



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

May 04, 2009

Cathy Young (HBR)
USEPA New England, Region 1
One Congress Street
Boston, MA. 01224-2023

Project Number: 09040020
Project: St John's Cemetery
Analysis: BNAs in Soils Medium Level
Analyst: Dan Boudreau *DB*
5/4/09

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, EIASOP-BNAS1.

Samples were prepared using pressurized fluid extraction. The samples were analyzed using high resolution capillary column chromatography and quadrapole mass spectrometry (GC/MS). The SOP for this analysis is based on US EPA SW-846 methods 3545A and 8270C and EIASOP-BNAGCMS6.

Date Samples Received by the Laboratory: 04/20/2009

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617-918-8340.

Sincerely,

Daniel N. Boudreau *5/11/09*
Daniel N. Boudreau
Chemistry Team Leader

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 5 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0341
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 6.525 grams
Wet Weight Extracted: 8.863 grams
Final Volume: 1 mL

Lab Sample ID: AA92725
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 74%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	380	
120-82-1	1,2,4-Trichlorobenzene	ND	380	
95-50-1	1,2-Dichlorobenzene	ND	380	
541-73-1	1,3-Dichlorobenzene	ND	380	
99-65-0	1,3-Dinitrobenzene	ND	380	
106-46-7	1,4-Dichlorobenzene	ND	380	
130-15-4	1,4-Naphthoquinone	ND	380	
90-12-0	1-Methylnaphthalene	ND	380	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	380	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	380	
95-95-4	2,4,5-Trichlorophenol	ND	380	
88-06-2	2,4,6-Trichlorophenol	ND	380	
120-83-2	2,4-Dichlorophenol	ND	380	
51-28-5	2,4-Dinitrophenol	ND	770	
121-14-2	2,4-Dinitrotoluene	ND	380	
105-67-9	2,4-dimethylphenol	ND	770	
87-65-0	2,6-Dichlorophenol	ND	380	
606-20-2	2,6-Dinitrotoluene	ND	380	
91-58-7	2-Chloronaphthalene	ND	380	
95-57-8	2-Chlorophenol	ND	380	
91-57-6	2-Methylnaphthalene	ND	380	
95-48-7	2-Methylphenol	ND	380	
88-74-4	2-Nitroaniline	ND	380	
88-75-5	2-Nitrophenol	ND	380	
108-39-4/106-44-	3&4-Methylphenol	ND	770	
91-94-1	3,3'-Dichlorobenzidine	ND	380	
56-49-5	3-Methylcholanthrene	ND	380	
99-09-2	3-Nitroaniline	ND	380	
534-52-1	4,6-Dinitro-2-methylphenol	ND	380	
101-55-3	4-Bromophenyl-phenylether	ND	380	
59-50-7	4-Chloro-3-methylphenol	ND	380	
106-47-8	4-Chloroaniline	ND	380	
7005-72-3	4-Chlorophenyl-phenylether	ND	380	
100-01-6	4-Nitroaniline	ND	380	
100-02-7	4-Nitrophenol	ND	380	
56-57-5	4-nitroquinoline-1-oxide	ND	1500	
83-32-9	Acenaphthene	ND	380	
208-96-8	Acenaphthylene	ND	380	
98-86-2	Acetophenone	ND	380	
62-53-3	Aniline	ND	380	
120-12-7	Anthracene	ND	380	

140-57-8	Aramite	ND	380
103-33-3	Azobenzene	ND	380
92-87-5	Benzidine	ND	380
56-55-3	Benzo(a)anthracene	ND	380
50-32-8	Benzo(a)pyrene	ND	380
205-99-2	Benzo(b)fluoranthene	480	380
191-24-2	Benzo(g,h,i)perylene	ND	380
207-08-9	Benzo(k)fluoranthene	ND	380
65-85-0	Benzoic acid	1000	770
100-51-6	Benzyl alcohol	ND	380
111-44-4	Bis(2-Chloroethyl)ether	ND	380
117-81-7	Bis(2-ethylhexyl)phthalate	ND	380
85-68-7	Butylbenzylphthalate	ND	380
86-74-8	Carbazole	ND	380
510-15-6	Chlorobenzilate	ND	380
218-01-9	Chrysene	ND	380
84-74-2	Di-n-butylphthalate	ND	380
117-84-0	Di-n-octyl phthalate	ND	380
53-70-3	Dibenz(a,h)anthracene	ND	380
132-64-9	Dibenzofuran	ND	380
84-66-2	Diethylphthalate	ND	380
131-11-3	Dimethyl phthalate	ND	380
88-85-7	Dinoseb	ND	380
62-50-0	Ethyl methanesulfonate	ND	380
206-44-0	Fluoranthene	ND	380
86-73-7	Fluorene	ND	380
118-74-1	Hexachlorobenzene	ND	380
87-68-3	Hexachlorobutadiene	ND	380
77-47-4	Hexachlorocyclopentadiene	ND	380
67-72-1	Hexachloroethane	ND	380
1888-71-7	Hexachloropropene	ND	380
193-39-5	Indeno(1,2,3-cd)pyrene	ND	380
465-73-6	Isodrin	ND	380
78-59-1	Isophorone	ND	380
120-58-1	Isosafrole	ND	380
143-50-0	Kepone	ND	770
66-27-3	Methyl methanesulfonate	ND	380
86-30-6	N-Nitrosodiphenylamine	ND	380
621-64-7	N-nitroso-di-n-propylamine	ND	380
62-75-9	N-nitrosodimethylamine	ND	380
91-20-3	Naphthalene	ND	380
98-95-3	Nitrobenzene	ND	380
608-93-5	Pentachlorobenzene	ND	380
82-68-8	Pentachloronitrobenzene	ND	380
87-86-5	Pentachlorophenol	ND	380
62-44-2	Phenacetin	ND	380
85-01-8	Phenanthrene	ND	380
108-95-2	Phenol	ND	380
129-00-0	Pyrene	ND	380
110-86-1	Pyridine	ND	380
94-59-7	Safrole	ND	380
111-91-1	bis(-2-Chloroethoxy)methane	ND	380

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	39 - 106
Phenol-d6 (SS2)	55	38 - 92
Nitrobenzene-d5 (SS3)	47	31 - 102
2,4,6-Tribromophenol (SS5)	48	35 - 102
p-Terphenyl-d14 (SS6)	65	41 - 106
2-Fluorobiphenyl (SS4)	60	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
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St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0342
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 11.464 grams
Wet Weight Extracted: 13.339 grams
Final Volume: 1 mL

Lab Sample ID: AA92726
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 86%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	
120-82-1	1,2,4-Trichlorobenzene	ND	220	
95-50-1	1,2-Dichlorobenzene	ND	220	
541-73-1	1,3-Dichlorobenzene	ND	220	
99-65-0	1,3-Dinitrobenzene	ND	220	
106-46-7	1,4-Dichlorobenzene	ND	220	
130-15-4	1,4-Naphthoquinone	ND	220	
90-12-0	1-Methylnaphthalene	ND	220	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	220	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	
95-95-4	2,4,5-Trichlorophenol	ND	220	
88-06-2	2,4,6-Trichlorophenol	ND	220	
120-83-2	2,4-Dichlorophenol	ND	220	
51-28-5	2,4-Dinitrophenol	ND	440	
121-14-2	2,4-Dinitrotoluene	ND	220	
105-67-9	2,4-dimethylphenol	ND	440	
87-65-0	2,6-Dichlorophenol	ND	220	
606-20-2	2,6-Dinitrotoluene	ND	220	
91-58-7	2-Chloronaphthalene	ND	220	
95-57-8	2-Chlorophenol	ND	220	
91-57-6	2-Methylnaphthalene	ND	220	
95-48-7	2-Methylphenol	ND	220	
88-74-4	2-Nitroaniline	ND	220	
88-75-5	2-Nitrophenol	ND	220	
108-39-4/106-44-	3&4-Methylphenol	ND	440	
91-94-1	3,3'-Dichlorobenzidine	ND	220	
56-49-5	3-Methylcholanthrene	ND	220	
99-09-2	3-Nitroaniline	ND	220	
534-52-1	4,6-Dinitro-2-methylphenol	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	220	
59-50-7	4-Chloro-3-methylphenol	ND	220	
106-47-8	4-Chloroaniline	ND	220	
7005-72-3	4-Chlorophenyl-phenylether	ND	220	
100-01-6	4-Nitroaniline	ND	220	
100-02-7	4-Nitrophenol	ND	220	
56-57-5	4-nitroquinoline-1-oxide	ND	870	
83-32-9	Acenaphthene	ND	220	
208-96-8	Acenaphthylene	ND	220	
98-86-2	Acetophenone	ND	220	
62-53-3	Aniline	ND	220	
120-12-7	Anthracene	ND	220	

