heptachlor epoxide	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
Endosulfan I	ug/L	NS	0.052 U	0.05 U	NS	0.06 U	0.066 U	NS
Dieldrin	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDE	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endrin	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endosulfan II	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDD	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endosulfan sulfate	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
4,4'-DDT	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Methoxychlor	ug/L	NS	0.52 U	0.5 U	NS	0.5 U	0.56 U	NS
Endrin ketone	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.11 U	NS
Endrin aldehyde	ug/L	NS	0.1 U	NS	NS	0.1 U	NS	NS
alpha-Chlordane	ug/L	NS	0.052 U	0.5 U	NS	0.06 U	0.56 U	NS
gamma-Chlordane	ug/L	NS	0.052 U	0.5 U	NS	0.06 U	0.56 U	NS
Toxaphene	ug/L	NS	5.2 U	1 U	NS	5 U	1.1 U	NS
Aroclor-1016	ug/L	NS	1 U	0.5 U	NS	1 U	0.56 U	NS
Aroclor-1221	ug/L	NS	2.1 U	0.5 U	NS	2 U	0.56 U	NS
Aroclor-1232	ug/L	NS	1 U	0.5 U	NS	1 U	0.56 U	NS
Aroclor-1242	ug/L	NS	1 U	0.5 U	NS	1 U	0.56 U	NS
Aroclor-1248	ug/L	NS	1 U	0.5 U	NS	1 U	0.56 U	NS
Aroclor-1254	ug/L	NS	1 U	1 U	NS	1 U	1.1 U	NS
Aroclor-1260	ug/L	NS	1 U	1 U	NS	1 U	1.1 U	NS
<b>HERBICIDES</b>								
2,4-D	ug/L	NS	1 U	1.1 U	NS	1 U	1 U	NS
2,4-DB	ug/L	NS	1 U	1.1 U	NS	1 U	1 U	NS
2,4,6-T	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS
2,4,6-TP (Silvex)	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS
Dalapon	ug/L	NS	2.3 U	2.5 U	NS	2.3 U	2.4 U	NS
Dicamba	ug/L	NS	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS
Dichloroprop	ug/L	NS	1 U	1.1 U	NS	1 U	1 U	NS
Dinoseb	ug/L	NS	0.5 U	0.5 U	NS	0.5 U	0.5 U	NS
MCPA	ug/L	NS	100 U	110 U	NS	100 U	100 U	NS
MCPP	ug/L	NS	100 U	110 U	NS	100 U	100 U	NS
<b>METALS</b>								
Aluminum	ug/L	24.5 U	637	2110	24.4 U	72.5 U	7930	24.5 U
Antimony	ug/L	53.2 U	49.7 UJ	55.6 U J	52.9 U	49.9 UJ	53.3 U	53.1 U
Arsenic	ug/L	3.5 U	1.4 UJ	3.5 U	3.5 U	1.4 UJ	3.5 U	3.5 U
Barium	ug/L	32.5 R	79.5 U	157 J	105 J	80.9 J	80.9 J	33.6 R
Beryllium	ug/L	2.4 R	0.89 U	2.1 R	2.6 R	0.8 U	2.6 R	1.3 R
Cadmium	ug/L	3 U	2.8 U	2.9 U	3 U	2.8 U	3.1 J	3 U
Calcium	ug/L	108000	115000	123000 J	93500	83500	97900	63500
Chromium	ug/L	6.2 U	2.7 UJ	6.6 J	6.1 U	2.7 UJ	12.5	6.2 U
Cobalt	ug/L	20.4 U	5.8 U	19.9 U	20.3 U	5.5 U	20.4 U	20.4 U
Copper	ug/L	10.2 U	5.4 J	14.4 U	10.1 U	4.7 U	33.3	10.2 U
Iron	ug/L	7 U	1090	3630	6.9 U	214	11400	7 U
Lead	ug/L	1.2 U	0.8 U	4.1	1.2 U	0.79 U	2.3 J	1.2 U
Magnesium	ug/L	17900	16100	16700 J	18400	16900	15500	12400
Manganese	ug/L	84.9	129	508	130	174	229	21
Mercury	ug/L	0.11 R	0.09 UJ	0.15 R	0.11 R	0.09 UJ	0.1 R	0.09 R
Nickel	ug/L	14.8 U	7.4 UJ	18.9 U	14.7 U	7.5 UJ	21.1 J	14.7 U
Potassium	ug/L	1330 J	1160 J	4960 J	4830 J	3220 J	3720 J	1770 J
Selenium	ug/L	1 U	1 UJ	1 U	1 J	1.5 UJ	1.3 U	1 U
Silver	ug/L	3.4 U	5.5 U	9 U	3.4 U	5.5 U	3.4 U	3.6 R
Sodium	ug/L	11200	15000	5460 J	5540	3750 J	15100	14000
Thallium	ug/L	3.2 U	2.6 U	3.2 U	3.2 U	2.8 U	3.2 U	3.2 U
Vanadium	ug/L	8.5 U	8.8 UJ	30.4 U	9.4 U	8.5 UJ	13.3 J	9.5 U
Zinc	ug/L	8.5 U	7.4 R	17.7 R	8.4 U	3.4 J	33.8 R	8.5 U
Cyanide	ug/L	NS	10 UJ	10 U J	NS	10 UJ	10 U	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW39 08/23/93 MW39 187232	PHASE I WATER MW-40 01/09/92 MW-40 182155	PHASE I WATER MW-40 01/09/92 MW-40F11e 152198	PHASE II WATER MW40 07/01/93 MW40 188128	PHASE I WATER MW-41D 01/13/92 MW-41D 152409	PHASE I WATER MW-41D 01/13/92 MW-41DRI 152409	PHASE II WATER MW41D 08/22/93 MW41D 187084	
COMPOUND UNITS								
Chloromethane	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Bromomethane	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Vinyl Chloride	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Chloroethane	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Methylene Chloride	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Acetone	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Carbon Disulfide	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,1-Dichloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,1-Dichloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,2-Dichloroethane (total)	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Chloroform	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,2-Dichloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
2-Butanone	ug/L	NS	10 U	NS	NS	10 U	NS	NS
1,1,1-Trichloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Carbon Tetrachloride	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Vinyl Acetate	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Bromodichloromethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,2-Dichloropropane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
cis-1,3-Dichloropropene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Trichloroethene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Dibromochloromethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,1,2-Trichloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Benzene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
trans-1,3-Dichloropropene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Bromoform	ug/L	NS	5 U	NS	NS	5 U	NS	NS
4-Methyl-2-Pentanone	ug/L	NS	10 U	NS	NS	10 U	NS	NS
2-Hexanone	ug/L	NS	10 U	NS	NS	10 U	NS	NS
Tetrachloroethene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Toluene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Chlorobenzene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Ethylbenzene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Styrene	ug/L	NS	5 U	NS	NS	5 U	NS	NS
Xylene (total)	ug/L	NS	5 U	NS	NS	5 U	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE II WATER MW38 06/23/93 MW39 157232	PHASE I WATER MW-40 01/09/92 MW-40 152155	PHASE I WATER MW-40 01/09/92 MW-40FIR 152198	PHASE II WATER MW40 07/01/93 MW40 188126	PHASE I WATER MW-41D 01/13/92 MW-41D 152409	PHASE I WATER MW-41D 01/13/92 MW-41DRI 152409	PHASE II WATER MW41D 06/22/93 MW41D 187064	
VOC's (504.2)								
Dichlorodifluoromethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Chloromethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Vinyl Chloride	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Bromomethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Chloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Trichloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1-Dichloroethene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Acetone	ug/L	5 U	NS	NS	5 U	NS	NS	5 U
Carbon Disulfide	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Methylene Chloride	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
trans-1,2-Dichloroethene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1-Dichloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
2,2-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
cis-1,2-Dichloroethene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
2-Butanone	ug/L	5 U	NS	NS	5 U	NS	NS	5 U
Bromochloromethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Chloroform	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1,1-Trichloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Carbon Tetrachloride	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Benzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2-Dichloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Trichloroethene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Dibromomethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Bromodichloromethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
cis-1,3-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
4-Methyl-2-Pentanone	ug/L	5 U	NS	NS	5 U	NS	NS	5 U
Toluene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
trans-1,3-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1,2-Trichloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Tetrachloroethene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,3-Dichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
2-Hexanone	ug/L	5 U	NS	NS	5 U	NS	NS	5 U
Dibromochloromethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2-Dibromoethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Chlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1,1,2-Tetrachloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Ethylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Styrene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Bromoform	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Isopropylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Bromobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2,3-Trichloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
n-Propylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
2-Chlorotoluene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
4-Chlorotoluene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,3,5-Trimethylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
tert-Butylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2,4-Trimethylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
sec-Butylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,3-Dichlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,4-Dichlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
p-Isopropyltoluene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2-Dichlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
n-Butylbenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2-Dibromo-3-Chloropropane	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2,4-Trichlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Hexachlorobutadiene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Naphthalene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
1,2,3-Trichlorobenzene	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U
Xylene (total)	ug/L	0.5 U	NS	NS	0.5 U	NS	NS	0.5 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW39 06/23/93 MW39 187232	PHASE I WATER MW-40 01/09/92 MW-40 182156	PHASE I WATER MW-40 01/09/92 MW-40FIRE 152196	PHASE II WATER MW40 07/01/93 MW40 188126	PHASE I WATER MW-41D 01/13/92 MW-41D 152409	PHASE I WATER MW-41D 01/13/92 MW-41DRI 152409	PHASE II WATER MW41D 06/22/93 MW41D 187064	
COMPOUND UNITS								
SEMI-VOLATILES								
Phenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
bis(2-Chloroethyl) ether	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2-Chlorophenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
1,3-Dichlorobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
1,4-Dichlorobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzyl Alcohol	ug/L	NS	11 U	NS	NS	10 U	NS	NS
1,2-Dichlorobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2-Methylphenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
bis(2-Chloropropyl) ether	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Methylphenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
N-Nitrosod-n-propylamine	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Hexachloroethane	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Nitrobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Isophorone	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2-Nitrophenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4-Dimethylphenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzic acid	ug/L	NS	56 U	NS	NS	82 U	NS	NS
bis(2-Chloroethoxy) methane	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4-Dichlorophenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
1,2,4-Trichlorobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Naphthalene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Chloroaniline	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Hexachlorobutadiene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Chloro-3-methylphenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2-Methylnaphthalene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Hexachlorocyclopentadiene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4,6-Trichlorophenol	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4,6-Trichlorophenol	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
2-Chloronaphthalene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2-Nitroaniline	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
Dimethylphthalate	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Acenaphthylene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,6-Dinitrotoluene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
3-Nitroaniline	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
Acenaphthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4-Dinitrophenol	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
4-Nitrophenol	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
Dibenzofuran	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
2,4-Dinitrotoluene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Diethylphthalate	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Chlorophenyl-phenylether	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Fluorene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Nitroaniline	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
4,6-Dinitro-2-methylphenol	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
N-Nitrosodiphenylamine (1)	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
4-Bromophenyl-phenylether	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Hexachlorobenzene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Pentachlorophenol	ug/L	26 U	56 U	NS	26 U	82 U	NS	26 U
Phenanthrene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Anthracene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Carbazole	ug/L	10 U	NS	NS	10 U	NS	NS	10 U
Di-n-butylphthalate	ug/L	4 J	11 U	NS	10 U	10 U	NS	4 J
Fluoranthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Pyrene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Butylbenzylphthalate	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
3,3'-Dichlorobenzidine	ug/L	10 U	22 U	NS	10 U	21 U	NS	10 U
Benzofluoranthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Chrysene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
bis(2-Ethylhexyl)phthalate	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Di-n-octylphthalate	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzofluoranthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzok(1)fluoranthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzok(2)fluoranthene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzok(3)pyrene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Dibenz(a,h)anthracene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U
Benzog(1,2,3)perylene	ug/L	10 U	11 U	NS	10 U	10 U	NS	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE I	PHASE I	PHASE II	PHASE I	PHASE I	PHASE II
		WATER MW38 08/23/83 MW38 187232	WATER MW-40 01/09/82 MW-40 182185	WATER MW-40 01/09/82 MW-40FIR 182198	WATER MW40 07/01/83 MW40 188126	WATER MW-41D 01/13/82 MW-41D 182409	WATER MW-41D 01/13/82 MW-41DRI 182409	WATER MW41D 08/22/83 MW41D 187064
<b>PESTICIDES/PCBS</b>								
alpha-BHC	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
beta-BHC	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
delta-BHC	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
gamma-BHC (lindane)	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
Heptachlor	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
Aldrin	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
Heptachlor epoxide	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
Endosulfan I	ug/L	0.06 U	0.06 U	NS	0.06 U	0.067 U R	0.071 U J	0.06 U
Dieldrin	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
4,4'-DDE	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
Endrin	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
Endosulfan II	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
4,4'-DDD	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
Endosulfan sulfate	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
4,4'-DDT	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
Methoxychlor	ug/L	0.8 U	0.8 U	NS	0.8 U	0.87 U R	0.71 U J	0.8 U
Endrin ketone	ug/L	0.1 U	0.1 U	NS	0.1 U	0.11 U R	0.14 U J	0.1 U
Endrin aldehyde	ug/L	0.1 U	NS	NS	0.1 U	NS	NS	0.1 U
alpha-Chlordane	ug/L	0.06 U	0.5 U	NS	0.06 U	0.67 U R	0.71 U J	0.06 U
gamma-Chlordane	ug/L	0.06 U	0.5 U	NS	0.06 U	0.67 U R	0.71 U J	0.06 U
Toxaphene	ug/L	8 U	1 U	NS	8 U	1.1 U R	1.4 U J	8 U
Aroclor-1016	ug/L	1 U	0.8 U	NS	1 U	0.87 U R	0.71 U J	1 U
Aroclor-1221	ug/L	2 U	0.8 U	NS	2 U	0.87 U R	0.71 U J	2 U
Aroclor-1232	ug/L	1 U	0.5 U	NS	1 U	0.87 U R	0.71 U J	1 U
Aroclor-1242	ug/L	1 U	0.5 U	NS	1 U	0.87 U R	0.71 U J	1 U
Aroclor-1248	ug/L	1 U	0.5 U	NS	1 U	0.87 U R	0.71 U J	1 U
Aroclor-1254	ug/L	1 U	1 U	NS	1 U	1.1 U R	1.4 U J	1 U
Aroclor-1260	ug/L	1 U	1 U	NS	1 U	1.1 U R	1.4 U J	1 U
<b>HERBICIDES</b>								
2,4-D	ug/L	1 U	1 U	NS	1 U	1 U	NS	1 U
2,4-DB	ug/L	1 U	1 U	NS	1 U	1 U	NS	1 U
2,4,6-T	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
2,4,6-TP (Silvex)	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
Dalapon	ug/L	2.3 U	2.3 U	NS	2.3 U	2.3 U	NS	2.3 U
Dicamba	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	NS	0.1 U
Dichloroprop	ug/L	1 U	1 U	NS	1 U	1 U	NS	1 U
Dinoseb	ug/L	0.8 U	0.5 U	NS	0.8 U	0.8 U	NS	0.8 U
MCPA	ug/L	100 U	100 U	NS	100 U	100 U	NS	100 U
MCPP	ug/L	100 U	100 U	NS	100 U	100 U	NS	100 U
<b>METALS</b>								
Aluminum	ug/L	72.8 U	2730	24.8 U	972	148 J	NS	72 U
Antimony	ug/L	48.9 UJ	86 U J	53.4 U	48.9 UJ	77.3 R	NS	48.5 UJ
Arsenic	ug/L	1.4 UJ	3.8 U	3.8 U	1.4 UJ	3.6 U	NS	1.4 UJ
Barium	ug/L	40 J	77.8 J	32.4 R	88 J	97 J	NS	67.9 J
Beryllium	ug/L	0.9 U	2.1 R	2.6 R	0.8 U	1.9 R	NS	0.89 U
Cadmium	ug/L	2.8 U	2.9 U	3 U	3.3 J	2.9 U	NS	2.8 U
Calcium	ug/L	10000	154000 J	101000	115000	48900 J	NS	39200
Chromium	ug/L	2.7 UJ	19.7	8.2 U	4.2 J	6.2 U	NS	2.7 UJ
Cobalt	ug/L	6.8 U	20 U	20.8 U	6.8 U	19.9 U	NS	6.4 U
Copper	ug/L	4.7 U	14.8 U	10.2 U	4.7 U	14.4 U	NS	4.7 U
Iron	ug/L	28.2 U	8040	7 U	1380	388 R	NS	128
Lead	ug/L	0.8 U	2.1 J	1.2 U	0.8 U	1.2 U	NS	0.8 U
Magnesium	ug/L	14100	14300	13800	13000	17300 R	NS	14700
Manganese	ug/L	29.8	831	484	77.9	113	NS	43.7
Mercury	ug/L	0.08 UJ	0.14 R	0.1 R	0.08 UJ	0.12 R	NS	0.09 UJ
Nickel	ug/L	7.8 UJ	18 U	14.8 U	7.8 UJ	15.9 U	NS	7.4 UJ
Potassium	ug/L	2420 J	2610 J	2610 J	2260 J	2530 J	NS	2210 J
Selenium	ug/L	1 UJ	1 U	1 U	1.8 J	1 U	NS	1 UJ
Silver	ug/L	8 U	8.1 U	8.4 U	8.8 U	8.1 U	NS	8.4 U
Sodium	ug/L	10800	7540 J	7270	16800	77800 J	NS	91000
Thallium	ug/L	2.8 U	3.2 U	3.2 U	2.8 U	3.2 U	NS	2.6 U
Vanadium	ug/L	6.8 UJ	30.8 U	9.8 U	6.8 UJ	30.8 U	NS	6.7 UJ
Zinc	ug/L	7 J	34.1 R	8.6 U	16.7 J	13.4 U	NS	13.9 J
Cyanide	ug/L	10 UJ	10 U J	NS	10 UJ	10 U J	NS	10 UJ