140-57-8	Aramite	ND	220
103-33-3	Azobenzene	ND	220
92-87-5	Benzidine	ND	220
56-55-3	Benzo(a)anthracene	ND	220
50-32-8	Benzo(a)pyrene	ND	220
205-99-2	Benzo(b)fluoranthene	ND	220
191-24-2	Benzo(g,h,i)perylene	ND	220
207-08-9	Benzo(k)fluoranthene	ND	220
65-85-0	Benzoic acid	ND	440
100-51-6	Benzyl alcohol	ND	220
111-44-4	Bis(2-Chloroethyl)ether	ND	220
117-81-7	Bis(2-ethylhexyl)phthalate	ND	220
85-68-7	Butylbenzylphthalate	ND	220
86-74-8	Carbazole	ND	220
510-15-6	Chlorobenzilate	ND	220
218-01-9	Chrysene	ND	220
84-74-2	Di-n-butylphthalate	ND	220
117-84-0	Di-n-octyl phthalate	ND	220
53-70-3	Dibenz(a,h)anthracene	ND	220
132-64-9	Dibenzofuran	ND	220
84-66-2	Diethylphthalate	ND	220
131-11-3	Dimethyl phthalate	ND	220
88-85-7	Dinoseb	ND	220
62-50-0	Ethyl methanesulfonate	ND	220
206-44-0	Fluoranthene	ND	220
86-73-7	Fluorene	ND	220
118-74-1	Hexachlorobenzene	ND	220
87-68-3	Hexachlorobutadiene	ND	220
77-47-4	Hexachlorocyclopentadiene	ND	220
67-72-1	Hexachloroethane	ND	220
1888-71-7	Hexachloropropene	ND	220
193-39-5	Indeno(1,2,3-cd)pyrene	ND	220
465-73-6	Isodrin	ND	220
78-59-1	Isophorone	ND	220
120-58-1	Isosafrole	ND	220
143-50-0	Kepone	ND	440
66-27-3	Methyl methanesulfonate	ND	220
86-30-6	N-Nitrosodiphenylamine	ND	220
621-64-7	N-nitroso-di-n-propylamine	ND	220
62-75-9	N-nitrosodimethylamine	ND	220
91-20-3	Naphthalene	ND	220
98-95-3	Nitrobenzene	ND	220
608-93-5	Pentachlorobenzene	ND	220
82-68-8	Pentachloronitrobenzene	ND	220
87-86-5	Pentachlorophenol	ND	220
62-44-2	Phenacetin	ND	220
85-01-8	Phenanthrene	ND	220
108-95-2	Phenol	ND	220
129-00-0	Pyrene	ND	220
110-86-1	Pyridine	ND	220
94-59-7	Safrole	ND	220
111-91-1	bis(-2-Chloroethoxy)methane	ND	220

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	63	39 - 106
Phenol-d6 (SS2)	63	38 - 92
Nitrobenzene-d5 (SS3)	55	31 - 102
2,4,6-Tribromophenol (SS5)	55	35 - 102
p-Terphenyl-d14 (SS6)	75	41 - 106
2-Fluorobiphenyl (SS4)	65	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
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St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0343
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 5.887 grams
Wet Weight Extracted: 7.987 grams
Final Volume: 1 mL

Lab Sample ID: AA92727
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 74%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	430	
120-82-1	1,2,4-Trichlorobenzene	ND	430	
95-50-1	1,2-Dichlorobenzene	ND	430	
541-73-1	1,3-Dichlorobenzene	ND	430	
99-65-0	1,3-Dinitrobenzene	ND	430	
106-46-7	1,4-Dichlorobenzene	ND	430	
130-15-4	1,4-Naphthoquinone	ND	430	
90-12-0	1-Methylnaphthalene	ND	430	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	430	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	430	
95-95-4	2,4,5-Trichlorophenol	ND	430	
88-06-2	2,4,6-Trichlorophenol	ND	430	
120-83-2	2,4-Dichlorophenol	ND	430	
51-28-5	2,4-Dinitrophenol	ND	850	
121-14-2	2,4-Dinitrotoluene	ND	430	
105-67-9	2,4-dimethylphenol	ND	850	
87-65-0	2,6-Dichlorophenol	ND	430	
606-20-2	2,6-Dinitrotoluene	ND	430	
91-58-7	2-Chloronaphthalene	ND	430	
95-57-8	2-Chlorophenol	ND	430	
91-57-6	2-Methylnaphthalene	ND	430	
95-48-7	2-Methylphenol	ND	430	
88-74-4	2-Nitroaniline	ND	430	
88-75-5	2-Nitrophenol	ND	430	
108-39-4/106-44-	3&4-Methylphenol	ND	850	
91-94-1	3,3'-Dichlorobenzidine	ND	430	
56-49-5	3-Methylcholanthrene	ND	430	
99-09-2	3-Nitroaniline	ND	430	
534-52-1	4,6-Dinitro-2-methylphenol	ND	430	
101-55-3	4-Bromophenyl-phenylether	ND	430	
59-50-7	4-Chloro-3-methylphenol	ND	430	
106-47-8	4-Chloroaniline	ND	430	
7005-72-3	4-Chlorophenyl-phenylether	ND	430	
100-01-6	4-Nitroaniline	ND	430	
100-02-7	4-Nitrophenol	ND	430	
56-57-5	4-nitroquinoline-1-oxide	ND	1700	
83-32-9	Acenaphthene	ND	430	
208-96-8	Acenaphthylene	ND	430	
98-86-2	Acetophenone	ND	430	
62-53-3	Aniline	ND	430	
120-12-7	Anthracene	ND	430	

140-57-8	Aramite	ND	430
103-33-3	Azobenzene	ND	430
92-87-5	Benzidine	ND	430
56-55-3	Benzo(a)anthracene	ND	430
50-32-8	Benzo(a)pyrene	ND	430
205-99-2	Benzo(b)fluoranthene	590	430
191-24-2	Benzo(g,h,i)perylene	ND	430
207-08-9	Benzo(k)fluoranthene	ND	430
65-85-0	Benzoic acid	1500	850
100-51-6	Benzyl alcohol	ND	430
111-44-4	Bis(2-Chloroethyl)ether	ND	430
117-81-7	Bis(2-ethylhexyl)phthalate	ND	430
85-68-7	Butylbenzylphthalate	ND	430
86-74-8	Carbazole	ND	430
510-15-6	Chlorobenzilate	ND	430
218-01-9	Chrysene	ND	430
84-74-2	Di-n-butylphthalate	ND	430
117-84-0	Di-n-octyl phthalate	ND	430
53-70-3	Dibenz(a,h)anthracene	ND	430
132-64-9	Dibenzofuran	ND	430
84-66-2	Diethylphthalate	ND	430
131-11-3	Dimethyl phthalate	ND	430
88-85-7	Dinoseb	ND	430
62-50-0	Ethyl methanesulfonate	ND	430
206-44-0	Fluoranthene	ND	430
86-73-7	Fluorene	ND	430
118-74-1	Hexachlorobenzene	ND	430
87-68-3	Hexachlorobutadiene	ND	430
77-47-4	Hexachlorocyclopentadiene	ND	430
67-72-1	Hexachloroethane	ND	430
1888-71-7	Hexachloropropene	ND	430
193-39-5	Indeno(1,2,3-cd)pyrene	ND	430
465-73-6	Isodrin	ND	430
78-59-1	Isophorone	ND	430
120-58-1	Isosafrole	ND	430
143-50-0	Kepone	ND	850
66-27-3	Methyl methanesulfonate	ND	430
86-30-6	N-Nitrosodiphenylamine	ND	430
621-64-7	N-nitroso-di-n-propylamine	ND	430
62-75-9	N-nitrosodimethylamine	ND	430
91-20-3	Naphthalene	ND	430
98-95-3	Nitrobenzene	ND	430
608-93-5	Pentachlorobenzene	ND	430
82-68-8	Pentachloronitrobenzene	ND	430
87-86-5	Pentachlorophenol	ND	430
62-44-2	Phenacetin	ND	430
85-01-8	Phenanthrene	ND	430
108-95-2	Phenol	ND	430
129-00-0	Pyrene	ND	430
110-86-1	Pyridine	ND	430
94-59-7	Safrole	ND	430
111-91-1	bis(-2-Chloroethoxy)methane	ND	430

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	75	39 - 106
Phenol-d6 (SS2)	75	38 - 92
Nitrobenzene-d5 (SS3)	65	31 - 102
2,4,6-Tribromophenol (SS5)	75	35 - 102
p-Terphenyl-d14 (SS6)	80	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0344
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 7.335 grams
Wet Weight Extracted: 9.460 grams
Final Volume: 1 mL

Lab Sample ID: AA92728
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 78%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	340	
120-82-1	1,2,4-Trichlorobenzene	ND	340	
95-50-1	1,2-Dichlorobenzene	ND	340	
541-73-1	1,3-Dichlorobenzene	ND	340	
99-65-0	1,3-Dinitrobenzene	ND	340	
106-46-7	1,4-Dichlorobenzene	ND	340	
130-15-4	1,4-Naphthoquinone	ND	340	
90-12-0	1-Methylnaphthalene	ND	340	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	340	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	340	
95-95-4	2,4,5-Trichlorophenol	ND	340	
88-06-2	2,4,6-Trichlorophenol	ND	340	
120-83-2	2,4-Dichlorophenol	ND	340	
51-28-5	2,4-Dinitrophenol	ND	680	
121-14-2	2,4-Dinitrotoluene	ND	340	
105-67-9	2,4-dimethylphenol	ND	680	
87-65-0	2,6-Dichlorophenol	ND	340	
606-20-2	2,6-Dinitrotoluene	ND	340	
91-58-7	2-Chloronaphthalene	ND	340	
95-57-8	2-Chlorophenol	ND	340	
91-57-6	2-Methylnaphthalene	ND	340	
95-48-7	2-Methylphenol	ND	340	
88-74-4	2-Nitroaniline	ND	340	
88-75-5	2-Nitrophenol	ND	340	
108-39-4/106-44-	3&4-Methylphenol	ND	680	
91-94-1	3,3'-Dichlorobenzidine	ND	340	
56-49-5	3-Methylcholanthrene	ND	340	
99-09-2	3-Nitroaniline	ND	340	
534-52-1	4,6-Dinitro-2-methylphenol	ND	340	
101-55-3	4-Bromophenyl-phenylether	ND	340	
59-50-7	4-Chloro-3-methylphenol	ND	340	
106-47-8	4-Chloroaniline	ND	340	
7005-72-3	4-Chlorophenyl-phenylether	ND	340	
100-01-6	4-Nitroaniline	ND	340	
100-02-7	4-Nitrophenol	ND	340	
56-57-5	4-nitroquinoline-1-oxide	ND	1400	
83-32-9	Acenaphthene	ND	340	
208-96-8	Acenaphthylene	ND	340	
98-86-2	Acetophenone	ND	340	
62-53-3	Aniline	ND	340	
120-12-7	Anthracene	ND	340	