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I	PHASE I	PHASE I	PHASE II	PHASE II	PHASE II	PHASE II
		WATER MW-42D 01/13/92 MW-42D 182410	WATER MW-42D 01/13/92 MW-42DRE(4) 152410	WATER MW-42D 01/13/92 MW-42DFII 152430	WATER MW42D 06/23/93 MW42D 187233	WATER MW-43 06/30/93 MW-43 187932	WATER MW44 07/15/93 MW44 189108	WATER MW45 07/15/93 MW45 189108
Chloromethane	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
Bromomethane	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
Vinyl Chloride	ug/L	10 U	NS	NS	NS	10 U	22000	10 U
Chloroethane	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
Methylene Chloride	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Acetone	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
Carbon Disulfide	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
1,1-Dichloroethane	ug/L	5 U	NS	NS	NS	10 U	200 J	10 U
1,1-Dichloroethane	ug/L	5 U	NS	NS	NS	10 U	180 J	10 U
1,2-Dichloroethane (total)	ug/L	5 U	NS	NS	NS	10 U	73000	10 U
Chloroform	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
1,2-Dichloroethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
2-Butanone	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
1,1,1-Trichloroethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Carbon Tetrachloride	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Vinyl Acetate	ug/L	10 U	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
1,2-Dichloropropane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
cis-1,3-Dichloropropene	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Trichloroethene	ug/L	5 U	NS	NS	NS	10 U	37000	10 U
Dibromochloromethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
1,1,2-Trichloroethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Benzene	ug/L	5 U	NS	NS	NS	10 U	170 J	10 U
trans-1,3-Dichloropropene	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Bromoform	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
4-Methyl-2-Pentanone	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
2-Hexanone	ug/L	10 U	NS	NS	NS	10 U	710 U	10 U
Tetrachloroethene	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
1,1,2,2-Tetrachloroethane	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Toluene	ug/L	5 U	NS	NS	NS	10 U	880	10 U
Chlorobenzene	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Ethylbenzene	ug/L	5 U	NS	NS	NS	10 U	130 J	10 U
Styrene	ug/L	5 U	NS	NS	NS	10 U	710 U	10 U
Xylene (total)	ug/L	5 U	NS	NS	NS	10 U	590 J	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND	PHASE I WATER MW-42D 01/13/92 MW-42D 182410	PHASE I WATER MW-42D 01/13/92 MW-42DRE(4) 182410	PHASE I WATER MW-42D 01/13/92 MW-42DFII 182430	PHASE II WATER MW42D 06/23/93 MW42D 187233	PHASE II WATER MW-43 08/30/93 MW-43 187932	PHASE II WATER MW44 07/15/93 MW44 189108	PHASE II WATER MW45 07/15/93 MW45 189108
VOC's (624.2)							
Dichlorodifluoromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Chloromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Vinyl Chloride	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Bromomethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Chloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Trichlorofluoromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1-Dichloroethene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Acetone	ug/L NS	NS	NS	8 U	NS	NS	NS
Carbon Disulfide	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Methylene Chloride	ug/L NS	NS	NS	0.8 U	NS	NS	NS
trans-1,2-Dichloroethene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1-Dichloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
2,2-Dichloropropane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
cis-1,2-Dichloroethene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
2-Butanone	ug/L NS	NS	NS	8 U	NS	NS	NS
Bromochloromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Chloroform	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1,1-Trichloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Carbon Tetrachloride	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1-Dichloropropene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Benzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2-Dichloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Trichloroethene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2-Dichloropropane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Dibromomethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Bromodichloromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
cis-1,3-Dichloropropene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
4-Methyl-2-Pentanone	ug/L NS	NS	NS	8 U	NS	NS	NS
Toluene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
trans-1,3-Dichloropropene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1,2-Trichloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Tetrachloroethene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,3-Dichloropropane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
2-Hexanone	ug/L NS	NS	NS	8 U	NS	NS	NS
Dibromochloromethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2-Dibromoethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Chlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1,2-Tetrachloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Ethylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Styrene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Bromoform	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Isopropylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Bromobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,1,2,2-Tetrachloroethane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2,3-Trichloropropane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
n-Propylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
2-Chlorotoluene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
4-Chlorotoluene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,3,5-Trimethylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
tert-Butylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2,4-Trimethylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
sec-Butylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,3-Dichlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,4-Dichlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
p-Isopropyltoluene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2-Dichlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
n-Butylbenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2,4-Trichlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Hexachlorobutadiene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Naphthalene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
1,2,3-Trichlorobenzene	ug/L NS	NS	NS	0.8 U	NS	NS	NS
Xylene (total)	ug/L NS	NS	NS	0.8 U	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	PHASE I WATER	PHASE I WATER	PHASE I WATER	PHASE II WATER	PHASE II WATER	PHASE II WATER	PHASE II WATER
DATE	MW-42D	MW-42D	MW-42D	MW42D	MW-43	MW44	MW45
ES ID	MW-42D	MW-42DRE(4)	MW-42DF1	MW42D	MW-43	MW44	MW45
LAB ID	182410	182410	182430	187233	187932	189108	189108
COMPOUND	UNITS						
SEMI-VOLATILES							
Phenol	ug/L	10 U	NS	NS	10 U	10 U	6 J
bis(2-Chloroethyl) ether	ug/L	10 U	NS	NS	10 U	10 U	10 U
2-Chlorophenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
1,3-Dichlorobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
1,4-Dichlorobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzyl Alcohol	ug/L	10 U	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
2-Methylphenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
bis(2-Chloroisopropyl) ether	ug/L	10 U	NS	NS	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	NS	NS	10 U	10 U	4 J
N-Nitrosodimethylamine	ug/L	10 U	NS	NS	10 U	10 U	10 U
Hexachloroethane	ug/L	10 U	NS	NS	10 U	10 U	10 U
Nitrobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Isophorone	ug/L	10 U	NS	NS	10 U	10 U	10 U
2-Nitrophenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4-Dimethylphenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzoic acid	ug/L	82 U	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Naphthalene	ug/L	10 U	NS	NS	10 U	10 U	66 J
4-Chloroaniline	ug/L	10 U	NS	NS	10 U	10 U	10 U
Hexachlorobutadiene	ug/L	10 U	NS	NS	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
2-Methylnaphthalene	ug/L	10 U	NS	NS	10 U	12 J	10 U
Hexachlorocyclopentadiene	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4,6-Trichlorophenol	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4,6-Trichlorophenol	ug/L	82 U	NS	NS	26 U	26 U	26 U
2-Chloronaphthalene	ug/L	10 U	NS	NS	10 U	10 U	10 U
2-Nitroaniline	ug/L	82 U	NS	NS	26 U	26 U	26 U
Dimethylphthalate	ug/L	10 U	NS	NS	10 U	10 U	10 U
Acenaphthylene	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,6-Dinitrotoluene	ug/L	10 U	NS	NS	10 U	10 U	10 U
3-Nitroaniline	ug/L	82 U	NS	NS	26 U	26 U	26 U
Acenaphthene	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	82 U	NS	NS	26 U	26 U	26 U
4-Nitrophenol	ug/L	82 U	NS	NS	26 U	26 U	26 U
Dibenzofuran	ug/L	10 U	NS	NS	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Diethylphthalate	ug/L	10 U	NS	NS	10 U	10 U	1 J
4-Chlorophenyl-phenylether	ug/L	10 U	NS	NS	10 U	10 U	10 U
Fluorene	ug/L	10 U	NS	NS	10 U	10 U	10 U
4-Nitroaniline	ug/L	82 U	NS	NS	26 U	26 U	26 U
4,6-Dinitro-2-methylphenol	ug/L	82 U	NS	NS	26 U	26 U	26 U
N-Nitrosodimethylamine (1)	ug/L	10 U	NS	NS	10 U	10 U	10 U
4-Bromophenyl-phenylether	ug/L	10 U	NS	NS	10 U	10 U	10 U
Hexachlorobenzene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Pentachlorophenol	ug/L	82 U	NS	NS	26 U	26 U	64 J
Phenanthrene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Anthracene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Carbazole	ug/L	NS	NS	NS	10 U	10 U	10 U
Di-n-butylphthalate	ug/L	10 U	NS	NS	10 U	2 J	2 J
Fluoranthene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Pyrene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Butylbenzylphthalate	ug/L	10 U	NS	NS	10 U	10 U	10 U
3,3'-Dichlorobenzidine	ug/L	21 U	NS	NS	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Chrysene	ug/L	10 U	NS	NS	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	10 U	NS	NS	14 U	13 U	10 U
Di-n-octylphthalate	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzo(b)fluoranthene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzo(k)fluoranthene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzo(a)pyrene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	10 U	NS	NS	10 U	10 U	10 U
Benzo(g,h,i)perylene	ug/L	10 U	NS	NS	10 U	10 U	10 U