140-57-8	Aramite	ND	340
103-33-3	Azobenzene	ND	340
92-87-5	Benzidine	ND	340
56-55-3	Benzo(a)anthracene	ND	340
50-32-8	Benzo(a)pyrene	ND	340
205-99-2	Benzo(b)fluoranthene	520	340
191-24-2	Benzo(g,h,i)perylene	ND	340
207-08-9	Benzo(k)fluoranthene	ND	340
65-85-0	Benzoic acid	ND	680
100-51-6	Benzyl alcohol	ND	340
111-44-4	Bis(2-Chloroethyl)ether	ND	340
117-81-7	Bis(2-ethylhexyl)phthalate	ND	340
85-68-7	Butylbenzylphthalate	ND	340
86-74-8	Carbazole	ND	340
510-15-6	Chlorobenzilate	ND	340
218-01-9	Chrysene	ND	340
84-74-2	Di-n-butylphthalate	ND	340
117-84-0	Di-n-octyl phthalate	ND	340
53-70-3	Dibenz(a,h)anthracene	ND	340
132-64-9	Dibenzofuran	ND	340
84-66-2	Diethylphthalate	ND	340
131-11-3	Dimethyl phthalate	ND	340
88-85-7	Dinoseb	ND	340
62-50-0	Ethyl methanesulfonate	ND	340
206-44-0	Fluoranthene	ND	340
86-73-7	Fluorene	ND	340
118-74-1	Hexachlorobenzene	ND	340
87-68-3	Hexachlorobutadiene	ND	340
77-47-4	Hexachlorocyclopentadiene	ND	340
67-72-1	Hexachloroethane	ND	340
1888-71-7	Hexachloropropene	ND	340
193-39-5	Indeno(1,2,3-cd)pyrene	ND	340
465-73-6	Isodrin	ND	340
78-59-1	Isophorone	ND	340
120-58-1	Isosafrole	ND	340
143-50-0	Kepone	ND	680
66-27-3	Methyl methanesulfonate	ND	340
86-30-6	N-Nitrosodiphenylamine	ND	340
621-64-7	N-nitroso-di-n-propylamine	ND	340
62-75-9	N-nitrosodimethylamine	ND	340
91-20-3	Naphthalene	ND	340
98-95-3	Nitrobenzene	ND	340
608-93-5	Pentachlorobenzene	ND	340
82-68-8	Pentachloronitrobenzene	ND	340
87-86-5	Pentachlorophenol	ND	340
62-44-2	Phenacetin	ND	340
85-01-8	Phenanthrene	ND	340
108-95-2	Phenol	ND	340
129-00-0	Pyrene	ND	340
110-86-1	Pyridine	ND	340
94-59-7	Safrole	ND	340
111-91-1	bis(-2-Chloroethoxy)methane	ND	340

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	75	39 - 106
Phenol-d6 (SS2)	78	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	75	35 - 102
p-Terphenyl-d14 (SS6)	80	41 - 106
2-Fluorobiphenyl (SS4)	80	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

Laboratory Blank

Client Sample ID: N/A
Date of Collection: N/A
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 15.838 grams
Wet Weight Extracted: 15.838 grams
Final Volume: 1 mL

Lab Sample ID: N/A
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 100%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	
120-82-1	1,2,4-Trichlorobenzene	ND	160	
95-50-1	1,2-Dichlorobenzene	ND	160	
541-73-1	1,3-Dichlorobenzene	ND	160	
99-65-0	1,3-Dinitrobenzene	ND	160	
106-46-7	1,4-Dichlorobenzene	ND	160	
130-15-4	1,4-Naphthoquinone	ND	160	
90-12-0	1-Methylnaphthalene	ND	160	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	160	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	
95-95-4	2,4,5-Trichlorophenol	ND	160	
88-06-2	2,4,6-Trichlorophenol	ND	160	
120-83-2	2,4-Dichlorophenol	ND	160	
51-28-5	2,4-Dinitrophenol	ND	320	
121-14-2	2,4-Dinitrotoluene	ND	160	
105-67-9	2,4-dimethylphenol	ND	320	
87-65-0	2,6-Dichlorophenol	ND	160	
606-20-2	2,6-Dinitrotoluene	ND	160	
91-58-7	2-Chloronaphthalene	ND	160	
95-57-8	2-Chlorophenol	ND	160	
91-57-6	2-Methylnaphthalene	ND	160	
95-48-7	2-Methylphenol	ND	160	
88-74-4	2-Nitroaniline	ND	160	
88-75-5	2-Nitrophenol	ND	160	
108-39-4/106-44-	3&4-Methylphenol	ND	320	
91-94-1	3,3'-Dichlorobenzidine	ND	160	
56-49-5	3-Methylcholanthrene	ND	320	
99-09-2	3-Nitroaniline	ND	160	
534-52-1	4,6-Dinitro-2-methylphenol	ND	160	
101-55-3	4-Bromophenyl-phenylether	ND	160	
59-50-7	4-Chloro-3-methylphenol	ND	160	
106-47-8	4-Chloroaniline	ND	160	
7005-72-3	4-Chlorophenyl-phenylether	ND	160	
100-01-6	4-Nitroaniline	ND	160	
100-02-7	4-Nitrophenol	ND	160	
56-57-5	4-nitroquinoline-1-oxide	ND	320	
83-32-9	Acenaphthene	ND	160	
208-96-8	Acenaphthylene	ND	160	
98-86-2	Acetophenone	ND	160	
62-53-3	Aniline	ND	160	
120-12-7	Anthracene	ND	160	

140-57-8	Aramite	ND	160
103-33-3	Azobenzene	ND	160
92-87-5	Benzidine	ND	160
56-55-3	Benzo(a)anthracene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
65-85-0	Benzoic acid	ND	160
100-51-6	Benzyl alcohol	ND	160
111-44-4	Bis(2-Chloroethyl)ether	ND	160
117-81-7	Bis(2-ethylhexyl)phthalate	ND	160
85-68-7	Butylbenzylphthalate	ND	160
86-74-8	Carbazole	ND	160
510-15-6	Chlorobenzilate	ND	160
218-01-9	Chrysene	ND	160
84-74-2	Di-n-butylphthalate	390	160
117-84-0	Di-n-octyl phthalate	ND	160
53-70-3	Dibenz(a,h)anthracene	ND	160
132-64-9	Dibenzofuran	ND	160
84-66-2	Diethylphthalate	ND	160
131-11-3	Dimethyl phthalate	ND	160
88-85-7	Dinoseb	ND	160
62-50-0	Ethyl methanesulfonate	ND	160
206-44-0	Fluoranthene	ND	160
86-73-7	Fluorene	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-68-3	Hexachlorobutadiene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
67-72-1	Hexachloroethane	ND	160
1888-71-7	Hexachloropropene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160
465-73-6	Isodrin	ND	160
78-59-1	Isophorone	ND	160
120-58-1	Isosafrole	ND	160
143-50-0	Kepone	ND	160
66-27-3	Methyl methanesulfonate	ND	160
86-30-6	N-Nitrosodiphenylamine	ND	160
621-64-7	N-nitroso-di-n-propylamine	ND	160
62-75-9	N-nitrosodimethylamine	ND	160
91-20-3	Naphthalene	ND	160
98-95-3	Nitrobenzene	ND	160
608-93-5	Pentachlorobenzene	ND	160
82-68-8	Pentachloronitrobenzene	ND	160
87-86-5	Pentachlorophenol	ND	320
62-44-2	Phenacetin	ND	160
85-01-8	Phenanthrene	ND	160
108-95-2	Phenol	ND	160
129-00-0	Pyrene	ND	160
110-86-1	Pyridine	ND	160
94-59-7	Safrole	ND	160
111-91-1	bis(-2-Chloroethoxy)methane	ND	160

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	58	39 - 106
Phenol-d6 (SS2)	57	38 - 92
Nitrobenzene-d5 (SS3)	49	31 - 102
2,4,6-Tribromophenol (SS5)	25	35 - 102
p-Terphenyl-d14 (SS6)	69	41 - 106

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

Method blank for samples AA92725 - AA92734; AA92746.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0345
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 5.721 grams
Wet Weight Extracted: 7.904 grams
Final Volume: 1 mL

Lab Sample ID: AA92729
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 72%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	440	
120-82-1	1,2,4-Trichlorobenzene	ND	440	
95-50-1	1,2-Dichlorobenzene	ND	440	
541-73-1	1,3-Dichlorobenzene	ND	440	
99-65-0	1,3-Dinitrobenzene	ND	440	
106-46-7	1,4-Dichlorobenzene	ND	440	
130-15-4	1,4-Naphthoquinone	ND	440	
90-12-0	1-Methylnaphthalene	ND	440	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	440	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	440	
95-95-4	2,4,5-Trichlorophenol	ND	440	
88-06-2	2,4,6-Trichlorophenol	ND	440	
120-83-2	2,4-Dichlorophenol	ND	440	
51-28-5	2,4-Dinitrophenol	ND	880	
121-14-2	2,4-Dinitrotoluene	ND	440	
105-67-9	2,4-dimethylphenol	ND	880	
87-65-0	2,6-Dichlorophenol	ND	440	
606-20-2	2,6-Dinitrotoluene	ND	440	
91-58-7	2-Chloronaphthalene	ND	440	
95-57-8	2-Chlorophenol	ND	440	
91-57-6	2-Methylnaphthalene	ND	440	
95-48-7	2-Methylphenol	ND	440	
88-74-4	2-Nitroaniline	ND	440	
88-75-5	2-Nitrophenol	ND	440	
108-39-4/106-44-	3&4-Methylphenol	ND	880	
91-94-1	3,3'-Dichlorobenzidine	ND	440	
56-49-5	3-Methylcholanthrene	ND	440	
99-09-2	3-Nitroaniline	ND	440	
534-52-1	4,6-Dinitro-2-methylphenol	ND	440	
101-55-3	4-Bromophenyl-phenylether	ND	440	
59-50-7	4-Chloro-3-methylphenol	ND	440	
106-47-8	4-Chloroaniline	ND	440	
7005-72-3	4-Chlorophenyl-phenylether	ND	440	
100-01-6	4-Nitroaniline	ND	440	
100-02-7	4-Nitrophenol	ND	440	
56-57-5	4-nitroquinoline-1-oxide	ND	1800	
83-32-9	Acenaphthene	ND	440	
208-96-8	Acenaphthylene	ND	440	
98-86-2	Acetophenone	ND	440	
62-53-3	Aniline	ND	440	
120-12-7	Anthracene	ND	440	