SENECA ARMY DEP OT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE I WATER MW-42D 01/13/92 MW-42D 162410	PHASE I WATER MW-42D 01/13/92 MW-42DRE(4) 162410	PHASE I WATER MW-42D 01/13/92 MW-42DFI 162430	PHASE II WATER MW42D 06/23/93 MW42D 167233	PHASE II WATER MW-43 06/30/93 MW-43 167932	PHASE II WATER MW44 07/15/93 MW44 169106	PHASE II WATER MW46 07/15/93 MW46 169106
<b>PESTICIDES/PCBS</b>								
alpha-BHC	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
beta-BHC	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
delta-BHC	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
gamma-BHC (Lindane)	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
Heptachlor	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
Aldrin	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
Heptachlor epoxide	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
Endosulfan I	ug/L	0.063 U R	0.062 U J	NS	0.06 U	0.06 U	0.056 U	0.06 U
Dieldrin	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
4,4'-DDE	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
Endrin	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
Endosulfan II	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
4,4'-DDD	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
Endosulfan sulfate	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
4,4'-DDE	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
Methoxychlor	ug/L	0.63 U R	0.62 U J	NS	0.6 U	0.6 U	0.56 U	0.6 U
Endrin ketone	ug/L	0.11 U R	0.1 U J	NS	0.1 U	0.1 U	0.11 U	0.1 U
Endrin aldehyde	ug/L	NS	NS	NS	0.1 U	0.1 U	0.11 U	0.1 U
alpha-Chlordane	ug/L	0.63 U R	0.62 U J	NS	0.6 U	0.6 U	0.56 U	0.6 U
gamma-Chlordane	ug/L	0.63 U R	0.62 U J	NS	0.6 U	0.6 U	0.56 U	0.6 U
Toxaphene	ug/L	1.1 U R	1 U J	NS	8 U	8 U	8 U	8 U
Aroclor-1016	ug/L	0.63 U R	0.62 U J	NS	1 U	1 U	1.1 U	1 U
Aroclor-1221	ug/L	0.63 U R	0.62 U J	NS	2 U	2 U	2.3 U	2 U
Aroclor-1232	ug/L	0.63 U R	0.62 U J	NS	1 U	1 U	1.1 U	1 U
Aroclor-1242	ug/L	0.63 U R	0.62 U J	NS	1 U	1 U	1.1 U	1 U
Aroclor-1248	ug/L	0.63 U R	0.62 U J	NS	1 U	1 U	1.1 U	1 U
Aroclor-1254	ug/L	1.1 U R	1 U J	NS	1 U	1 U	1.1 U	1 U
Aroclor-1260	ug/L	1.1 U R	1 U J	NS	1 U	1 U	1.1 U	1 U
<b>HERBICIDES</b>								
2,4-D	ug/L	1.2 U	NS	NS	1 U	1 U	1.2 U	1.1 U
2,4-DB	ug/L	1.2 U	NS	NS	1 U	1 U	1.2 U	1.1 U
2,4,5-T	ug/L	0.1 U	NS	NS	0.1 U	0.1 U	0.12 U	0.11 U
2,4,5-TP (Silvex)	ug/L	0.1 U	NS	NS	0.1 U	0.1 U	0.12 U	0.11 U
Dalapon	ug/L	2.7 U	NS	NS	2.3 U	2.3 U	2.7 U	2.4 U
Dicamba	ug/L	0.1 U	NS	NS	0.1 U	0.1 U	0.12 U	0.11 U
Dichloroprop	ug/L	1.2 U	NS	NS	1 U	1 U	1.2 U	1.1 U
Dinoseb	ug/L	0.6 U	NS	NS	0.6 U	0.6 U	0.58 U	0.61 U
MCPA	ug/L	120 U	NS	NS	100 U	100 U	120 U	110 U
MCPP	ug/L	120 U	NS	NS	100 U	100 U	120 U	110 U
<b>METALS</b>								
Aluminum	ug/L	209	NS	24.8 U	72.8 U	62700	12300 J	21300 J
Antimony	ug/L	66.6 U J	NS	63.2 U	49.8 UJ	49.8 UJ	49.7 U	49.6 U
Arsenic	ug/L	3.6 U	NS	3.8 U	1.4 UJ	1.4 UJ	7.8 J	2.7 J
Barium	ug/L	112 J	NS	96.3 J	96 J	358	317	243
Beryllium	ug/L	2.1 R	NS	2.6 R	0.9 U	2.6 J	1.5 J	1.6 J
Cadmium	ug/L	2.8 U	NS	3 U	2.8 U	2.8 U	2.8 U	2.8 U
Calcium	ug/L	67300 J	NS	66000	66200	403000	370000	161000
Chromium	ug/L	8.7 J	NS	8.9 U	2.7 UJ	96.2 J	18.2 J	29.1 J
Cobalt	ug/L	19.9 U	NS	20.4 U	6.6 U	36.1 J	22.5 J	26.3 J
Copper	ug/L	14.4 U	NS	10.2 U	4.7 U	61.4	12.9 J	8.7 J
Iron	ug/L	683 R	NS	7 U	106	66500	18500 J	30100 J
Lead	ug/L	1.2 U	NS	1.2 U	0.79 U	21.9	147	6.8
Magnesium	ug/L	26200 J	NS	32800	30100	36100	41100	22100
Manganese	ug/L	169	NS	112	66	2280	7120	1010
Mercury	ug/L	0.15 R	NS	0.12 R	0.09 UJ	0.35 J	0.38	0.18 J
Nickel	ug/L	16.8 U	NS	14.8 U	7.6 UJ	107 J	30.8 J	46.3 J
Potassium	ug/L	9470	NS	11200	2960 J	10300	6660	6220
Selenium	ug/L	1 U	NS	1 U	0.99 UJ	8 UJ	10 UJ	0.99 UJ
Silver	ug/L	9 U	NS	4.4 R	6.8 U	6.5 U	6.5 U	6.5 U
Sodium	ug/L	18700 J	NS	18700	17200	11900	37600	6420
Thallium	ug/L	3.2 U	NS	3.2 U	2.6 U	2.6 U	26.9 U	2.6 U
Vanadium	ug/L	30.3 U	NS	6.6 U	6.8 UJ	73.4 J	13.3 J	26.2 J
Zinc	ug/L	13.4 U	NS	6.6 U	4.9 J	223	117 J	116 J
Cyanide	ug/L	10 U J	NS	NS	10 UJ	10 UJ	4.3 J	1.3 J

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II
		WATER	WATER	WATER	WATER	WATER	WATER	WATER
		MW46	MW47	MW47RE	MW48	MW48D	MW50D	MW51D
		07/14/83	07/10/83	07/10/83	07/15/83	07/14/83	07/14/83	07/10/83
		189023	188722	188722	189109	189026	189026	188723
Chloromethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Bromomethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Vinyl Chloride	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Chloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Methylene Chloride	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Acetone	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Carbon Disulfide	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,1-Dichloroethene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,1-Dichloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	ug/L	120	10 U	NS	10 U	10 U	10 U	10 U
Chloroform	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,2-Dichloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
2-Butanone	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Carbon Tetrachloride	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Vinyl Acetate	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,2-Dichloropropane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Trichloroethene	ug/L	47	10 U	NS	10 U	10 U	10 U	10 U
Dibromochloromethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Benzene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	8 J
trans-1,3-Dichloropropene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Bromoform	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Tetrachloroethene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Tolujene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Chlorobenzene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Ethylbenzene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Styrene	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U
Xylene (total)	ug/L	10 U	10 U	NS	10 U	10 U	10 U	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II
		WATER MW46 07/14/93 MW46 189023	WATER MW47 07/10/93 MW47 188722	WATER MW47RE 07/10/93 MW47RE 188722	WATER MW46 07/15/93 MW46 189109	WATER MW49D 07/14/93 MW49D 189025	WATER MW50D 07/14/93 MW50D 189026	WATER MW51D 07/10/93 MW51D 189723
VOC's (B24.2)								
Dichlorodifluoromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Chloromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Vinyl Chloride	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromomethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Chloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Acetone	ug/L	NS	NS	NS	NS	NS	NS	NS
Carbon Disulfide	ug/L	NS	NS	NS	NS	NS	NS	NS
Methylene Chloride	ug/L	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS	NS
2-Butanone	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromochloromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Chloroform	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
Benzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
Dibromomethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	ug/L	NS	NS	NS	NS	NS	NS	NS
Toluene	ug/L	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	ug/L	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
Ethylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
Styrene	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromoform	ug/L	NS	NS	NS	NS	NS	NS	NS
Isopropylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
Bromobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
2-Chloroluene	ug/L	NS	NS	NS	NS	NS	NS	NS
4-Chloroluene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	ug/L	NS	NS	NS	NS	NS	NS	NS
Naphthalene	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS	NS
Xylene (total)	ug/L	NS	NS	NS	NS	NS	NS	NS



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW48 07/14/93 MW46 189023	PHASE II WATER MW47 07/10/93 MW47 186722	PHASE II WATER MW47RE 07/10/93 MW47RE 186722	PHASE II WATER MW48 07/18/93 MW48 189109	PHASE II WATER MW49D 07/14/93 MW48D 189025	PHASE II WATER MW50D 07/14/93 MW50D 189026	PHASE II WATER MW51D 07/10/93 MW51D 186723
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>PESTICIDES/PCBS</b>							
alpha-BHC	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
beta-BHC	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
delta-BHC	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
gamma-BHC (Lindane)	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Heptachlor	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Aldrin	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Heptachlor epoxide	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Endosulfan I	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Dieldrin	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
4,4'-DDE	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Endrin	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Endosulfan II	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
4,4'-DDD	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Endosulfan sulfate	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
4,4'-DDT	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Methoxychlor	ug/L	0.6 U	0.62 U	NS	0.6 U	0.6 U	0.6 U
Endrin ketone	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Endrin aldehyde	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
alpha-Chlordane	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
gamma-Chlordane	ug/L	0.06 U	0.062 U	NS	0.06 U	0.06 U	0.06 U
Toxaphene	ug/L	8 U	8.2 U	NS	8 U	8 U	8 U
Aroclor-1018	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Aroclor-1221	ug/L	2 U	2 U	NS	2 U	2 U	2 U
Aroclor-1232	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Aroclor-1242	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Aroclor-1248	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Aroclor-1254	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Aroclor-1260	ug/L	1 U	1 U	NS	1 U	1 U	1 U
<b>HERBICIDES</b>							
2,4-D	ug/L	1 U	1 U	NS	1 U	1 U	1 U
2,4-DB	ug/L	1 U	1 U	NS	1 U	1 U	1 U
2,4,5-T	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
2,4,5-TP (Silvex)	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Dalapon	ug/L	2.3 U	2.3 U	NS	2.3 U	2.3 U	2.3 U
Dicamba	ug/L	0.1 U	0.1 U	NS	0.1 U	0.1 U	0.1 U
Dichloroprop	ug/L	1 U	1 U	NS	1 U	1 U	1 U
Dinoseb	ug/L	0.5 U	0.5 U	NS	0.5 U	0.5 U	0.5 U
MCPA	ug/L	100 U	100 U	NS	100 U	100 U	100 U
MCPP	ug/L	100 U	100 U	NS	100 U	100 U	100 U
<b>METALS</b>							
Aluminum	ug/L	55300	17900	NS	22700 J	82.9 J	81.6 J
Antimony	ug/L	49.7 U	49.6 UJ	NS	49.5 U	53.6 R	49.7 R
Arsenic	ug/L	3.1 J	1.7 J	NS	3.9 J	1.4 U	1.4 UJ
Barium	ug/L	813	214	NS	268	96 J	65.9 J
Beryllium	ug/L	2.6 J	0.89 UJ	NS	1.8 J	0.9 U	0.89 UJ
Cadmium	ug/L	2.8 U	2.8 U	NS	2.8 U	2.8 U	2.8 U
Calcium	ug/L	459000	153000	NS	202000	86900	45900
Chromium	ug/L	68.4	27.6 J	NS	36.2 J	2.7 U	2.7 UJ
Cobalt	ug/L	36.7 J	11.2 J	NS	27.9 J	5.5 U	5.5 U
Copper	ug/L	49.8	18 J	NS	14.4 J	8 J	7 J
Iron	ug/L	85800 J	23400	NS	34700 J	719 J	112 J
Lead	ug/L	23	8.3	NS	22	0.59 U	0.6 U
Magnesium	ug/L	43800	16700	NS	25600	20500	20600
Manganese	ug/L	2770	614	NS	1230	96.9	72.2
Mercury	ug/L	0.41 J	0.09 UJ	NS	2.5	0.09 UJ	0.09 UJ
Nickel	ug/L	101	90 J	NS	80 J	7.6 U	7.4 U
Potassium	ug/L	11800	4730 J	NS	5520	2520 J	2600 J
Selenium	ug/L	2.9 J	1.5 UJ	NS	10 UJ	1.5 U	1.5 UJ
Silver	ug/L	7.2 J	5.5 U	NS	5.5 U	5.5 U	5.5 U
Sodium	ug/L	11700	11000	NS	10400	12200	21100
Thallium	ug/L	2.6 U	2.6 U	NS	2.6 U	2.6 U	2.6 U
Vanadium	ug/L	81.9	27.3 J	NS	29.4 J	6.8 U	6.7 U
Zinc	ug/L	240	59.2 R	NS	148 J	22.3	23.4
Cyanide	ug/L	1.2 U	4.4 UJ	NS	1.2 U	1.7 J	1.4 J