140-57-8	Aramite	ND	440
103-33-3	Azobenzene	ND	440
92-87-5	Benzidine	ND	440
56-55-3	Benzo(a)anthracene	ND	440
50-32-8	Benzo(a)pyrene	ND	440
205-99-2	Benzo(b)fluoranthene	650	440
191-24-2	Benzo(g,h,i)perylene	ND	440
207-08-9	Benzo(k)fluoranthene	ND	440
65-85-0	Benzoic acid	ND	880
100-51-6	Benzyl alcohol	ND	440
111-44-4	Bis(2-Chloroethyl)ether	ND	440
117-81-7	Bis(2-ethylhexyl)phthalate	ND	440
85-68-7	Butylbenzylphthalate	ND	440
86-74-8	Carbazole	ND	440
510-15-6	Chlorobenzilate	ND	440
218-01-9	Chrysene	ND	440
84-74-2	Di-n-butylphthalate	ND	440
117-84-0	Di-n-octyl phthalate	ND	440
53-70-3	Dibenz(a,h)anthracene	ND	440
132-64-9	Dibenzofuran	ND	440
84-66-2	Diethylphthalate	ND	440
131-11-3	Dimethyl phthalate	ND	440
88-85-7	Dinoseb	ND	440
62-50-0	Ethyl methanesulfonate	ND	440
206-44-0	Fluoranthene	ND	440
86-73-7	Fluorene	ND	440
118-74-1	Hexachlorobenzene	ND	440
87-68-3	Hexachlorobutadiene	ND	440
77-47-4	Hexachlorocyclopentadiene	ND	440
67-72-1	Hexachloroethane	ND	440
1888-71-7	Hexachloropropene	ND	440
193-39-5	Indeno(1,2,3-cd)pyrene	ND	440
465-73-6	Isodrin	ND	440
78-59-1	Isophorone	ND	440
120-58-1	Isosafrole	ND	440
143-50-0	Kepone	ND	880
66-27-3	Methyl methanesulfonate	ND	440
86-30-6	N-Nitrosodiphenylamine	ND	440
621-64-7	N-nitroso-di-n-propylamine	ND	440
62-75-9	N-nitrosodimethylamine	ND	440
91-20-3	Naphthalene	ND	440
98-95-3	Nitrobenzene	ND	440
608-93-5	Pentachlorobenzene	ND	440
82-68-8	Pentachloronitrobenzene	ND	440
87-86-5	Pentachlorophenol	ND	440
62-44-2	Phenacetin	ND	440
85-01-8	Phenanthrene	ND	440
108-95-2	Phenol	ND	440
129-00-0	Pyrene	ND	440
110-86-1	Pyridine	ND	440
94-59-7	Safrole	ND	440
111-91-1	bis(-2-Chloroethoxy)methane	ND	440

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	50	39 - 106
Phenol-d6 (SS2)	50	38 - 92
Nitrobenzene-d5 (SS3)	47	31 - 102
2,4,6-Tribromophenol (SS5)	53	35 - 102
p-Terphenyl-d14 (SS6)	65	41 - 106
2-Fluorobiphenyl (SS4)	50	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0346
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 5.807 grams
Wet Weight Extracted: 7.984 grams
Final Volume: 1 mL

Lab Sample ID: AA92730
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 73%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	430	
120-82-1	1,2,4-Trichlorobenzene	ND	430	
95-50-1	1,2-Dichlorobenzene	ND	430	
541-73-1	1,3-Dichlorobenzene	ND	430	
99-65-0	1,3-Dinitrobenzene	ND	430	
106-46-7	1,4-Dichlorobenzene	ND	430	
130-15-4	1,4-Naphthoquinone	ND	430	
90-12-0	1-Methylnaphthalene	ND	430	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	430	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	430	
95-95-4	2,4,5-Trichlorophenol	ND	430	
88-06-2	2,4,6-Trichlorophenol	ND	430	
120-83-2	2,4-Dichlorophenol	ND	430	
51-28-5	2,4-Dinitrophenol	ND	860	
121-14-2	2,4-Dinitrotoluene	ND	430	
105-67-9	2,4-dimethylphenol	ND	860	
87-65-0	2,6-Dichlorophenol	ND	430	
606-20-2	2,6-Dinitrotoluene	ND	430	
91-58-7	2-Chloronaphthalene	ND	430	
95-57-8	2-Chlorophenol	ND	430	
91-57-6	2-Methylnaphthalene	ND	430	
95-48-7	2-Methylphenol	ND	430	
88-74-4	2-Nitroaniline	ND	430	
88-75-5	2-Nitrophenol	ND	430	
108-39-4/106-44-	3&4-Methylphenol	ND	860	
91-94-1	3,3'-Dichlorobenzidine	ND	430	
56-49-5	3-Methylcholanthrene	ND	430	
99-09-2	3-Nitroaniline	ND	430	
534-52-1	4,6-Dinitro-2-methylphenol	ND	430	
101-55-3	4-Bromophenyl-phenylether	ND	430	
59-50-7	4-Chloro-3-methylphenol	ND	430	
106-47-8	4-Chloroaniline	ND	430	
7005-72-3	4-Chlorophenyl-phenylether	ND	430	
100-01-6	4-Nitroaniline	ND	430	
100-02-7	4-Nitrophenol	ND	430	
56-57-5	4-nitroquinoline-1-oxide	ND	1700	
83-32-9	Acenaphthene	ND	430	
208-96-8	Acenaphthylene	ND	430	
98-86-2	Acetophenone	ND	430	
62-53-3	Aniline	ND	430	
120-12-7	Anthracene	ND	430	

140-57-8	Aramite	ND	430
103-33-3	Azobenzene	ND	430
92-87-5	Benzidine	ND	430
56-55-3	Benzo(a)anthracene	ND	430
50-32-8	Benzo(a)pyrene	ND	430
205-99-2	Benzo(b)fluoranthene	650	430
191-24-2	Benzo(g,h,i)perylene	ND	430
207-08-9	Benzo(k)fluoranthene	ND	430
65-85-0	Benzoic acid	ND	860
100-51-6	Benzyl alcohol	ND	430
111-44-4	Bis(2-Chloroethyl)ether	ND	430
117-81-7	Bis(2-ethylhexyl)phthalate	ND	430
85-68-7	Butylbenzylphthalate	ND	430
86-74-8	Carbazole	ND	430
510-15-6	Chlorobenzilate	ND	430
218-01-9	Chrysene	ND	430
84-74-2	Di-n-butylphthalate	ND	430
117-84-0	Di-n-octyl phthalate	ND	430
53-70-3	Dibenz(a,h)anthracene	ND	430
132-64-9	Dibenzofuran	ND	430
84-66-2	Diethylphthalate	ND	430
131-11-3	Dimethyl phthalate	ND	430
88-85-7	Dinoseb	ND	430
62-50-0	Ethyl methanesulfonate	ND	430
206-44-0	Fluoranthene	ND	430
86-73-7	Fluorene	ND	430
118-74-1	Hexachlorobenzene	ND	430
87-68-3	Hexachlorobutadiene	ND	430
77-47-4	Hexachlorocyclopentadiene	ND	430
67-72-1	Hexachloroethane	ND	430
1888-71-7	Hexachloropropene	ND	430
193-39-5	Indeno(1,2,3-cd)pyrene	ND	430
465-73-6	Isodrin	ND	430
78-59-1	Isophorone	ND	430
120-58-1	Isosafrole	ND	430
143-50-0	Kepone	ND	860
66-27-3	Methyl methanesulfonate	ND	430
86-30-6	N-Nitrosodiphenylamine	ND	430
621-64-7	N-nitroso-di-n-propylamine	ND	430
62-75-9	N-nitrosodimethylamine	ND	430
91-20-3	Naphthalene	ND	430
98-95-3	Nitrobenzene	ND	430
608-93-5	Pentachlorobenzene	ND	430
82-68-8	Pentachloronitrobenzene	ND	430
87-86-5	Pentachlorophenol	ND	430
62-44-2	Phenacetin	ND	430
85-01-8	Phenanthrene	ND	430
108-95-2	Phenol	ND	430
129-00-0	Pyrene	ND	430
110-86-1	Pyridine	ND	430
94-59-7	Safrole	ND	430
111-91-1	bis(-2-Chloroethoxy)methane	ND	430

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	55	39 - 106
Phenol-d6 (SS2)	55	38 - 92
Nitrobenzene-d5 (SS3)	55	31 - 102
2,4,6-Tribromophenol (SS5)	58	35 - 102
p-Terphenyl-d14 (SS6)	60	41 - 106
2-Fluorobiphenyl (SS4)	60	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0347
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 9.670 grams
Wet Weight Extracted: 12.398 grams
Final Volume: 1 mL