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW61DRE 07/10/93 MW61DRE 188723	PHASE II WATER MW62D 07/02/93 MW62D 188152	PHASE II WATER MW63 07/13/93 MW63 188602	PHASE II WATER MW63 RE 07/11/93 MW63 RE 188602R1	PHASE II WATER MW64D 07/13/93 MW64D 188603	PHASE II WATER MW65D 07/18/93 MW65D 189110	PHASE II WATER MW66 07/02/93 MW66 188153
COMPOUND UNITS							
Chloromethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Bromomethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Vinyl Chloride	ug/L	NS	10 U	10 U	NS	10 U	10 U
Chloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Methylene Chloride	ug/L	NS	10 U	10 U	NS	10 U	10 U
Acetone	ug/L	NS	10 U	10 U	NS	10 U	10 U
Carbon Disulfide	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,1-Dichloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,1-Dichloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,2-Dichloroethane (total)	ug/L	NS	10 U	81	NS	10 U	10 U
Chloroform	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,2-Dichloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
2-Butanone	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,1,1-Trichloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Carbon Tetrachloride	ug/L	NS	10 U	10 U	NS	10 U	10 U
Vinyl Acetate	ug/L	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,2-Dichloropropane	ug/L	NS	10 U	10 U	NS	10 U	10 U
cis-1,3-Dichloropropene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Trichloroethene	ug/L	NS	10 U	4 J	NS	10 U	10 U
Dibromochloromethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,1,2-Trichloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Benzene	ug/L	NS	10 U	10 U	NS	10 U	10 U
trans-1,3-Dichloropropene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Bromoform	ug/L	NS	10 U	10 U	NS	10 U	10 U
4-Methyl-2-Pentanone	ug/L	NS	10 U	10 U	NS	10 U	10 U
2-Hexanone	ug/L	NS	10 U	10 U	NS	10 U	10 U
Tetrachloroethene	ug/L	NS	10 U	10 U	NS	10 U	10 U
1,1,2,2-Tetrachloroethane	ug/L	NS	10 U	10 U	NS	10 U	10 U
Toluene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Chlorobenzene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Ethylbenzene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Styrene	ug/L	NS	10 U	10 U	NS	10 U	10 U
Xylene (total)	ug/L	NS	10 U	10 U	NS	10 U	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW61DRE 07/10/93 MW61DRE 188723	PHASE II WATER MW62D 07/02/93 MW62D 188152	PHASE II WATER MW63 07/13/93 MW63 188802	PHASE II WATER MW63 RE 07/11/93 MW63 RE 188802R1	PHASE II WATER MW64D 07/13/93 MW64D 188803	PHASE II WATER MW65D 07/18/93 MW65D 189110	PHASE II WATER MW66 07/02/93 MW66 188153
COMPOUND UNITS							
VOC's (834.2)							
Dichlorodifluoromethane	ug/L	NS	NS	NS	NS	NS	NS
Chloromethane	ug/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride	ug/L	NS	NS	NS	NS	NS	NS
Bromomethane	ug/L	NS	NS	NS	NS	NS	NS
Chloroethane	ug/L	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
Acetone	ug/L	NS	NS	NS	NS	NS	NS
Carbon Disulfide	ug/L	NS	NS	NS	NS	NS	NS
Methylene Chloride	ug/L	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
2-Butanone	ug/L	NS	NS	NS	NS	NS	NS
Bromochloromethane	ug/L	NS	NS	NS	NS	NS	NS
Chloroform	ug/L	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
Benzene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Trichloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
Dibromomethane	ug/L	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	ug/L	NS	NS	NS	NS	NS	NS
Toluene	ug/L	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
2-Hexanone	ug/L	NS	NS	NS	NS	NS	NS
Dibromochloromethane	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	ug/L	NS	NS	NS	NS	NS	NS
Chlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS
Ethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
Styrene	ug/L	NS	NS	NS	NS	NS	NS
Bromoform	ug/L	NS	NS	NS	NS	NS	NS
Isopropylbenzene	ug/L	NS	NS	NS	NS	NS	NS
Bromobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	ug/L	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/L	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	ug/L	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	ug/L	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	ug/L	NS	NS	NS	NS	NS	NS
Naphthalene	ug/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
Xylene (total)	ug/L	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID	PHASE II WATER MW61DRE 07/10/93 MW61DRE 188723	PHASE II WATER MW62D 07/02/93 MW62D 188162	PHASE II WATER MW63 07/13/93 MW63 188602	PHASE II WATER MW63 RE 07/11/93 MW63 RE 188602R1	PHASE II WATER MW64D 07/13/93 MW64D 188603	PHASE II WATER MW65D 07/15/93 MW65D 189110	PHASE II WATER MW66 07/02/93 MW66 186163	
COMPOUND UNITS								
SEMIVOLATILES								
Phenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
bis(2-Chloroethyl) ether	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2-Chlorophenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
1,3-Dichlorobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
1,4-Dichlorobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benzyl Alcohol	ug/L	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2-Methylphenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
bis(2-Chloroisopropyl) ether	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Methylphenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
N-Nitroso-di-n-propylamine	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Hexachloroethane	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Nitrobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Isophorone	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2-Nitrophenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4-Dimethylphenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benzic acid	ug/L	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4-Dichlorophenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
1,2,4-Trichlorobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Naphthalene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Chloroaniline	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Hexachlorobutadiene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Chloro-3-methylphenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2-Methylnaphthalene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Hexachlorocyclopentadiene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4,6-Trichlorophenol	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4,5-Trichlorophenol	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
2-Chloronaphthalene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2-Nitroaniline	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
Dimethylphthalate	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Acenaphthylene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,6-Dinitrotoluene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
3-Nitroaniline	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
Acenaphthene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4-Dinitrophenol	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
4-Nitrophenol	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
Dibenzofuran	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
2,4-Dinitrotoluene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Diethylphthalate	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Chlorophenyl-phenylether	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Fluorene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Nitroaniline	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
4,6-Dinitro-2-methylphenol	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
N-Nitrosodiphenylamine (1)	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
4-Bromophenyl-phenylether	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Hexachlorobenzene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Pentachlorophenol	ug/L	26 U	27 U	26 U	NS	26 U	26 U	33 U
Phenanthrene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Anthracene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Carbazole	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Di-n-butylphthalate	ug/L	10 U	9 J	1 J	NS	1 J	9 J	13 U
Fluoranthene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Pyrene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Butylbenzylphthalate	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
3,3'-Dichlorobenzidine	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benz(a)anthracene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Chrysene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
bis(2-Ethylhexyl)phthalate	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Di-n-octylphthalate	ug/L	10 U	17 U	10 U	NS	10 U	13 U	76 U
Benz(b)fluoranthene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benz(k)fluoranthene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benz(a)pyrene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Dibenz(a,h)anthracene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U
Benz(g,h,i)perylene	ug/L	10 U	11 U	10 U	NS	10 U	10 U	13 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE EA ID LAB ID UNITS	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II
		WATER MW61DRE 07/10/93 MW61DRE 188723	WATER MW62D 07/02/93 MW62D 188152	WATER MW63 07/13/93 MW63 188802	WATER MW63 RE 07/11/93 MW63 RE 188802R1	WATER MW64D 07/13/93 MW64D 188803	WATER MW65D 07/15/93 MW65D 189110	WATER MW66 MW66 07/02/93 MW66 188153
<b>PESTICIDES/PCBS</b>								
alpha-BHC	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
beta-BHC	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
delta-BHC	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
gamma-BHC (Lindane)	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Heptachlor	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Aldrin	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Heptachlor epoxide	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Endosulfan I	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Dieldrin	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
4,4'-DDE	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
Endrin	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
Endosulfan II	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
4,4'-DDD	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
Endosulfan sulfate	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
4,4'-DDT	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
Methoxychlor	ug/L	NS	0.8 UJ	0.8 U	NS	0.8 U	0.8 UJ	0.81 U
Endrin ketone	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
Endrin aldehyde	ug/L	NS	0.1 UJ	0.1 U	NS	0.1 U	0.1 UJ	0.1 U
alpha-Chlordane	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
gamma-Chlordane	ug/L	NS	0.06 UJ	0.06 U	NS	0.06 U	0.06 UJ	0.061 U
Toxaphene	ug/L	NS	8 UJ	8 U	NS	8 U	8 UJ	8.1 U
Aroclor-1016	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
Aroclor-1221	ug/L	NS	2 UJ	2 U	NS	2 U	2 UJ	2 U
Aroclor-1232	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
Aroclor-1242	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
Aroclor-1248	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
Aroclor-1254	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
Aroclor-1260	ug/L	NS	1 UJ	1 U	NS	1 U	1 UJ	1 U
<b>HERBICIDES</b>								
2,4-D	ug/L	NS	1 U	1 R	1 R	1 U	1 U	1 U
2,4-DB	ug/L	NS	1 U	1 R	1 R	1 U	1 U	1 U
2,4,5-T	ug/L	NS	0.1 U	0.1 R	0.1 R	0.1 U	0.1 U	0.1 U
2,4,5-TP (Silvex)	ug/L	NS	0.1 U	0.1 R	0.1 R	0.1 U	0.1 U	0.1 U
Dalapon	ug/L	NS	2.3 U	2.3 R	2.7 J	2.3 U	2.3 U	2.3 U
Dicamba	ug/L	NS	0.1 U	0.1 R	0.1 R	0.1 U	0.1 U	0.1 U
Dichloroprop	ug/L	NS	1 U	1 R	1 R	1 U	1 U	1 U
Dinoseb	ug/L	NS	0.8 U	0.8 R	0.81 R	0.8 U	0.8 U	0.81 U
MCPA	ug/L	NS	100 U	100 R	100 R	100 U	100 U	100 U
MCPP	ug/L	NS	100 U	100 R	100 R	100 U	100 U	100 U
<b>METALS</b>								
Aluminum	ug/L	NS	31200	47700	NS	246	4140 J	228000
Antimony	ug/L	NS	49.7 UJ	86.1 R	NS	84.2 R	49.8 U	191 J
Arsenic	ug/L	NS	2.8 J	8.3 J	NS	1.4 U	1.9 U	1.4 UJ
Barium	ug/L	NS	271	328	NS	271	117 J	1480
Beryllium	ug/L	NS	2.2 J	2.5 J	NS	0.9 U	0.89 U	11.7
Cadmium	ug/L	NS	2.9 U	2.8 U	NS	2.8 U	2.8 U	2.8 U
Calcium	ug/L	NS	23700 R	188000	NS	64800	6580	287000
Chromium	ug/L	NS	23.8 J	78.2	NS	2.7 U	7.1 J	381 J
Cobalt	ug/L	NS	8.3 J	64.5	NS	8.5 U	8.4 U	201
Copper	ug/L	NS	13.9 J	70.5	NS	8.5 J	4.7 UJ	272
Iron	ug/L	NS	24800	80900 J	NS	607 J	5310 J	379000
Lead	ug/L	NS	14	25.8	NS	0.88 U	1.3 J	44.3
Magnesium	ug/L	NS	11700	34400	NS	20700	2260 J	100000
Manganese	ug/L	NS	340	2930	NS	148	88.2	10800
Mercury	ug/L	NS	0.09 UJ	0.09 UJ	NS	0.09 UJ	0.09 U	0.13 J
Nickel	ug/L	NS	33.4 J	107	NS	7.8 U	7.4 UJ	833 J
Potassium	ug/L	NS	5020	8280	NS	2910 J	2670 J	24800
Selenium	ug/L	NS	1.8 UJ	1.5 U	NS	1.8 U	1 UJ	1.8 UJ
Silver	ug/L	NS	8.5 U	8.5 U	NS	8.5 U	8.4 U	8.4 U
Sodium	ug/L	NS	128000	33000	NS	29500	114000	19600
Thallium	ug/L	NS	2.8 U	2.8 U	NS	2.8 U	2.8 U	2.8 U
Vanadium	ug/L	NS	28.1 J	71.2	NS	8.8 U	6.7 UJ	917 J
Zinc	ug/L	NS	111	284	NS	81	87.9 R	1100
Cyanide	ug/L	NS	10 UJ	1.8 J	NS	2.1 J	1.2 U	10 UJ