Lab Sample ID: AA92731
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 78%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	260	
120-82-1	1,2,4-Trichlorobenzene	ND	260	
95-50-1	1,2-Dichlorobenzene	ND	260	
541-73-1	1,3-Dichlorobenzene	ND	260	
99-65-0	1,3-Dinitrobenzene	ND	260	
106-46-7	1,4-Dichlorobenzene	ND	260	
130-15-4	1,4-Naphthoquinone	ND	260	
90-12-0	1-Methylnaphthalene	ND	260	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	260	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	260	
95-95-4	2,4,5-Trichlorophenol	ND	260	
88-06-2	2,4,6-Trichlorophenol	ND	260	
120-83-2	2,4-Dichlorophenol	ND	260	
51-28-5	2,4-Dinitrophenol	ND	520	
121-14-2	2,4-Dinitrotoluene	ND	260	
105-67-9	2,4-dimethylphenol	ND	520	
87-65-0	2,6-Dichlorophenol	ND	260	
606-20-2	2,6-Dinitrotoluene	ND	260	
91-58-7	2-Chloronaphthalene	ND	260	
95-57-8	2-Chlorophenol	ND	260	
91-57-6	2-Methylnaphthalene	ND	260	
95-48-7	2-Methylphenol	ND	260	
88-74-4	2-Nitroaniline	ND	260	
88-75-5	2-Nitrophenol	ND	260	
108-39-4/106-44-	3&4-Methylphenol	ND	520	
91-94-1	3,3'-Dichlorobenzidine	ND	260	
56-49-5	3-Methylcholanthrene	ND	260	
99-09-2	3-Nitroaniline	ND	260	
534-52-1	4,6-Dinitro-2-methylphenol	ND	260	
101-55-3	4-Bromophenyl-phenylether	ND	260	
59-50-7	4-Chloro-3-methylphenol	ND	260	
106-47-8	4-Chloroaniline	ND	260	
7005-72-3	4-Chlorophenyl-phenylether	ND	260	
100-01-6	4-Nitroaniline	ND	260	
100-02-7	4-Nitrophenol	ND	260	
56-57-5	4-nitroquinoline-1-oxide	ND	1000	
83-32-9	Acenaphthene	ND	260	
208-96-8	Acenaphthylene	ND	260	
98-86-2	Acetophenone	ND	260	
62-53-3	Aniline	ND	260	
120-12-7	Anthracene	ND	260	

140-57-8	Aramite	ND	260
103-33-3	Azobenzene	ND	260
92-87-5	Benzidine	ND	260
56-55-3	Benzo(a)anthracene	ND	260
50-32-8	Benzo(a)pyrene	ND	260
205-99-2	Benzo(b)fluoranthene	350	260
191-24-2	Benzo(g,h,i)perylene	ND	260
207-08-9	Benzo(k)fluoranthene	ND	260
65-85-0	Benzoic acid	720	520
100-51-6	Benzyl alcohol	ND	260
111-44-4	Bis(2-Chloroethyl)ether	ND	260
117-81-7	Bis(2-ethylhexyl)phthalate	ND	260
85-68-7	Butylbenzylphthalate	ND	260
86-74-8	Carbazole	ND	260
510-15-6	Chlorobenzilate	ND	260
218-01-9	Chrysene	ND	260
84-74-2	Di-n-butylphthalate	ND	260
117-84-0	Di-n-octyl phthalate	ND	260
53-70-3	Dibenz(a,h)anthracene	ND	260
132-64-9	Dibenzofuran	ND	260
84-66-2	Diethylphthalate	ND	260
131-11-3	Dimethyl phthalate	ND	260
88-85-7	Dinoseb	ND	260
62-50-0	Ethyl methanesulfonate	ND	260
206-44-0	Fluoranthene	ND	260
86-73-7	Fluorene	ND	260
118-74-1	Hexachlorobenzene	ND	260
87-68-3	Hexachlorobutadiene	ND	260
77-47-4	Hexachlorocyclopentadiene	ND	260
67-72-1	Hexachloroethane	ND	260
1888-71-7	Hexachloropropene	ND	260
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260
465-73-6	Isodrin	ND	260
78-59-1	Isophorone	ND	260
120-58-1	Isosafrole	ND	260
143-50-0	Kepone	ND	520
66-27-3	Methyl methanesulfonate	ND	260
86-30-6	N-Nitrosodiphenylamine	ND	260
621-64-7	N-nitroso-di-n-propylamine	ND	260
62-75-9	N-nitrosodimethylamine	ND	260
91-20-3	Naphthalene	ND	260
98-95-3	Nitrobenzene	ND	260
608-93-5	Pentachlorobenzene	ND	260
82-68-8	Pentachloronitrobenzene	ND	260
87-86-5	Pentachlorophenol	ND	260
62-44-2	Phenacetin	ND	260
85-01-8	Phenanthrene	ND	260
108-95-2	Phenol	ND	260
129-00-0	Pyrene	ND	260
110-86-1	Pyridine	ND	260
94-59-7	Safrole	ND	260
111-91-1	bis(-2-Chloroethoxy)methane	ND	260

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	70	39 - 106
Phenol-d6 (SS2)	73	38 - 92
Nitrobenzene-d5 (SS3)	65	31 - 102
2,4,6-Tribromophenol (SS5)	73	35 - 102
p-Terphenyl-d14 (SS6)	75	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0348
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 8.347 grams
Wet Weight Extracted: 11.157 grams
Final Volume: 1 mL

Lab Sample ID: AA92732
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 75%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	300	
120-82-1	1,2,4-Trichlorobenzene	ND	300	
95-50-1	1,2-Dichlorobenzene	ND	300	
541-73-1	1,3-Dichlorobenzene	ND	300	
99-65-0	1,3-Dinitrobenzene	ND	300	
106-46-7	1,4-Dichlorobenzene	ND	300	
130-15-4	1,4-Naphthoquinone	ND	300	
90-12-0	1-Methylnaphthalene	ND	300	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	300	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	300	
95-95-4	2,4,5-Trichlorophenol	ND	300	
88-06-2	2,4,6-Trichlorophenol	ND	300	
120-83-2	2,4-Dichlorophenol	ND	300	
51-28-5	2,4-Dinitrophenol	ND	600	
121-14-2	2,4-Dinitrotoluene	ND	300	
105-67-9	2,4-dimethylphenol	ND	600	
87-65-0	2,6-Dichlorophenol	ND	300	
606-20-2	2,6-Dinitrotoluene	ND	300	
91-58-7	2-Chloronaphthalene	ND	300	
95-57-8	2-Chlorophenol	ND	300	
91-57-6	2-Methylnaphthalene	ND	300	
95-48-7	2-Methylphenol	ND	300	
88-74-4	2-Nitroaniline	ND	300	
88-75-5	2-Nitrophenol	ND	300	
108-39-4/106-44-	3&4-Methylphenol	ND	600	
91-94-1	3,3'-Dichlorobenzidine	ND	300	
56-49-5	3-Methylcholanthrene	ND	300	
99-09-2	3-Nitroaniline	ND	300	
534-52-1	4,6-Dinitro-2-methylphenol	ND	300	
101-55-3	4-Bromophenyl-phenylether	ND	300	
59-50-7	4-Chloro-3-methylphenol	ND	300	
106-47-8	4-Chloroaniline	ND	300	
7005-72-3	4-Chlorophenyl-phenylether	ND	300	
100-01-6	4-Nitroaniline	ND	300	
100-02-7	4-Nitrophenol	ND	300	
56-57-5	4-nitroquinoline-1-oxide	ND	1200	
83-32-9	Acenaphthene	ND	300	
208-96-8	Acenaphthylene	ND	300	
98-86-2	Acetophenone	ND	300	
62-53-3	Aniline	ND	300	
120-12-7	Anthracene	ND	300	

140-57-8	Aramite	ND	300
103-33-3	Azobenzene	ND	300
92-87-5	Benzidine	ND	300
56-55-3	Benzo(a)anthracene	ND	300
50-32-8	Benzo(a)pyrene	ND	300
205-99-2	Benzo(b)fluoranthene	ND	300
191-24-2	Benzo(g,h,i)perylene	ND	300
207-08-9	Benzo(k)fluoranthene	ND	300
65-85-0	Benzoic acid	810	600
100-51-6	Benzyl alcohol	ND	300
111-44-4	Bis(2-Chloroethyl)ether	ND	300
117-81-7	Bis(2-ethylhexyl)phthalate	ND	300
85-68-7	Butylbenzylphthalate	ND	300
86-74-8	Carbazole	ND	300
510-15-6	Chlorobenzilate	ND	300
218-01-9	Chrysene	ND	300
84-74-2	Di-n-butylphthalate	ND	300
117-84-0	Di-n-octyl phthalate	ND	300
53-70-3	Dibenz(a,h)anthracene	ND	300
132-64-9	Dibenzofuran	ND	300
84-66-2	Diethylphthalate	ND	300
131-11-3	Dimethyl phthalate	ND	300
88-85-7	Dinoseb	ND	300
62-50-0	Ethyl methanesulfonate	ND	300
206-44-0	Fluoranthene	ND	300
86-73-7	Fluorene	ND	300
118-74-1	Hexachlorobenzene	ND	300
87-68-3	Hexachlorobutadiene	ND	300
77-47-4	Hexachlorocyclopentadiene	ND	300
67-72-1	Hexachloroethane	ND	300
1888-71-7	Hexachloropropene	ND	300
193-39-5	Indeno(1,2,3-cd)pyrene	ND	300
465-73-6	Isodrin	ND	300
78-59-1	Isophorone	ND	300
120-58-1	Isosafrole	ND	300
143-50-0	Kepone	ND	600
66-27-3	Methyl methanesulfonate	ND	300
86-30-6	N-Nitrosodiphenylamine	ND	300
621-64-7	N-nitroso-di-n-propylamine	ND	300
62-75-9	N-nitrosodimethylamine	ND	300
91-20-3	Naphthalene	ND	300
98-95-3	Nitrobenzene	ND	300
608-93-5	Pentachlorobenzene	ND	300
82-68-8	Pentachloronitrobenzene	ND	300
87-86-5	Pentachlorophenol	ND	300
62-44-2	Phenacetin	ND	300
85-01-8	Phenanthrene	ND	300
108-95-2	Phenol	ND	300
129-00-0	Pyrene	ND	300
110-86-1	Pyridine	ND	300
94-59-7	Safrole	ND	300
111-91-1	bis(-2-Chloroethoxy)methane	ND	300