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID COMPOUND UNITS	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II
	WATER MW57D 07/02/93 MW57D 188154	WATER MW58D 07/10/93 MW58D 188724	WATER MW80 07/13/93 MW80 188804	WATER MW82 07/10/93 MW82 188726	WATER MW84 07/15/93 MW84 189111	WATER MW86 07/14/93 MW86 189027	WATER MW88 07/10/93 MW88 188727
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	23000	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	170	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	150	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	47	80	74000	120	10 U
Chloroform	10 U	10 U	10 U	10 U	8 J	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	72	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Acetate	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	200	8 J	37000	48	10 U
Dibromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	150	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	77	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	2 J	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	800 J	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	100	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	840	10 U	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER MW67D 07/02/93 MW57D 188154	PHASE II WATER MW56D 07/10/93 MW56D 188724	PHASE II WATER MW50 07/13/93 MW50 188804	PHASE II WATER MW82 07/10/93 MW62 188726	PHASE II WATER MW84 07/15/93 MW84 189111	PHASE II WATER MW86 07/14/93 MW86 189027	PHASE II WATER MW88 07/10/93 MW88 188727
COMPOUND							
VOC's (B24-2)							
Dichlorodifluoromethane	ug/L	NS	NS	NS	NS	NS	NS
Chloromethane	ug/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride	ug/L	NS	NS	NS	NS	NS	NS
Bromomethane	ug/L	NS	NS	NS	NS	NS	NS
Chloroethane	ug/L	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
Acetone	ug/L	NS	NS	NS	NS	NS	NS
Carbon Disulfide	ug/L	NS	NS	NS	NS	NS	NS
Methylene Chloride	ug/L	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS
2,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	ug/L	NS	NS	NS	NS	NS	NS
2-Butanone	ug/L	NS	NS	NS	NS	NS	NS
Bromochloromethane	ug/L	NS	NS	NS	NS	NS	NS
Chloroform	ug/L	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Carbon Tetrachloride	ug/L	NS	NS	NS	NS	NS	NS
1,1-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
Benzene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Trichloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
Dibromomethane	ug/L	NS	NS	NS	NS	NS	NS
Bromodichloromethane	ug/L	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloropropene	ug/L	NS	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	ug/L	NS	NS	NS	NS	NS	NS
Toluene	ug/L	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	ug/L	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	ug/L	NS	NS	NS	NS	NS	NS
Tetrachloroethene	ug/L	NS	NS	NS	NS	NS	NS
1,3-Dichloropropane	ug/L	NS	NS	NS	NS	NS	NS
2-Hexanone	ug/L	NS	NS	NS	NS	NS	NS
Dibromochloromethane	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dibromoethane	ug/L	NS	NS	NS	NS	NS	NS
Chlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS
Ethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
Styrene	ug/L	NS	NS	NS	NS	NS	NS
Bromoform	ug/L	NS	NS	NS	NS	NS	NS
Isopropylbenzene	ug/L	NS	NS	NS	NS	NS	NS
Bromobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	ug/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	ug/L	NS	NS	NS	NS	NS	NS
n-Propylbenzene	ug/L	NS	NS	NS	NS	NS	NS
2-Chlorotoluene	ug/L	NS	NS	NS	NS	NS	NS
4-Chlorotoluene	ug/L	NS	NS	NS	NS	NS	NS
1,3,5-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
tert-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,2,4-Trimethylbenzene	ug/L	NS	NS	NS	NS	NS	NS
sec-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
p-Isopropyltoluene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
n-Butylbenzene	ug/L	NS	NS	NS	NS	NS	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	ug/L	NS	NS	NS	NS	NS	NS
Naphthalene	ug/L	NS	NS	NS	NS	NS	NS
1,2,3-Trichlorobenzene	ug/L	NS	NS	NS	NS	NS	NS
Xylene (total)	ug/L	NS	NS	NS	NS	NS	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	DATE	ES ID	LAB ID	UNITS	PHASE II WATER MW57D	PHASE II WATER MW58D	PHASE II WATER MW60	PHASE II WATER MW82	PHASE II WATER MW84	PHASE II WATER MW86	PHASE II WATER MW88
COMPOUND	186164	186724	186804	186726	189111	189027	189027	189111	189027	189027	186727
SEMI-VOLATILES											
Phenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl Alcohol	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroisopropyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bisoxalic acid	ug/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	ug/L	10 U	10 U	10 U	10 U	10 U	65 J	10 U	10 U	10 U	10 U
4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U	13 J	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4-Nitrophenol	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U	2 J	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	ug/L	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine (I)	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	ug/L	25 U	25 U	25 U	25 U	25 U	74 J	25 U	25 U	25 U	25 U
Phenanthrene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	ug/L	10 U	10 U	10 U	2 J	10 U	10 U	0.6 J	10 U	9 J	10 U
Fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)phthalate	ug/L	44 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE EB ID LAB ID UNITS	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II	PHASE II
		WATER MW57D 07/02/93 MW57D 186164	WATER MW58D 07/10/93 MW58D 185724	WATER MW60 07/10/93 MW60 186604	WATER MW62 07/10/93 MW62 186726	WATER MW64 07/15/93 MW64 189111	WATER MW66 07/14/93 MW66 189027	WATER MW68 07/10/93 MW68 188727
<b>PESTICIDES/PCBs</b>								
alpha-BHC	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
beta-BHC	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
delta-BHC	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
gamma-BHC (Lindane)	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Heptachlor	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Aldrin	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Heptachlor epoxide	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Endosulfan I	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Dieldrin	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
4,4'-DDE	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Endrin	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Endosulfan II	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
4,4'-DDD	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Endosulfan sulfate	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
4,4'-DDT	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Methoxychlor	ug/L	0.82 UJ	0.8 UJ	0.8 U	0.8 U	0.86 U	0.82 U	0.8 UJ
Endrin ketone	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Endrin aldehyde	ug/L	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
alpha-Chlordane	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
gamma-Chlordane	ug/L	0.062 UJ	0.06 UJ	0.06 U	0.06 U	0.066 U	0.062 U	0.06 UJ
Toxaphene	ug/L	8.2 UJ	8 UJ	8 U	8 U	8.6 U	8.2 U	8 UJ
Aroclor-1016	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
Aroclor-1221	ug/L	2.1 UJ	2 UJ	2 U	2 U	2.2 U	2.1 U	2 UJ
Aroclor-1232	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
Aroclor-1242	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
Aroclor-1248	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
Aroclor-1254	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
Aroclor-1260	ug/L	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 UJ
<b>HERBICIDES</b>								
2,4-D	ug/L	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U
2,4-DB	ug/L	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U
2,4,5-T	ug/L	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U
2,4,5-TP (Silvex)	ug/L	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U
Dalapon	ug/L	2.3 U	2.3 U	2.3 U	2.3 U	2.7 U	2.3 U	2.3 U
Dicamba	ug/L	0.1 U	0.1 U	0.1 U	0.1 U	0.18 U	0.1 U	0.1 U
Dichloroprop	ug/L	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U
Dinoseb	ug/L	0.6 U	0.6 U	0.6 U	0.6 U	0.66 U	0.6 U	0.6 U
MCPA	ug/L	100 U	100 U	100 U	100 U	120 U	100 U	100 U
MCPP	ug/L	100 U	100 U	100 U	100 U	120 U	100 U	100 U
<b>METALS</b>								
Aluminum	ug/L	18500	40100	84.7 J	142 J	45800 J	91200	76500
Antimony	ug/L	49.6 UJ	77.2 R	80 UJ	77.7	84.6 R	80 UJ	80 UJ
Arsenic	ug/L	2.8 J	3.3 J	1.4 U	1.4 UJ	6.3 J	2.3 J	4.3 J
Barium	ug/L	617	706	54.2 J	46.8 J	408	1190	1060
Beryllium	ug/L	1.2 J	3.5 J	0.89 U	0.8 U	2.4 J	4 J	5.4
Cadmium	ug/L	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Calcium	ug/L	61800	71400	116000	113000	365000	461000	75100
Chromium	ug/L	32.2 J	66.2 J	2.7 U	2.7 UJ	77.8 J	143	111 J
Cobalt	ug/L	11.3 J	19.8 J	6.6 U	6.5 U	40.3 J	57.4	36.7 J
Copper	ug/L	18.1 J	32.3	5.9 J	4.7 U	49.2 J	75.4	53.2
Iron	ug/L	31000	50200	93.8 J	162	76700 J	141000 J	91100
Lead	ug/L	6.7	13.5	0.6 U	0.6 U	1.32	20.1	16.3
Magnesium	ug/L	12300	19100	11400	12700	54700	57800	31300
Manganese	ug/L	791	1100	6.4 J	32.3	7580	3290	1410
Mercury	ug/L	0.09 UJ	0.09 UJ	0.09 UJ	0.09 UJ	0.18 J	0.25 J	0.09 UJ
Nickel	ug/L	37.3 J	66.8 J	7.4 U	7.6 UJ	89 J	189	116 J
Potassium	ug/L	4830 J	11200	1690 J	1260 J	11900	16400	21700
Selenium	ug/L	1.8 UJ	1.8 UJ	1.8 UJ	1.8 UJ	9.9 UJ	1.8 UJ	1.8 UJ
Silver	ug/L	8.5 U	8.5 U	8.5 U	8.5 U	5.5 U	5.5 U	5.5 U
Sodium	ug/L	148000	147000	26600	14800	38400	11900	149000
Thallium	ug/L	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U
Vanadium	ug/L	26.5 J	67.1 J	6.8 U	6.8 UJ	84.6 J	126	123 J
Zinc	ug/L	67.2	122	3.1 J	7.2 R	267 J	363	166
Cyanide	ug/L	10 UJ	3.8 UJ	4 J	1.2 UJ	3.4 J	1.2 U	3.6 UJ



SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX	PHASE II
	LOCATION	WATER
	DATE	07/10/93
	ES ID	MW68RE
	LAB ID	188727
	UNITS	
Chloromethane	ug/L	NS
Bromomethane	ug/L	NS
Vinyl Chloride	ug/L	NS
Chloroethane	ug/L	NS
Methylene Chloride	ug/L	NS
Acetone	ug/L	NS
Carbon Disulfide	ug/L	NS
1,1-Dichloroethene	ug/L	NS
1,1-Dichloroethane	ug/L	NS
1,2-Dichloroethene (total)	ug/L	NS
Chloroform	ug/L	NS
1,2-Dichloroethane	ug/L	NS
2-Butanone	ug/L	NS
1,1,1-Trichloroethane	ug/L	NS
Carbon Tetrachloride	ug/L	NS
Vinyl Acetate	ug/L	NS
Bromodichloromethane	ug/L	NS
1,2-Dichloropropane	ug/L	NS
cis-1,3-Dichloropropene	ug/L	NS
Trichloroethene	ug/L	NS
Dibromochloromethane	ug/L	NS
1,1,2-Trichloroethane	ug/L	NS
Benzene	ug/L	NS
trans-1,3-Dichloropropene	ug/L	NS
Bromoform	ug/L	NS
4-Methyl-2-Pentanone	ug/L	NS
2-Hexanone	ug/L	NS
Tetrachloroethene	ug/L	NS
1,1,2,2-Tetrachloroethane	ug/L	NS
Toluene	ug/L	NS
Chlorobenzene	ug/L	NS
Ethylbenzene	ug/L	NS
Styrene	ug/L	NS
Xylene (total)	ug/L	NS

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER MW&RE 07/10/93 MW&RE 186727
VOC's (24/2)		
Dichlorodifluoromethane	ug/L	NS
Chloromethane	ug/L	NS
Vinyl Chloride	ug/L	NS
Bromomethane	ug/L	NS
Chloroethane	ug/L	NS
Trichlorofluoromethane	ug/L	NS
1,1-Dichloroethene	ug/L	NS
Acetone	ug/L	NS
Carbon Disulfide	ug/L	NS
Methylene Chloride	ug/L	NS
trans-1,2-Dichloroethene	ug/L	NS
1,1-Dichloroethane	ug/L	NS
2,2-Dichloropropane	ug/L	NS
cis-1,2-Dichloroethene	ug/L	NS
2-Butanone	ug/L	NS
Bromochloromethane	ug/L	NS
Chloroform	ug/L	NS
1,1,1-Trichloroethane	ug/L	NS
Carbon Tetrachloride	ug/L	NS
1,1-Dichloropropene	ug/L	NS
Benzene	ug/L	NS
1,2-Dichloroethane	ug/L	NS
Trichloroethene	ug/L	NS
1,2-Dichloropropane	ug/L	NS
Dibromomethane	ug/L	NS
Bromodichloromethane	ug/L	NS
cis-1,3-Dichloropropene	ug/L	NS
4-Methyl-2-Pentanone	ug/L	NS
Toluene	ug/L	NS
trans-1,3-Dichloropropene	ug/L	NS
1,1,2-Trichloroethane	ug/L	NS
Tetrachloroethene	ug/L	NS
1,3-Dichloropropane	ug/L	NS
2-Hexanone	ug/L	NS
Dibromochloromethane	ug/L	NS
1,2-Dibromoethane	ug/L	NS
Chlorobenzene	ug/L	NS
1,1,1,2-Tetrachloroethane	ug/L	NS
Ethylbenzene	ug/L	NS
Styrene	ug/L	NS
Bromoform	ug/L	NS
Isopropylbenzene	ug/L	NS
Bromobenzene	ug/L	NS
1,1,2,2-Tetrachloroethane	ug/L	NS
1,2,3-Trichloropropane	ug/L	NS
n-Propylbenzene	ug/L	NS
2-Chlorotoluene	ug/L	NS
4-Chlorotoluene	ug/L	NS
1,3,5-Trimethylbenzene	ug/L	NS
tert-Butylbenzene	ug/L	NS
1,2,4-Trimethylbenzene	ug/L	NS
sec-Butylbenzene	ug/L	NS
1,3-Dichlorobenzene	ug/L	NS
1,4-Dichlorobenzene	ug/L	NS
p-Isopropyltoluene	ug/L	NS
1,2-Dichlorobenzene	ug/L	NS
n-Butylbenzene	ug/L	NS
1,2-Dibromo-3-Chloropropane	ug/L	NS
1,2,4-Trichlorobenzene	ug/L	NS
Hexachlorobutadiene	ug/L	NS
Naphthalene	ug/L	NS
1,2,3-Trichlorobenzene	ug/L	NS
Xylene (ota)	ug/L	

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER MW68RE 07/10/93 MW68RE 166727
SEMI-VOLATILES		
Phenol	ug/L	10 U
bis(2-Chloroethyl) ether	ug/L	10 U
2-Chlorophenol	ug/L	10 U
1,3-Dichlorobenzene	ug/L	10 U
1,4-Dichlorobenzene	ug/L	10 U
Benzyl Alcohol	ug/L	NS
1,2-Dichlorobenzene	ug/L	10 U
2-Methylphenol	ug/L	10 U
bis(2-Chloroisopropyl) ether	ug/L	10 U
4-Methylphenol	ug/L	10 U
N-Nitroso-dl-n-propylamine	ug/L	10 U
Hexachloroethane	ug/L	10 U
Nitrobenzene	ug/L	10 U
Isophorone	ug/L	10 U
2-Nitrophenol	ug/L	10 U
2,4-Dimethylphenol	ug/L	10 U
Benzole acid	ug/L	NS
bis(p-Chloroethoxy) methane	ug/L	10 U
2,4-Dichlorophenol	ug/L	10 U
1,2,4-Trichlorobenzene	ug/L	10 U
Naphthalene	ug/L	10 U
4-Chloroaniline	ug/L	10 U
Hexachlorobutadiene	ug/L	10 U
4-Chloro-3-methylphenol	ug/L	10 U
2-Methylnaphthalene	ug/L	10 U
Hexachlorocyclopentadiene	ug/L	10 U
2,4,6-Trichlorophenol	ug/L	10 U
2,4,6-Trichlorophenol	ug/L	25 U
2-Chloronaphthalene	ug/L	10 U
2-Nitroaniline	ug/L	25 U
Dimethylphthalate	ug/L	10 U
Acenaphthylene	ug/L	10 U
2,6-Dinitrotoluene	ug/L	10 U
3-Nitroaniline	ug/L	25 U
Acenaphthene	ug/L	10 U
2,4-Dinitrophenol	ug/L	25 U
4-Nitrophenol	ug/L	25 U
Dibenzofuran	ug/L	10 U
2,4-Dinitrotoluene	ug/L	10 U
Diethylphthalate	ug/L	10 U
4-Chlorophenyl-phenylether	ug/L	10 U
Fluorene	ug/L	10 U
4-Nitroaniline	ug/L	25 U
4,8-Dinitro-2-methylphenol	ug/L	25 U
N-Nitrosodiphenylamine (1)	ug/L	10 U
4-Bromophenyl-phenylether	ug/L	10 U
Hexachlorobenzene	ug/L	10 U
Pentachlorophenol	ug/L	25 U
Phenanthrene	ug/L	10 U
Anthracene	ug/L	10 U
Carbazole	ug/L	10 U
Di-n-butylphthalate	ug/L	10 U
Fluoranthene	ug/L	10 U
Pyrene	ug/L	10 U
Butylbenzylphthalate	ug/L	10 U
3,3'-Dichlorobenzidine	ug/L	10 U
Benzo(a)anthracene	ug/L	10 U
Chrysene	ug/L	10 U
bis(2-Ethylhexyl)phthalate	ug/L	10 U
Di-n-octylphthalate	ug/L	10 U
Benzo(b)fluoranthene	ug/L	10 U
Benzo(k)fluoranthene	ug/L	10 U
Benzo(a)pyrene	ug/L	10 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U
Dibenzo(a,h)anthracene	ug/L	10 U
Benzo(g,h,i)perylene	ug/L	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
GROUNDWATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION DATE ES ID LAB ID UNITS	PHASE II WATER MWS&RE 07/10/93 MWS&RE 168727
<b>PESTICIDES/PCBS</b>		
alpha-BHC	ug/L	NS
beta-BHC	ug/L	NS
delta-BHC	ug/L	NS
gamma-BHC (Lindane)	ug/L	NS
Heptachlor	ug/L	NS
Aldrin	ug/L	NS
Heptachlor epoxide	ug/L	NS
Endosulfan I	ug/L	NS
Dieldrin	ug/L	NS
4,4'-DDE	ug/L	NS
Endrin	ug/L	NS
Endosulfan II	ug/L	NS
4,4'-DDD	ug/L	NS
Endosulfan sulfate	ug/L	NS
4,4'-DDT	ug/L	NS
Methoxychlor	ug/L	NS
Endrin ketone	ug/L	NS
Endrin aldehyde	ug/L	NS
alpha-Chlordane	ug/L	NS
gamma-Chlordane	ug/L	NS
Toxaphene	ug/L	NS
Aroclor-1016	ug/L	NS
Aroclor-1221	ug/L	NS
Aroclor-1232	ug/L	NS
Aroclor-1242	ug/L	NS
Aroclor-1248	ug/L	NS
Aroclor-1254	ug/L	NS
Aroclor-1260	ug/L	NS
<b>HERBICIDES</b>		
2,4-D	ug/L	NS
2,4-DB	ug/L	NS
2,4,5-T	ug/L	NS
2,4,5-TP (Silvex)	ug/L	NS
Dalapon	ug/L	NS
Dicamba	ug/L	NS
Dichloroprop	ug/L	NS
Dinoseb	ug/L	NS
MCPA	ug/L	NS
MCPP	ug/L	NS
<b>METALS</b>		
Aluminum	ug/L	NS
Antimony	ug/L	NS
Arsenic	ug/L	NS
Barium	ug/L	NS
Beryllium	ug/L	NS
Cadmium	ug/L	NS
Calcium	ug/L	NS
Chromium	ug/L	NS
Cobalt	ug/L	NS
Copper	ug/L	NS
Iron	ug/L	NS
Lead	ug/L	NS
Magnesium	ug/L	NS
Manganese	ug/L	NS
Mercury	ug/L	NS
Nickel	ug/L	NS
Potassium	ug/L	NS
Selenium	ug/L	NS
Silver	ug/L	NS
Sodium	ug/L	NS
Thallium	ug/L	NS
Vanadium	ug/L	NS
Zinc	ug/L	NS
Cyanide	ug/L	NS

SENECA ARMY DEPOT, ASH LANDFILL  
 SURFACE WATER ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	DEPTH	DATE	ES ID	LAB ID	UNITS	WATER SW-100	WATER SW-100	WATER SW-300	WATER SW-400	WATER SW-800	WATER SW-800	WATER SW-800	WATER SW-800	WATER SW-800	WATER ASH	WATER ASH	WATER ASH
COMPOUND						SW-100	SW-100RE(4)	SW-300	SW-400	SW-800	SW-800	SW-800	SW-800	SW-800	ASH	ASH	ASH
Chloromethane	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Bromomethane	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Vinyl Chloride	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Chloroethane	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Methylene Chloride	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Acetone	µg/L	10 U	NS	10 U	17 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Carbon Disulfide	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,1-Dichloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,1-Dichloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,2-Dichloroethane (total)	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Chloroform	µg/L	5 U	NS	5 U	2 J	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,2-Dichloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
2-Butanone	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
1,1,1-Trichloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Carbon Tetrachloride	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Vinyl Acetate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS	
Bromodichloromethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,2-Dichloropropane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
cis-1,3-Dichloropropene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Trichloroethene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Dibromochloromethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,1,2-Trichloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Benzene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
trans-1,3-Dichloropropene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Bromoform	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
4-Methyl-2-Pentanone	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
2-Hexanone	µg/L	10 U	NS	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	
Tetrachloroethene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
1,1,2,2-Tetrachloroethane	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Toluene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Chlorobenzene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Ethylbenzene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Styrene	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	
Xylene (total)	µg/L	5 U	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NS	NS	NS	10 U	10 U	10 U	

NOTE: "NS" = NOT SAMPLED

SENECA ARMY DEPOT, ASH LANDFILL  
SURFACE WATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	WATER SW-100	WATER SW-100	WATER SW-300	WATER SW-400	WATER SW-800	WATER SW-800	WATER SW-800	WATER SW-800	WATER SW-800	WATER SW-800	WATER ASH	WATER ASH	WATER ASH	
DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12/09/92	12/09/92	12/09/92	
DATE	12/10/91	12/10/91	11/15/91	11/15/91	11/16/91	11/16/91	11/16/91	11/16/91	11/16/91	11/16/91	12/09/92	12/09/92	12/09/92	
ES ID	W1012119(3)	W1012119RE(4)	W1811-79	W1811-80	W1811-83	W1811-83	W1811-84(1)	W1811-83A(2)	W1811-84A(1)	W1811-84A(1)	SW-WD	SW-WE	RBSDSW-2	
LAB ID	150730	150730	149120	149121	149238	149237	149237	149454	149454	149455	175889	175890	175888	
COMPOUND	UNITS													
Semivolatiles														
Phenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
bia(2-Chloroethyl) ether	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2-Chlorophenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzyl Alcohol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2-Methylphenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
bia(2-Chloroethyl) ether	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Methylphenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Hexachloroethane	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Nitrobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Isophorone	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2-Nitrophenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzole acid	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	10 U	10 U	10 U	10 U
bia(2-Chloroethyl) methane	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	NS
2,4-Dichlorophenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Naphthalene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Chloroaniline	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Hexachlorobutadiene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Chloro-3-methylphenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2-Methylnaphthalene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
2-Chloronaphthalene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2-Nitroaniline	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	25 U	25 U	25 U	25 U
Dimethylphthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Acenaphthylene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
3-Nitroaniline	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
Acenaphthene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
4-Nitrophenol	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
Dibenzofuran	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Diethylphthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Fluorene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Nitroaniline	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
4,8-Dinitro-2-methylphenol	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
N-Nitrosodiphenylamine (1)	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Hexachlorobenzene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Pentachlorophenol	µg/L	50 U	NS	51 U	50 U	50 U	50 U	NS	NS	NS	25 U	25 U	25 U	25 U
Phenanthrene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Anthracene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Carbazole	µg/L	NS	NS	NS	NS	NS	NS	NS	NS	NS	10 U	10 U	10 U	10 U
Di-n-butylphthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	0.3 J
Fluoranthene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Pyrene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Butylbenzylphthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	µg/L	20 U	NS	21 U	20 U	20 U	20 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzo(a)anthracene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Chrysene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
bia(2-Ethylhexyl)phthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Di-n-octylphthalate	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzo(a)pyrene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	µg/L	10 U	NS	10 U	10 U	10 U	10 U	NS	NS	NS	10 U	10 U	10 U	10 U

SENECA ARMY DEPOT, ASH LANDFILL  
SURFACE WATER ANALYSIS RESULTS  
VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH DATE ES ID LAB ID	WATER SW-100 N/A 12/10/81 W1012119(3) 150730	WATER SW-100 N/A 12/10/81 W1012119RE(4) 150730	WATER SW-300 N/A 11/15/81 W1511-79 149120	WATER SW-400 N/A 11/15/81 W1511-80 149121	WATER SW-800 N/A 11/16/81 W1811-83 149236	WATER SW-800 N/A 11/16/81 W1811-84(1) 149237	WATER SW-800 N/A 11/16/81 W1911-83A(2) 149454	WATER SW-800 N/A 11/16/81 W1911-84A(1) 149455	WATER ASH 12/09/82 SW-WD 175689	WATER ASH 12/09/82 SW-WE 175690	WATER ASH 12/09/82 RBSOSW-2 175688	
<b>COMPOUND</b>												
<b>Pesticides/PCBs</b>												
alpha-BHC	µg/L 0.05 U	0.05 U J	0.05 U	0.05 U	0.05 U	0.05 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
beta-BHC	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
delta-BHC	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
gamma-BHC (Lindane)	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
Heptachlor	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
Aldrin	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
Heptachlor epoxide	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
Endosulfan I	µg/L 0.06 U	0.06 U J	0.06 U	0.06 U	0.06 U	0.06 U	NS	NS	0.064 U	0.054 UJ	0.056 U	
Dieldrin	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
4,4'-DDE	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
Endrin	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
Endosulfan II	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
4,4'-DDD	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
Endosulfan sulfate	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
4,4'-DDT	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
Methoxychlor	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	0.64 U	0.54 UJ	0.56 U	
Endrin ketone	µg/L 0.1 U	0.1 U J	0.1 U	0.099 U	0.1 U	0.1 U	NS	NS	0.13 U	0.11 UJ	0.11 U	
Endrin aldehyde	µg/L NS	NS	NS	NS	NS	NS	NS	NS	0.064 U	0.054 UJ	0.056 U	
alpha-Chlordane	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	0.64 U	0.54 UJ	0.56 U	
gamma-Chlordane	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	0.64 U	0.54 UJ	0.56 U	
Toxaphene	µg/L 1 U	1 U J	1 U	0.99 U	1 U	1 U	NS	NS	6.4 U	5.4 UJ	5.6 U	
Aroclor-1018	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
Aroclor-1221	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	2.5 U	2.2 UJ	2.2 U	
Aroclor-1232	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
Aroclor-1242	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
Aroclor-1248	µg/L 0.5 U	0.5 U J	0.5 U	0.5 U	0.5 U	0.5 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
Aroclor-1254	µg/L 1 U	1 U J	1 U	0.99 U	1 U	1 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
Aroclor-1260	µg/L 1 U	1 U J	1 U	0.99 U	1 U	1 U	NS	NS	1.3 U	1.1 UJ	1.1 U	
<b>Herbicides</b>												
2,4-D	µg/L 1 U	NS	1 U J	1 U J	1 U J	1 U J	NS	NS	1.2 U	1.3 U	1.1 U	
2,4-DB	µg/L 1 U	NS	1 U J	1 U J	1 U J	1 U J	NS	NS	1.2 U	1.3 U	1.1 U	
2,4,5-T	µg/L 0.1 U	NS	0.1 U J	0.1 U J	0.1 U J	0.1 U J	NS	NS	0.12 U	0.13 U	0.11 U	
2,4,5-TP (Silvex)	µg/L 0.1 U	NS	0.1 U J	0.1 U J	0.1 U J	0.1 U J	NS	NS	0.12 U	0.13 U	0.11 U	
Dalapon	µg/L 2.3 U	NS	2.4 U J	2.3 U J	2.3 U J	2.4 U J	NS	NS	2.8 U	3 U	2.5 U	
Dicamba	µg/L 0.1 U	NS	0.1 U J	0.1 U J	0.1 U J	0.1 U J	NS	NS	0.12 U	0.13 U	0.11 U	
Dichloroprop	µg/L 1 U	NS	1 U J	1 U J	1 U J	1 U J	NS	NS	1.2 U	1.3 U	1.1 U	
Dinoseb	µg/L 0.5 U	NS	0.5 U J	0.5 U J	0.5 U J	0.5 U J	NS	NS	0.6 U	0.84 U	0.55 U	
MCPA	µg/L 100 U	NS	100 U J	99 U J	100 U J	100 U J	NS	NS	120 U	130 U	110 U	
MCPP	µg/L 100 U	NS	100 U J	99 U J	100 U J	100 U J	NS	NS	120 U	130 U	110 U	
<b>Metals</b>												
Aluminum	µg/L 203 J	NS	2410 J	97.8 U J	97.8 U J	97.4 U J	-	-	599	2370	62.8 U	
Antimony	µg/L 53.2 U J	NS	141 J	56.7 U J	56.7 U J	55.5 U J	-	-	54 U	53.9 U	54.1 U	
Arsenic	µg/L 2.9 U J	NS	3.7 U J	3.7 U J	3.7 U J	3.7 U J	-	-	2.9 J	1.3 J	1.2 U	
Barium	µg/L 35.4 J	NS	64.8 J	24.9 J	44.6 J	46.9 J	-	-	66.2 J	113 J	12 U	
Beryllium	µg/L 1.2 J	NS	1.2 U J	1.2 U J	1.2 U J	1.2 U J	-	-	0.3 U	0.3 U	0.3 U	
Cadmium	µg/L 3 U J	NS	2.9 U J	2.9 U J	2.9 U J	2.9 U J	-	-	3.1 U	3.1 U	3.1 U	
Calcium	µg/L 104000 J	NS	125000 J	45800 J	71700 J	73400 J	-	-	99300	165000	204 U	
Chromium	µg/L 6.2 U J	NS	7.6 J	6.2 U J	6.2 J	6.1 U J	-	-	2 U	4.3 J	2 U	
Chromium	µg/L 20.4 U J	NS	19.9 U J	19.9 U J	19.9 U J	19.9 U J	-	-	8 U	6.9 J	5 U	
Cobalt	µg/L 15.7 J	NS	14.5 U J	14.4 U J	14.4 U J	14.4 U J	-	-	4.7 R	21.7 J	3.4 J	
Copper	µg/L 218 J	NS	2080 J	17 U J	16.9 U J	16.9 U J	-	-	8750	3090	21.9 U	
Lead	µg/L 1.2 U J	NS	14.4 R	0.7 U J	0.7 U J	0.7 U J	-	-	4.5	42.3	0.9 U	
Magnesium	µg/L 13200 J	NS	11800 J	353 U J	9950 J	9950 J	-	-	12800	16700	284 U	
Manganese	µg/L 6.3 J	NS	468 J	3.2 U J	3.2 U J	3.2 U J	-	-	841	860	0.7 U	
Mercury	µg/L 0.06 U J	NS	0.06 U J	0.06 U J	0.06 U J	0.06 U J	-	-	0.06 U	0.15 J	0.08 U	
Nickel	µg/L 14.7 U J	NS	16 U J	15.9 U J	15.9 U J	15.9 U J	-	-	3.5 U	11.2 J	3.5 U	
Potassium	µg/L 828 J	NS	3850 J	4680 J	1830 J	1650 J	-	-	751 J	1740 J	448 U	
Selenium	µg/L 1 U J	NS	1.7 U J	1.7 U J	1.7 U J	1.7 U J	-	-	1.1 J	3.4 J	1.1 U	
Silver	µg/L 3.4 U J	NS	9.1 U J	9.1 U J	9 U J	9 U J	-	-	3.2 U	3.2 U	3.2 U	
Sodium	µg/L 9470 U J	NS	19400 J	2180000 J	83400 J	84200 J	-	-	8200	13200	289 U	
Thallium	µg/L 2.8 U J	NS	2.8 U J	2.8 U J	2.8 U J	2.8 U J	-	-	2.6 U	2.6 U	2.6 U	
Vanadium	µg/L 16.3 J	NS	30.5 U J	30.5 U J	30.4 U J	30.3 U J	-	-	2.1 U	5.2 J	2.1 U	
Zinc	µg/L 29.8 U J	NS	187 J	16.8 U J	13.4 U J	19.8 U J	-	-	36.9 R	133	9.4 J	
Cyanide	µg/L 10 U J	NS	10 U J	10 U J	-	-	10 U J	10 U J	10 U	10 U	10 U	