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	58	39 - 106
Phenol-d6 (SS2)	58	38 - 92
Nitrobenzene-d5 (SS3)	55	31 - 102
2,4,6-Tribromophenol (SS5)	58	35 - 102
p-Terphenyl-d14 (SS6)	60	41 - 106
2-Fluorobiphenyl (SS4)	60	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0349
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 7.861 grams
Wet Weight Extracted: 11.565 grams
Final Volume: 1 mL

Lab Sample ID: AA92733
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 68%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	320	
120-82-1	1,2,4-Trichlorobenzene	ND	320	
95-50-1	1,2-Dichlorobenzene	ND	320	
541-73-1	1,3-Dichlorobenzene	ND	320	
99-65-0	1,3-Dinitrobenzene	ND	320	
106-46-7	1,4-Dichlorobenzene	ND	320	
130-15-4	1,4-Naphthoquinone	ND	320	
90-12-0	1-Methylnaphthalene	ND	320	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	320	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	320	
95-95-4	2,4,5-Trichlorophenol	ND	320	
88-06-2	2,4,6-Trichlorophenol	ND	320	
120-83-2	2,4-Dichlorophenol	ND	320	
51-28-5	2,4-Dinitrophenol	ND	640	
121-14-2	2,4-Dinitrotoluene	ND	320	
105-67-9	2,4-dimethylphenol	ND	640	
87-65-0	2,6-Dichlorophenol	ND	320	
606-20-2	2,6-Dinitrotoluene	ND	320	
91-58-7	2-Chloronaphthalene	ND	320	
95-57-8	2-Chlorophenol	ND	320	
91-57-6	2-Methylnaphthalene	ND	320	
95-48-7	2-Methylphenol	ND	320	
88-74-4	2-Nitroaniline	ND	320	
88-75-5	2-Nitrophenol	ND	320	
108-39-4/106-44-	3&4-Methylphenol	ND	640	
91-94-1	3,3'-Dichlorobenzidine	ND	320	
56-49-5	3-Methylcholanthrene	ND	320	
99-09-2	3-Nitroaniline	ND	320	
534-52-1	4,6-Dinitro-2-methylphenol	ND	320	
101-55-3	4-Bromophenyl-phenylether	ND	320	
59-50-7	4-Chloro-3-methylphenol	ND	320	
106-47-8	4-Chloroaniline	ND	320	
7005-72-3	4-Chlorophenyl-phenylether	ND	320	
100-01-6	4-Nitroaniline	ND	320	
100-02-7	4-Nitrophenol	ND	320	
56-57-5	4-nitroquinoline-1-oxide	ND	1300	
83-32-9	Acenaphthene	ND	320	
208-96-8	Acenaphthylene	ND	320	
98-86-2	Acetophenone	ND	320	
62-53-3	Aniline	ND	320	
120-12-7	Anthracene	ND	320	

140-57-8	Aramite	ND	320
103-33-3	Azobenzene	ND	320
92-87-5	Benzidine	ND	320
56-55-3	Benzo(a)anthracene	ND	320
50-32-8	Benzo(a)pyrene	ND	320
205-99-2	Benzo(b)fluoranthene	430	320
191-24-2	Benzo(g,h,i)perylene	ND	320
207-08-9	Benzo(k)fluoranthene	ND	320
65-85-0	Benzoic acid	730	640
100-51-6	Benzyl alcohol	ND	320
111-44-4	Bis(2-Chloroethyl)ether	ND	320
117-81-7	Bis(2-ethylhexyl)phthalate	ND	320
85-68-7	Butylbenzylphthalate	ND	320
86-74-8	Carbazole	ND	320
510-15-6	Chlorobenzilate	ND	320
218-01-9	Chrysene	ND	320
84-74-2	Di-n-butylphthalate	ND	320
117-84-0	Di-n-octyl phthalate	ND	320
53-70-3	Dibenz(a,h)anthracene	ND	320
132-64-9	Dibenzofuran	ND	320
84-66-2	Diethylphthalate	ND	320
131-11-3	Dimethyl phthalate	ND	320
88-85-7	Dinoseb	ND	320
62-50-0	Ethyl methanesulfonate	ND	320
206-44-0	Fluoranthene	ND	320
86-73-7	Fluorene	ND	320
118-74-1	Hexachlorobenzene	ND	320
87-68-3	Hexachlorobutadiene	ND	320
77-47-4	Hexachlorocyclopentadiene	ND	320
67-72-1	Hexachloroethane	ND	320
1888-71-7	Hexachloropropene	ND	320
193-39-5	Indeno(1,2,3-cd)pyrene	ND	320
465-73-6	Isodrin	ND	320
78-59-1	Isophorone	ND	320
120-58-1	Isosafrole	ND	320
143-50-0	Kepone	ND	640
66-27-3	Methyl methanesulfonate	ND	320
86-30-6	N-Nitrosodiphenylamine	ND	320
621-64-7	N-nitroso-di-n-propylamine	ND	320
62-75-9	N-nitrosodimethylamine	ND	320
91-20-3	Naphthalene	ND	320
98-95-3	Nitrobenzene	ND	320
608-93-5	Pentachlorobenzene	ND	320
82-68-8	Pentachloronitrobenzene	ND	320
87-86-5	Pentachlorophenol	ND	320
62-44-2	Phenacetin	ND	320
85-01-8	Phenanthrene	ND	320
108-95-2	Phenol	ND	320
129-00-0	Pyrene	ND	320
110-86-1	Pyridine	ND	320
94-59-7	Safrole	ND	320
111-91-1	bis(-2-Chloroethoxy)methane	ND	320

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	60	39 - 106
Phenol-d6 (SS2)	60	38 - 92
Nitrobenzene-d5 (SS3)	60	31 - 102
2,4,6-Tribromophenol (SS5)	63	35 - 102
p-Terphenyl-d14 (SS6)	60	41 - 106
2-Fluorobiphenyl (SS4)	65	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0350
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 8.743 grams
Wet Weight Extracted: 11.366 grams
Final Volume: 1 mL

Lab Sample ID: AA92734
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 77%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	290	
120-82-1	1,2,4-Trichlorobenzene	ND	290	
95-50-1	1,2-Dichlorobenzene	ND	290	
541-73-1	1,3-Dichlorobenzene	ND	290	
99-65-0	1,3-Dinitrobenzene	ND	290	
106-46-7	1,4-Dichlorobenzene	ND	290	
130-15-4	1,4-Naphthoquinone	ND	290	
90-12-0	1-Methylnaphthalene	ND	290	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	290	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	290	
95-95-4	2,4,5-Trichlorophenol	ND	290	
88-06-2	2,4,6-Trichlorophenol	ND	290	
120-83-2	2,4-Dichlorophenol	ND	290	
51-28-5	2,4-Dinitrophenol	ND	570	
121-14-2	2,4-Dinitrotoluene	ND	290	
105-67-9	2,4-dimethylphenol	ND	570	
87-65-0	2,6-Dichlorophenol	ND	290	
606-20-2	2,6-Dinitrotoluene	ND	290	
91-58-7	2-Chloronaphthalene	ND	290	
95-57-8	2-Chlorophenol	ND	290	
91-57-6	2-Methylnaphthalene	ND	290	
95-48-7	2-Methylphenol	ND	290	
88-74-4	2-Nitroaniline	ND	290	
88-75-5	2-Nitrophenol	ND	290	
108-39-4/106-44-	3&4-Methylphenol	ND	570	
91-94-1	3,3'-Dichlorobenzidine	ND	290	
56-49-5	3-Methylcholanthrene	ND	290	
99-09-2	3-Nitroaniline	ND	290	
534-52-1	4,6-Dinitro-2-methylphenol	ND	290	
101-55-3	4-Bromophenyl-phenylether	ND	290	
59-50-7	4-Chloro-3-methylphenol	ND	290	
106-47-8	4-Chloroaniline	ND	290	
7005-72-3	4-Chlorophenyl-phenylether	ND	290	
100-01-6	4-Nitroaniline	ND	290	
100-02-7	4-Nitrophenol	ND	290	
56-57-5	4-nitroquinoline-1-oxide	ND	1100	
83-32-9	Acenaphthene	ND	290	
208-96-8	Acenaphthylene	ND	290	
98-86-2	Acetophenone	ND	290	
62-53-3	Aniline	ND	290	
120-12-7	Anthracene	ND	290	