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL SW-100	SOIL SW-100	SOIL SW-100	SOIL SW-200	SOIL SW-300	SOIL SW-400	SOIL SW-600	SOIL SW-600
DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DATE	11/15/91	11/15/91	12/10/91	11/15/91	11/15/91	11/15/91	11/16/91	11/16/91
ES ID	S1811-76	S1811-83	S1012119	S1811-77	S1811-79	S1811-80	S1811-85	S1811-86(1)
LAB ID	149231	149232	150727	149115	149116	149117	149233	149234
UNITS								
<b>COMPOUND</b>								
<b>VOCs</b>								
Chloromethane	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Bromomethane	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Vinyl Chloride	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Chloroethane	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Methylene Chloride	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Acetone	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Carbon Disulfide	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,1-Dichloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,1-Dichloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,2-Dichloroethane (total)	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Chloroform	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,2-Dichloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
2-Butanone	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
1,1,1-Trichloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Carbon Tetrachloride	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Vinyl Acetate	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Bromodichloromethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,2-Dichloropropane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
cis-1,3-Dichloropropene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Trichloroethene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Dibromochloromethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,1,2-Trichloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Benzene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
trans-1,3-Dichloropropene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Bromocloromethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
4-Methyl-2-Pentanone	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
2-Hexanone	µg/Kg	15 U	13 U	21 U	16 U	16 U	22 U	13 U
Tetrachloroethene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
1,1,2,2-Tetrachloroethane	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Toluene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Chlorobenzene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Ethylbenzene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Styrene	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U
Xylene (total)	µg/Kg	8 U	8 U	10 U	8 U	8 U	11 U	7 U

NOTE: "NS" = NOT SAMPLED



SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL SW-100	SOIL SW-100	SOIL SW-100	SOIL SW-200	SOIL SW-300	SOIL SW-400	SOIL SW-600	SOIL SW-600	
DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DATE	11/15/91	11/15/91	12/10/91	11/15/91	11/15/91	11/15/91	11/15/91	11/15/91	
ES ID	S1511-78	S1611-83	S1012119	S1511-77	S1511-79	S1511-80	S1611-85	S1611-86(1)	
LAB ID	149231	149232	150727	149115	149116	149117	149233	149234	
COMPOUND UNITS									
Semivolatiles									
Phenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
bis(2-Chloroethyl) ether	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2-Chlorophenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
1,3-Dichlorobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
1,4-Dichlorobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Benzyl Alcohol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
1,2-Dichlorobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2-Methylphenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
bis(2-Chloroisopropyl) ether	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Methylphenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
N-Nitroso-d-n-propylamine	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Hexachloroethane	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Nitrobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Isophorone	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2-Nitrophenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4-Dimethylphenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Benzoic acid	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
bis(2-Chloroethoxy) methane	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4-Dichlorophenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
1,2,4-Trichlorobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Naphthalene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Chloroaniline	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Hexachlorobutadiene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Chloro-3-methylphenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2-Methylnaphthalene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Hexachlorocyclopentadiene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4,6-Trichlorophenol	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4,5-Trichlorophenol	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
2-Chloronaphthalene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2-Nitroaniline	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
Dimethylphthalate	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Acenaphthylene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,6-Dinitrotoluene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
3-Nitroaniline	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
Acenaphthene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4-Dinitrophenol	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
4-Nitrophenol	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
Dibenzofuran	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
2,4-Dinitrotoluene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Diethylphthalate	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Chlorophenyl-phenylether	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Fluorene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Nitroaniline	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
4,8-Dinitro-2-methylphenol	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
N-Nitrosodiphenylamine (1)	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
4-Bromophenyl-phenylether	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Hexachlorobenzene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Pentachlorophenol	µg/Kg	5000 U	8000 U	NS	5100 U	5100 U	5700 U	4300 U	4500 U
Phenanthrene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	270 J	720 J	1200
Anthracene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	180 J	270 J
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Fluoranthene	µg/Kg	120 J	1200 U	NS	1100 U	130 J	830 J	5500	7400
Pyrene	µg/Kg	94 J	1200 U	NS	130 J	180 J	740 J	4400	6700
Butylbenzylphthalate	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
3,3'-Dichlorobenzidine	µg/Kg	2000 U	2500 U	NS	2100 U	2100 U	2400 U	1800 U	1800 U
Benzo(a)anthracene	µg/Kg	1000 U	1200 U	NS	1100 U	97 J	410 J	3300	4900
Chrysene	µg/Kg	1000 U	1200 U	NS	1100 U	130 J	520 J	3600	5300
bis(2-Ethylhexyl)phthalate	µg/Kg	1000 U	1200 U	NS	100 J	210 J	1200 U	880 U	4300
Di-n-octylphthalate	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	1200 U	880 U	940 U
Benzo(b)fluoranthene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	450 J	3100	4500
Benzo(k)fluoranthene	µg/Kg	1000 U	1200 U	NS	1100 U	97 J	450 J	2400	3700
Benzo(a)pyrene	µg/Kg	1000 U	1200 U	NS	1100 U	110 J	480 J	2600	3500
Indeno(1,2,3-cd)pyrene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	340 J	1700	2400
Dibenz(a,h)anthracene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	180 J	680 J	1300
Benzo(g,h,i)perylene	µg/Kg	1000 U	1200 U	NS	1100 U	1100 U	340 J	1600	2300

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL SW-100	SOIL SW-100	SOIL SW-100	SOIL SW-200	SOIL SW-300	SOIL SW-400	SOIL SW-600	SOIL SW-800
DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DATE	11/15/91	11/15/91	12/10/91	11/15/91	11/15/91	11/15/91	11/15/91	11/15/91
ES ID	S1811-78	S1811-83	S1012119	S1511-77	S1511-79	S1511-80	S1811-85	S1811-86(1)
LAB ID	149231	149232	150727	149115	149116	149117	149233	149234
COMPOUND UNITS								
<b>Pesticides/PCBs</b>								
alpha-BHC	µg/Kg 25 U	30 U	NS	28 U	25 U	29 U	21 U	23 U
beta-BHC	µg/Kg 25 U	30 U	NS	29 U	26 U	29 U	21 U	23 U
delta-BHC	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
gamma-BHC (Lindane)	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
Heptachlor	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
Aldrin	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
Heptachlor epoxide	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
Endosulfan I	µg/Kg 25 U	30 U	NS	26 U	25 U	29 U	21 U	23 U
Dieldrin	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
4,4'-DDE	µg/Kg 50 U	80 U	NS	51 U	51 U	63	43 U	45 U
Endrin	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
Endosulfan II	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
4,4'-DDD	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
Endosulfan sulfate	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
4,4'-DDT	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
Methoxychlor	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Endrin ketone	µg/Kg 50 U	80 U	NS	51 U	51 U	57 U	43 U	45 U
Endrin aldehyde	NS	NS	NS	NS	NS	NS	NS	NS
alpha-Chlordane	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
gamma-Chlordane	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Toxaphene	µg/Kg 500 U	600 U	NS	510 U	510 U	570 U	430 U	450 U
Aroclor-1016	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Aroclor-1221	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Aroclor-1232	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Aroclor-1242	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Aroclor-1248	µg/Kg 250 U	300 U	NS	280 U	250 U	290 U	210 U	230 U
Aroclor-1254	µg/Kg 500 U	600 U	NS	510 U	510 U	570 U	430 U	450 U
Aroclor-1280	µg/Kg 500 U	600 U	NS	510 U	510 U	570 U	430 U	450 U
<b>Herbicides</b>								
2,4-D	µg/Kg 77 U J	84 U	NS	79 U J	79 U J	88 U J	67 U J	71 U J
2,4-DB	µg/Kg 77 U J	84 U	NS	79 U J	79 U J	88 U J	67 U J	71 U J
2,4,5-T	µg/Kg 8 U J	8 U	NS	8 U J	8 U J	9 U J	7 U J	7 U J
2,4,5-TP (Silvex)	µg/Kg 8 U J	8 U	NS	8 U J	8 U J	9 U J	7 U J	7 U J
Dalepon	µg/Kg 180 U J	230 U	NS	190 U J	190 U J	210 U J	160 U J	170 U J
Dicamba	µg/Kg 8 U J	8 U	NS	8 U J	8 U J	9 U J	7 U J	7 U J
Dichloroprop	µg/Kg 77 U J	84 U	NS	79 U J	79 U J	88 U J	67 U J	71 U J
Dinoseb	µg/Kg 39 U J	47 U	NS	40 U J	40 U J	44 U J	33 U J	36 U J
MCPA	µg/Kg 7700 U J	9400 U	NS	7900 U J	7900 U J	8800 U J	6700 U J	7100 U J
MCPP	µg/Kg 7700 U J	9400 U	NS	7900 U J	7900 U J	8800 U J	6700 U J	7100 U J
<b>Metals</b>								
Aluminum	mg/Kg 17400	17400	NS	14200	7340	12100	17400	20900
Antimony	mg/Kg 13.9 U	10.8 J	NS	12.9 U	9.1 U	11.1 U	9.4 U	12.8 U
Arsenic	mg/Kg 3	3.5 J	NS	7.9	3.4	8.7	8	10.5
Barium	mg/Kg 128	128	NS	110	52.7	79	157	227
Beryllium	mg/Kg 1.1 J	1 R	NS	0.9 J	0.45 J	0.75 J	1.1	1.2
Cadmium	mg/Kg 3.5	3.3	NS	2.3	2	2.3	3	3.9
Calcium	mg/Kg 10800	13800	NS	11400	229000	37300	8960	14200
Chromium	mg/Kg 26	25.4	NS	20.7	13.2	21.8	26.5	33.4
Cobalt	mg/Kg 8.7 J	11.7	NS	7.8 J	6.8 J	9.1 J	11.7	12.9
Copper	mg/Kg 58	88.8	NS	41.2	14.9	31.2	39.2	43
Iron	mg/Kg 26300	27900	NS	23800	16200	22900	33100	36400
Lead	mg/Kg 85.4	100	NS	26.7	23.9	83.7	219	197
Magnesium	mg/Kg 5000	5250	NS	4790	7240	11000	5480	6400
Manganese	mg/Kg 488	511 J	NS	462	1040	383	837	989
Mercury	mg/Kg 0.11 J	0.08	NS	0.1 J	0.08 J	0.12 J	0.12	0.07 J
Nickel	mg/Kg 28.1	28	NS	24.8	22	32	29.8	35.8
Potassium	mg/Kg 2150	1670	NS	2020	750 J	1740	1850	2510
Selenium	mg/Kg 0.88 J	0.52 J	NS	2 U	0.48 U	0.39 U	0.38 U	2.1 U
Silver	mg/Kg 2.1 U	0.89	NS	2.1 U	1.5 U	1.8 U	1.5 U	2 U
Sodium	mg/Kg 108 U	108	NS	74.8 U	140 J	97.9 J	54.4 U	80.2 J
Thallium	mg/Kg 0.71 U	0.52	NS	0.85 U	0.78 U	0.85 U	0.82 U	0.89 U
Vanadium	mg/Kg 29.1	23.8	NS	23.1	10.7	21.8	29	30.7
Zinc	mg/Kg 495	523	NS	144	278	681	448	800
Cyanide	mg/Kg 0.86 U	0.89	NS	0.82 U	0.85 U	1 U	0.7 U	0.82 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

COMPOUND	MATRIX LOCATION	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		SW-700	SW-700	SW-800	SW-900	SW-900	SW-901	ASH	ASH
VOCs	DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	DATE	11/20/91	11/20/91	11/18/91	11/21/91	11/20/91	11/15/91	12/09/92	12/09/92
	ES ID	S2011-88	S2011-88RE(4)	S1811-83	S2011-87	S2011-87	S1511-76	SD-WA	SD-WB
	LAB ID	149452	149452	149232	149451	149451	149114	175894	175895
	UNITS								
Chloromethane	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
Bromomethane	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
Vinyl Chloride	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
Chloroethane	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
Methylene Chloride	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Acetone	µg/Kg	14 U	NS	NS	NS	54 U	NS	16 U	34 U
Carbon Disulfide	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
1,1-Dichloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	15 J
1,1-Dichloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
1,2-Dichloroethane (total)	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	640
Chloroform	µg/Kg	7 U	NS	NS	NS	16 U	NS	4 J	34 U
1,2-Dichloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
2-Butanone	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
1,1,1-Trichloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Carbon Tetrachloride	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Vinyl Acetate	µg/Kg	14 U	NS	NS	NS	32 U	NS	NS	NS
Bromodichloromethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
1,2-Dichloropropene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
cis-1,3-Dichloropropene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Trichloroethene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	11 J
Dibromochloromethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
1,1,2-Trichloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Benzene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
trans-1,3-Dichloropropene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Bromoform	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
4-Methyl-2-Pentanone	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
2-Hexanone	µg/Kg	14 U	NS	NS	NS	32 U	NS	16 U	34 U
Tetrachloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
1,1,2,2-Tetrachloroethane	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Toluene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Chlorobenzene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Ethylbenzene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Styrene	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U
Xylene (total)	µg/Kg	7 U	NS	NS	NS	16 U	NS	16 U	34 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH DATE ES ID LAB ID	SOIL SW-700 N/A S2011-88 149452	SOIL SW-700 N/A S2011-88RE# 149452	SOIL SW-800 N/A S1811-83 149232	SOIL SW-900 N/A S2011-87 149451	SOIL SW-900 N/A S2011-87 149451	SOIL SW-901 N/A S1811-76 149114	SOIL ASH SD-WA 175894	SOIL ASH SD-WB 175895
COMPOUND	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
Semivolatiles								
Phenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
bis(2-Chloroethyl) ether	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2-Chlorophenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
1,3-Dichlorobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
1,4-Dichlorobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Benzyl Alcohol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	NS
1,2-Dichlorobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2-Methylphenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
bis(2-Chloroisopropyl) ether	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Methylphenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
N-Nitrosod-n-propylamine	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Hexachloroethane	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Nitrobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Isophorone	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2-Nitrophenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4-Dimethylphenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Benzoic acid	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	NS
bis(2-Chloroethoxy) methane	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4-Dichlorophenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
1,2,4-Trichlorobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Naphthalene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Chloroaniline	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Hexachlorobutadiene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Chloro-3-methylphenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2-Methylnaphthalene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Hexachlorocyclopentadiene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4,6-Trichlorophenol	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4,5-Trichlorophenol	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
2-Chloronaphthalene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2-Nitroaniline	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
Dimethylphthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Acenaphthylene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,6-Dinitrotoluene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
3-Nitroaniline	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
Acenaphthene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4-Dinitrophenol	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
4-Nitrophenol	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
Dibenzofuran	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
2,4-Dinitrotoluene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Diethylphthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Chlorophenyl-phenylether	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Fluorene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Nitroaniline	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
4,6-Dinitro-2-methylphenol	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
N-Nitrosodiphenylamine (1)	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
4-Bromophenyl-phenylether	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Hexachlorobenzene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Pentachlorophenol	µg/Kg	4800 U	2300 U	3700 U	10000 U J	5100 U	4500 U	1100 U
Phenanthrene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	99 J	440 U
Anthracene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Carbazole	µg/Kg	NS	NS	NS	NS	NS	NS	440 U
Di-n-butylphthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Fluoranthene	µg/Kg	940 U	95 J	78 J	2100 U J	1100 U	130 J	440 U
Pyrene	µg/Kg	940 U	110 J	780 U	2100 U J	1100 U	140 J	440 U
Butylbenzylphthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
3,3'-Dichlorobenzidine	µg/Kg	1900 U	980 U	1500 U	4200 U J	2100 U	1900 U	440 U
Benzo(a)anthracene	µg/Kg	940 U	59 J	780 U	2100 U J	1100 U	86 J	440 U
Chrysene	µg/Kg	940 U	84 J	780 U	2100 U J	1100 U	120 J	440 U
bis(2-Ethylhexyl)phthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	100 J	440 U
Di-n-octylphthalate	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Benzo(b)fluoranthene	µg/Kg	940 U	80 J	780 U	2100 U J	1100 U	98 J	440 U
Benzo(k)fluoranthene	µg/Kg	940 U	86 J	780 U	2100 U J	1100 U	930 U	440 U
Benzo(a)pyrene	µg/Kg	940 U	71 J	780 U	2100 U J	1100 U	100 J	440 U
Indeno(1,2,3-cd)pyrene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Dibenz(a,h)anthracene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U
Benzo(g,h,i)perylene	µg/Kg	940 U	480 U	780 U	2100 U J	1100 U	930 U	440 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL SW-700	SOIL SW-700	SOIL SW-800	SOIL SW-800	SOIL SW-800	SOIL SW-901	SOIL ASH	SOIL ASH
DEPTH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DATE	11/20/91	11/20/91	11/16/91	11/21/91	11/20/91	11/15/91	12/09/92	12/09/92
ES ID	S2011-88	S2011-86RE(I)	S1811-83	S2011-87	S2011-87	S2011-87	SD-WA	SD-WB
LAB ID	149452	149452	149232	149451	149451	149451	175894	175895
UNITS								
<b>COMPOUND</b>								
<b>Pesticides/PCBs</b>								
alpha-BHC	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
beta-BHC	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
delta-BHC	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
gamma-BHC (Lindane)	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
Heptachlor	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
Aldrin	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
Heptachlor epoxide	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
Endosulfan I	µg/Kg	23 U	NS	18 U	51 U	23 U	23 U	2.3 U
Dieldrin	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
4,4'-DDE	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
Endrin	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
Endosulfan II	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
4,4'-DDD	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
Endosulfan sulfate	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
4,4'-DDT	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
Methoxychlor	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	23 U
Endrin ketone	µg/Kg	48 U	NS	37 U	100 U	48 U	45 U	4.5 U
Endrin aldehyde	µg/Kg	NS	NS	NS	NS	NS	NS	4.5 U
alpha-Chlordane	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	2.3 U
gamma-Chlordane	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	2.3 U
Toxaphene	µg/Kg	480 U	NS	370 U	1000 U	480 U	450 U	230 U
Aroclor-1018	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	45 U
Aroclor-1221	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	91 U
Aroclor-1232	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	45 U
Aroclor-1242	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	45 U
Aroclor-1248	µg/Kg	230 U	NS	180 U	510 U	230 U	230 U	45 U
Aroclor-1254	µg/Kg	480 U	NS	370 U	1000 U	480 U	450 U	45 U
Aroclor-1260	µg/Kg	480 U	NS	370 U	1000 U	480 U	450 U	45 U
<b>Herbicides</b>								
2,4-D	µg/Kg	71 U J	NS	57 U J	180 U J	NS	70 U J	68 U
2,4-DB	µg/Kg	71 U J	NS	57 U J	180 U J	NS	70 U J	68 U
2,4,5-T	µg/Kg	7 U J	NS	8 U J	18 U J	NS	7 U J	6.8 U
2,4,5-TP (Silvex)	µg/Kg	7 U J	NS	8 U J	18 U J	NS	7 U J	6.8 U
Delepon	µg/Kg	170 U J	NS	140 U J	390 U J	NS	170 U J	180 U
Diamba	µg/Kg	7 U J	NS	8 U J	18 U J	NS	7 U J	6.8 U
Dichloroprop	µg/Kg	71 U J	NS	57 U J	180 U J	NS	70 U J	68 U
Dinoseb	µg/Kg	38 U J	NS	29 U J	80 U J	NS	35 U J	34 U
MCPA	µg/Kg	7100 U J	NS	5700 U J	16000 U J	NS	7000 U J	6800 U
MCPP	µg/Kg	7100 U J	NS	5700 U J	16000 U J	NS	7000 U J	6800 U
<b>Metals</b>								
Aluminum	mg/Kg	12700 J	NS	13500	13900 J	NS	13000	14800
Antimony	mg/Kg	11.8 U J	NS	11.3 U	35.4 U J	NS	15.4 U	11.8 UU
Arsenic	mg/Kg	7.3 J	NS	5.7	9 J	NS	6.6	4.4 J
Barium	mg/Kg	120 J	NS	81.8	139 J	NS	100	81.5
Beryllium	mg/Kg	0.73 J	NS	0.81 J	1.1 J	NS	0.98 J	0.82 J
Cadmium	mg/Kg	2.4 J	NS	4.1	2.5 J	NS	2.6	0.68 U
Calcium	mg/Kg	48900 J	NS	42900	105000 J	NS	24100	4770
Chromium	mg/Kg	21.3 J	NS	22.8	22.8	NS	24.1	22.5
Cobalt	mg/Kg	12.5 J	NS	17	12.7 U J	NS	8.8 J	10 J
Copper	mg/Kg	22.8 J	NS	16.7	24.3 J	NS	33.9	28.7
Iron	mg/Kg	28200 J	NS	36800	23900 J	NS	26800	26400
Lead	mg/Kg	37.3 J	NS	8.5	21.5 J	NS	31.3	19.2
Magnesium	mg/Kg	14900 J	NS	7080	6290 J	NS	4920	4090
Manganese	mg/Kg	913 J	NS	1950	447 J	NS	340	591
Mercury	mg/Kg	0.05 U J	NS	0.04 U	0.12 U J	NS	0.05 J	0.02 U
Nickel	mg/Kg	27.9 J	NS	37.8	22.6 J	NS	28.3	29.4
Potassium	mg/Kg	1470 J	NS	875 J	1690 J	NS	1710	2110
Selenium	mg/Kg	1.8 U J	NS	0.27 U	0.95 U J	NS	1.8 U	1 J
Silver	mg/Kg	1.8 U J	NS	1.7 U	5.8 U J	NS	2.5 U	0.88 U
Sodium	mg/Kg	68.3 U J	NS	195 J	205 U J	NS	89 U	63.9 U
Thallium	mg/Kg	0.6 U J	NS	0.45 U	1.6 U J	NS	0.58 U	0.61 U
Vanadium	mg/Kg	20.8 J	NS	20.3	29.1 J	NS	21.6	20
Zinc	mg/Kg	255 J	NS	100	339 J	NS	370	78
Cyanide	mg/Kg	0.83 U J	NS	0.65 U	1.9 U J	NS	0.82 U	0.79 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH
COMPOUND										
VOCs										
Chloromethane	µg/Kg	NS	13 U	NS	12 U	NS	18 U	15 U	NS	12 U
Bromomethane	µg/Kg	NS	13 U	NS	12 U	NS	18 U	15 U	NS	12 U
Vinyl Chloride	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Chloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Methylene Chloride	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Acetone	µg/Kg	NS	8 J	NS	12 U	NS	19	8 J	NS	12 U
Carbon Disulfide	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,1-Dichloroethane	µg/Kg	NS	18	NS	12 U	NS	16 U	15 U	NS	12 U
1,1-Dichloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,2-Dichloroethane (total)	µg/Kg	NS	580	NS	12 U	NS	16 U	15 U	NS	12 U
Chloroform	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,2-Dichloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
2-Butanone	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,1,1-Trichloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Carbon Tetrachloride	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Vinyl Acetate	µg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,2-Dichloropropane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
cis-1,3-Dichloropropene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Trichloroethane	µg/Kg	NS	7 J	NS	12 U	NS	16 U	15 U	NS	12 U
Dibromochloromethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,1,2-Trichloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Benzene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
trans-1,3-Dichloropropene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Bromoform	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
4-Methyl-2-Pentanone	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
2-Hexanone	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Tetrachloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
1,1,2,2-Tetrachloroethane	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Toluene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Chlorobenzene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Ethylbenzene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Styrene	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U
Xylene (total)	µg/Kg	NS	13 U	NS	12 U	NS	16 U	15 U	NS	12 U

SENECA ARMY DEPOT, ASH LANDFILL  
 SEDIMENT ANALYSIS RESULTS  
 VALIDATED DATA (PHASES I & II)

MATRIX LOCATION DEPTH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH	SOIL ASH
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID	ES ID
LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID	LAB ID
COMPOUND	SD-WBRE	SD-WB1	SD-WB1RE	SD-WC	SD-WCRE	SD-WD	SD-WE	SD-WERE	SD-WF	SD-WF
Semivolatiles	175896R1	175898	175898R1	175897	175897R1	175898	175898	175898R1	175898	175900
UNITS		DUP SD-WB								
Phenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
bis(2-Chloroethyl) ether	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2-Chlorophenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
1,3-Dichlorobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
1,4-Dichlorobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Benzyl Alcohol	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2-Methylphenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
bis(2-Chloroisopropyl) ether	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Methylphenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
N-Nitroso-di-n-propylamine	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Hexachloroethane	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Nitrobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Isophorone	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2-Nitrophenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4-Dimethylphenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Benzoic acid	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
bis(2-Chloroethoxy) methane	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4-Dichlorophenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
1,2,4-Trichlorobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Naphthalene	440 UJ	470 UJ	22 J	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Chloroaniline	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Hexachlorobutadiene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Chloro-3-methylphenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2-Methylnaphthalene	440 UJ	30 J	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Hexachlorocyclopentadiene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4,6-Trichlorophenol	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4,6-Trichlorophenol	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
2-Chloronaphthalene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2-Nitroaniline	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
Dimethylphthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Acenaphthylene	18 J	72 J	30 J	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,6-Dinitrotoluene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
3-Nitroaniline	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
Acenaphthene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4-Dinitrophenol	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
4-Nitrophenol	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
Dibenzofuran	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
2,4-Dinitrotoluene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Diethylphthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Chlorophenyl-phenylether	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Fluorene	440 UJ	470 UJ	470 UJ	20 J	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Nitroaniline	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
4,6-Dinitro-2-methylphenol	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
N-Nitrosodiphenylamine (1)	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
4-Bromophenyl-phenylether	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Hexachlorobenzene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Pentachlorophenol	1000 UJ	1100 UJ	1100 UJ	910 UJ	930 UJ	1800 U	1200 UJ	1200 UJ	930 U	930 U
Phenanthrene	88 J	220 J	180 J	170 J	28 J	670 U	500 UJ	500 UJ	380 U	380 U
Anthracene	18 J	82 J	37 J	30 J	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Carbazole	440 UJ	45 J	48 J	32 J	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Di-n-butylphthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Fluoranthene	140 J	440 J	280 J	300 J	48 J	30 J	120 J	370 J	140 J	140 J
Pyrene	180 J	420 J	300 J	240 J	58 J	25 J	98 J	410 J	110 J	110 J
Butylbenzylphthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
3,3'-Dichlorobenzidine	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Benzo(a)anthracene	84 J	230 J	180 J	130 J	30 J	670 U	53 J	250 J	84 J	84 J
Chrysene	100 J	300 J	180 J	150 J	38 J	670 U	59 J	250 J	84 J	84 J
bis(2-Ethylhexyl)phthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Di-n-octylphthalate	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Benzo(b)fluoranthene	80 J	230 J	180 J	140 J	37 J	670 U	80 J	210 J	78 J	78 J
Benzo(k)fluoranthene	90 J	220 J	180 J	140 J	37 J	670 U	81 J	200 J	70 J	70 J
Benzo(a)pyrene	83 J	190 J	150 J	99 J	34 J	0 J	25 J	220 J	35 J	35 J
Indeno(1,2,3-cd)pyrene	87 J	140 J	120 J	81 J	29 J	670 U	42 J	180 J	53 J	53 J
Dibenz(a,h)anthracene	440 UJ	470 UJ	470 UJ	380 UJ	380 UJ	670 U	500 UJ	500 UJ	380 U	380 U
Benzo(g,h,i)perylene	77 J	170 J	97 J	85 J	380 UJ	670 U	44 J	110 J	53 J	53 J