140-57-8	Aramite	ND	290
103-33-3	Azobenzene	ND	290
92-87-5	Benzidine	ND	290
56-55-3	Benzo(a)anthracene	ND	290
50-32-8	Benzo(a)pyrene	ND	290
205-99-2	Benzo(b)fluoranthene	420	290
191-24-2	Benzo(g,h,i)perylene	ND	290
207-08-9	Benzo(k)fluoranthene	ND	290
65-85-0	Benzoic acid	690	570
100-51-6	Benzyl alcohol	ND	290
111-44-4	Bis(2-Chloroethyl)ether	ND	290
117-81-7	Bis(2-ethylhexyl)phthalate	ND	290
85-68-7	Butylbenzylphthalate	ND	290
86-74-8	Carbazole	ND	290
510-15-6	Chlorobenzilate	ND	290
218-01-9	Chrysene	ND	290
84-74-2	Di-n-butylphthalate	ND	290
117-84-0	Di-n-octyl phthalate	ND	290
53-70-3	Dibenz(a,h)anthracene	ND	290
132-64-9	Dibenzofuran	ND	290
84-66-2	Diethylphthalate	ND	290
131-11-3	Dimethyl phthalate	ND	290
88-85-7	Dinoseb	ND	290
62-50-0	Ethyl methanesulfonate	ND	290
206-44-0	Fluoranthene	ND	290
86-73-7	Fluorene	ND	290
118-74-1	Hexachlorobenzene	ND	290
87-68-3	Hexachlorobutadiene	ND	290
77-47-4	Hexachlorocyclopentadiene	ND	290
67-72-1	Hexachloroethane	ND	290
1888-71-7	Hexachloropropene	ND	290
193-39-5	Indeno(1,2,3-cd)pyrene	ND	290
465-73-6	Isodrin	ND	290
78-59-1	Isophorone	ND	290
120-58-1	Isosafrole	ND	290
143-50-0	Kepone	ND	570
66-27-3	Methyl methanesulfonate	ND	290
86-30-6	N-Nitrosodiphenylamine	ND	290
621-64-7	N-nitroso-di-n-propylamine	ND	290
62-75-9	N-nitrosodimethylamine	ND	290
91-20-3	Naphthalene	ND	290
98-95-3	Nitrobenzene	ND	290
608-93-5	Pentachlorobenzene	ND	290
82-68-8	Pentachloronitrobenzene	ND	290
87-86-5	Pentachlorophenol	ND	290
62-44-2	Phenacetin	ND	290
85-01-8	Phenanthrene	ND	290
108-95-2	Phenol	ND	290
129-00-0	Pyrene	ND	290
110-86-1	Pyridine	ND	290
94-59-7	Safrole	ND	290
111-91-1	bis(-2-Chloroethoxy)methane	ND	290

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	75	39 - 106
Phenol-d6 (SS2)	75	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	75	35 - 102
p-Terphenyl-d14 (SS6)	75	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0351
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 6.515 grams
Wet Weight Extracted: 8.748 grams
Final Volume: 1 mL

Lab Sample ID: AA92735
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 74%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	380	
120-82-1	1,2,4-Trichlorobenzene	ND	380	
95-50-1	1,2-Dichlorobenzene	ND	380	
541-73-1	1,3-Dichlorobenzene	ND	380	
99-65-0	1,3-Dinitrobenzene	ND	380	
106-46-7	1,4-Dichlorobenzene	ND	380	
130-15-4	1,4-Naphthoquinone	ND	380	
90-12-0	1-Methylnaphthalene	ND	380	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	380	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	380	
95-95-4	2,4,5-Trichlorophenol	ND	380	
88-06-2	2,4,6-Trichlorophenol	ND	380	
120-83-2	2,4-Dichlorophenol	ND	380	
51-28-5	2,4-Dinitrophenol	ND	770	
121-14-2	2,4-Dinitrotoluene	ND	380	
105-67-9	2,4-dimethylphenol	ND	770	
87-65-0	2,6-Dichlorophenol	ND	380	
606-20-2	2,6-Dinitrotoluene	ND	380	
91-58-7	2-Chloronaphthalene	ND	380	
95-57-8	2-Chlorophenol	ND	380	
91-57-6	2-Methylnaphthalene	ND	380	
95-48-7	2-Methylphenol	ND	380	
88-74-4	2-Nitroaniline	ND	380	
88-75-5	2-Nitrophenol	ND	380	
108-39-4/106-44-	3&4-Methylphenol	ND	770	
91-94-1	3,3'-Dichlorobenzidine	ND	380	
56-49-5	3-Methylcholanthrene	ND	380	
99-09-2	3-Nitroaniline	ND	380	
534-52-1	4,6-Dinitro-2-methylphenol	ND	380	
101-55-3	4-Bromophenyl-phenylether	ND	380	
59-50-7	4-Chloro-3-methylphenol	ND	380	
106-47-8	4-Chloroaniline	ND	380	
7005-72-3	4-Chlorophenyl-phenylether	ND	380	
100-01-6	4-Nitroaniline	ND	380	
100-02-7	4-Nitrophenol	ND	380	
56-57-5	4-nitroquinoline-1-oxide	ND	1500	
83-32-9	Acenaphthene	ND	380	
208-96-8	Acenaphthylene	ND	380	
98-86-2	Acetophenone	ND	380	
62-53-3	Aniline	ND	380	
120-12-7	Anthracene	ND	380	

140-57-8	Aramite	ND	380	
103-33-3	Azobenzene	ND	380	
92-87-5	Benzidine	ND	380	
56-55-3	Benzo(a)anthracene	ND	380	
50-32-8	Benzo(a)pyrene	ND	380	
205-99-2	Benzo(b)fluoranthene	ND	380	
191-24-2	Benzo(g,h,i)perylene	ND	380	
207-08-9	Benzo(k)fluoranthene	ND	380	
65-85-0	Benzoic acid	950	770	
100-51-6	Benzyl alcohol	ND	380	
111-44-4	Bis(2-Chloroethyl)ether	ND	380	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	380	
85-68-7	Butylbenzylphthalate	ND	380	
86-74-8	Carbazole	ND	380	
510-15-6	Chlorobenzilate	ND	380	
218-01-9	Chrysene	ND	380	
84-74-2	Di-n-butylphthalate	ND	380	
117-84-0	Di-n-octyl phthalate	ND	380	
53-70-3	Dibenz(a,h)anthracene	ND	380	
132-64-9	Dibenzofuran	ND	380	
84-66-2	Diethylphthalate	1300	380	B
131-11-3	Dimethyl phthalate	ND	380	
88-85-7	Dinoseb	ND	380	
62-50-0	Ethyl methanesulfonate	ND	380	
206-44-0	Fluoranthene	440	380	
86-73-7	Fluorene	ND	380	
118-74-1	Hexachlorobenzene	ND	380	
87-68-3	Hexachlorobutadiene	ND	380	
77-47-4	Hexachlorocyclopentadiene	ND	380	
67-72-1	Hexachloroethane	ND	380	
1888-71-7	Hexachloropropene	ND	380	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	380	
465-73-6	Isodrin	ND	380	
78-59-1	Isophorone	ND	380	
120-58-1	Isosafrole	ND	380	
143-50-0	Kepone	ND	770	
66-27-3	Methyl methanesulfonate	ND	380	
86-30-6	N-Nitrosodiphenylamine	ND	380	
621-64-7	N-nitroso-di-n-propylamine	ND	380	
62-75-9	N-nitrosodimethylamine	ND	380	
91-20-3	Naphthalene	ND	380	
98-95-3	Nitrobenzene	ND	380	
608-93-5	Pentachlorobenzene	ND	380	
82-68-8	Pentachloronitrobenzene	ND	380	
87-86-5	Pentachlorophenol	ND	380	
62-44-2	Phenacetin	ND	380	
85-01-8	Phenanthrene	ND	380	
108-95-2	Phenol	ND	380	
129-00-0	Pyrene	ND	380	
110-86-1	Pyridine	ND	380	
94-59-7	Safrole	ND	380	
111-91-1	bis(-2-Chloroethoxy)methane	ND	380	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	73	39 - 106
Phenol-d6 (SS2)	73	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	80	35 - 102
p-Terphenyl-d14 (SS6)	85	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0352
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 6.508 grams
Wet Weight Extracted: 8.866 grams
Final Volume: 1 mL

Lab Sample ID: AA92736
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 73%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	390	
120-82-1	1,2,4-Trichlorobenzene	ND	390	
95-50-1	1,2-Dichlorobenzene	ND	390	
541-73-1	1,3-Dichlorobenzene	ND	390	
99-65-0	1,3-Dinitrobenzene	ND	390	
106-46-7	1,4-Dichlorobenzene	ND	390	
130-15-4	1,4-Naphthoquinone	ND	390	
90-12-0	1-Methylnaphthalene	ND	390	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	390	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	390	
95-95-4	2,4,5-Trichlorophenol	ND	390	
88-06-2	2,4,6-Trichlorophenol	ND	390	
120-83-2	2,4-Dichlorophenol	ND	390	
51-28-5	2,4-Dinitrophenol	ND	770	
121-14-2	2,4-Dinitrotoluene	ND	390	
105-67-9	2,4-dimethylphenol	ND	770	
87-65-0	2,6-Dichlorophenol	ND	390	
606-20-2	2,6-Dinitrotoluene	ND	390	
91-58-7	2-Chloronaphthalene	ND	390	
95-57-8	2-Chlorophenol	ND	390	
91-57-6	2-Methylnaphthalene	ND	390	
95-48-7	2-Methylphenol	ND	390	
88-74-4	2-Nitroaniline	ND	390	
88-75-5	2-Nitrophenol	ND	390	
108-39-4/106-44-	3&4-Methylphenol	ND	770	
91-94-1	3,3'-Dichlorobenzidine	ND	390	
56-49-5	3-Methylcholanthrene	ND	390	
99-09-2	3-Nitroaniline	ND	390	
534-52-1	4,6-Dinitro-2-methylphenol	ND	390	
101-55-3	4-Bromophenyl-phenylether	ND	390	
59-50-7	4-Chloro-3-methylphenol	ND	390	
106-47-8	4-Chloroaniline	ND	390	
7005-72-3	4-Chlorophenyl-phenylether	ND	390	
100-01-6	4-Nitroaniline	ND	390	
100-02-7	4-Nitrophenol	ND	390	
56-57-5	4-nitroquinoline-1-oxide	ND	1500	
83-32-9	Acenaphthene	ND	390	
208-96-8	Acenaphthylene	ND	390	
98-86-2	Acetophenone	ND	390	
62-53-3	Aniline	ND	390	
120-12-7	Anthracene	ND	390	

140-57-8	Aramite	ND	390
103-33-3	Azobenzene	ND	390
92-87-5	Benzidine	ND	390
56-55-3	Benzo(a)anthracene	ND	390
50-32-8	Benzo(a)pyrene	ND	390
205-99-2	Benzo(b)fluoranthene	540	390
191-24-2	Benzo(g,h,i)perylene	ND	390
207-08-9	Benzo(k)fluoranthene	ND	390
65-85-0	Benzoic acid	1100	770
100-51-6	Benzyl alcohol	ND	390
111-44-4	Bis(2-Chloroethyl)ether	ND	390
117-81-7	Bis(2-ethylhexyl)phthalate	ND	390
85-68-7	Butylbenzylphthalate	ND	390
86-74-8	Carbazole	ND	390
510-15-6	Chlorobenzilate	ND	390
218-01-9	Chrysene	ND	390
84-74-2	Di-n-butylphthalate	ND	390
117-84-0	Di-n-octyl phthalate	ND	390
53-70-3	Dibenz(a,h)anthracene	ND	390
132-64-9	Dibenzofuran	ND	390
84-66-2	Diethylphthalate	1300	390
131-11-3	Dimethyl phthalate	ND	390
88-85-7	Dinoseb	ND	390
62-50-0	Ethyl methanesulfonate	ND	390
206-44-0	Fluoranthene	ND	390
86-73-7	Fluorene	ND	390
118-74-1	Hexachlorobenzene	ND	390
87-68-3	Hexachlorobutadiene	ND	390
77-47-4	Hexachlorocyclopentadiene	ND	390
67-72-1	Hexachloroethane	ND	390
1888-71-7	Hexachloropropene	ND	390
193-39-5	Indeno(1,2,3-cd)pyrene	ND	390
465-73-6	Isodrin	ND	390
78-59-1	Isophorone	ND	390
120-58-1	Isosafrole	440	390
143-50-0	Kepone	ND	770
66-27-3	Methyl methanesulfonate	ND	390
86-30-6	N-Nitrosodiphenylamine	ND	390
621-64-7	N-nitroso-di-n-propylamine	ND	390
62-75-9	N-nitrosodimethylamine	ND	390
91-20-3	Naphthalene	ND	390
98-95-3	Nitrobenzene	ND	390
608-93-5	Pentachlorobenzene	ND	390
82-68-8	Pentachloronitrobenzene	ND	390
87-86-5	Pentachlorophenol	ND	390
62-44-2	Phenacetin	ND	390
85-01-8	Phenanthrene	ND	390
108-95-2	Phenol	ND	390
129-00-0	Pyrene	ND	390
110-86-1	Pyridine	ND	390
94-59-7	Safrole	ND	390
111-91-1	bis(-2-Chloroethoxy)methane	ND	390

B

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	63	39 - 106
Phenol-d6 (SS2)	65	38 - 92
Nitrobenzene-d5 (SS3)	65	31 - 102
2,4,6-Tribromophenol (SS5)	65	35 - 102
p-Terphenyl-d14 (SS6)	75	41 - 106
2-Fluorobiphenyl (SS4)	70	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0353
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 5.372 grams
Wet Weight Extracted: 8.483 grams
Final Volume: 1 mL

Lab Sample ID: AA92737
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 63%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	470	
120-82-1	1,2,4-Trichlorobenzene	ND	470	
95-50-1	1,2-Dichlorobenzene	ND	470	
541-73-1	1,3-Dichlorobenzene	ND	470	
99-65-0	1,3-Dinitrobenzene	ND	470	
106-46-7	1,4-Dichlorobenzene	ND	470	
130-15-4	1,4-Naphthoquinone	ND	470	
90-12-0	1-Methylnaphthalene	ND	470	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	470	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	470	
95-95-4	2,4,5-Trichlorophenol	ND	470	
88-06-2	2,4,6-Trichlorophenol	ND	470	
120-83-2	2,4-Dichlorophenol	ND	470	
51-28-5	2,4-Dinitrophenol	ND	930	
121-14-2	2,4-Dinitrotoluene	ND	470	
105-67-9	2,4-dimethylphenol	ND	930	
87-65-0	2,6-Dichlorophenol	ND	470	
606-20-2	2,6-Dinitrotoluene	ND	470	
91-58-7	2-Chloronaphthalene	ND	470	
95-57-8	2-Chlorophenol	ND	470	
91-57-6	2-Methylnaphthalene	ND	470	
95-48-7	2-Methylphenol	ND	470	
88-74-4	2-Nitroaniline	ND	470	
88-75-5	2-Nitrophenol	ND	470	
108-39-4/106-44-	3&4-Methylphenol	ND	930	
91-94-1	3,3'-Dichlorobenzidine	ND	470	
56-49-5	3-Methylcholanthrene	ND	470	
99-09-2	3-Nitroaniline	ND	470	
534-52-1	4,6-Dinitro-2-methylphenol	ND	470	
101-55-3	4-Bromophenyl-phenylether	ND	470	
59-50-7	4-Chloro-3-methylphenol	ND	470	
106-47-8	4-Chloroaniline	ND	470	
7005-72-3	4-Chlorophenyl-phenylether	ND	470	
100-01-6	4-Nitroaniline	ND	470	
100-02-7	4-Nitrophenol	ND	470	
56-57-5	4-nitroquinoline-1-oxide	ND	1900	
83-32-9	Acenaphthene	ND	470	
208-96-8	Acenaphthylene	ND	470	
98-86-2	Acetophenone	ND	470	
62-53-3	Aniline	ND	470	
120-12-7	Anthracene	ND	470	

140-57-8	Aramite	ND	470	
103-33-3	Azobenzene	ND	470	
92-87-5	Benzidine	ND	470	
56-55-3	Benzo(a)anthracene	ND	470	
50-32-8	Benzo(a)pyrene	ND	470	
205-99-2	Benzo(b)fluoranthene	720	470	
191-24-2	Benzo(g,h,i)perylene	ND	470	
207-08-9	Benzo(k)fluoranthene	ND	470	
65-85-0	Benzoic acid	2100	930	
100-51-6	Benzyl alcohol	ND	470	
111-44-4	Bis(2-Chloroethyl)ether	ND	470	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	470	
85-68-7	Butylbenzylphthalate	ND	470	
86-74-8	Carbazole	ND	470	
510-15-6	Chlorobenzilate	ND	470	
218-01-9	Chrysene	ND	470	
84-74-2	Di-n-butylphthalate	ND	470	
117-84-0	Di-n-octyl phthalate	ND	470	
53-70-3	Dibenz(a,h)anthracene	ND	470	
132-64-9	Dibenzofuran	ND	470	
84-66-2	Diethylphthalate	1800	470	B
131-11-3	Dimethyl phthalate	ND	470	
88-85-7	Dinoseb	ND	470	
62-50-0	Ethyl methanesulfonate	ND	470	
206-44-0	Fluoranthene	420	470	L
86-73-7	Fluorene	ND	470	
118-74-1	Hexachlorobenzene	ND	470	
87-68-3	Hexachlorobutadiene	ND	470	
77-47-4	Hexachlorocyclopentadiene	ND	470	
67-72-1	Hexachloroethane	ND	470	
1888-71-7	Hexachloropropene	ND	470	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	470	
465-73-6	Isodrin	ND	470	
78-59-1	Isophorone	ND	470	
120-58-1	Isosafrole	660	470	
143-50-0	Kepone	ND	930	
66-27-3	Methyl methanesulfonate	ND	470	
86-30-6	N-Nitrosodiphenylamine	ND	470	
621-64-7	N-nitroso-di-n-propylamine	ND	470	
62-75-9	N-nitrosodimethylamine	ND	470	
91-20-3	Naphthalene	ND	470	
98-95-3	Nitrobenzene	ND	470	
608-93-5	Pentachlorobenzene	ND	470	
82-68-8	Pentachloronitrobenzene	ND	470	
87-86-5	Pentachlorophenol	ND	470	
62-44-2	Phenacetin	ND	470	
85-01-8	Phenanthrene	ND	470	
108-95-2	Phenol	ND	470	
129-00-0	Pyrene	ND	470	
110-86-1	Pyridine	ND	470	
94-59-7	Safrole	ND	470	
111-91-1	bis(-2-Chloroethoxy)methane	ND	470	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	68	39 - 106
Phenol-d6 (SS2)	70	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	75	35 - 102
p-Terphenyl-d14 (SS6)	85	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

Laboratory Blank

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix	Soil
Date of Extraction:	4/21/09	Volume Extracted:	N/A
Date of Analysis:	4/23/09	Percent Solids:	100%
Dry Weight Extracted:	11.554 grams	Extract Dilution:	1
Wet Weight Extracted:	11.554 grams	pH:	N/A
Final Volume:	1 mL	GPC Factor	N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	
120-82-1	1,2,4-Trichlorobenzene	ND	220	
95-50-1	1,2-Dichlorobenzene	ND	220	
541-73-1	1,3-Dichlorobenzene	ND	220	
99-65-0	1,3-Dinitrobenzene	ND	220	
106-46-7	1,4-Dichlorobenzene	ND	220	
130-15-4	1,4-Naphthoquinone	ND	220	
90-12-0	1-Methylnaphthalene	ND	220	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	220	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	
95-95-4	2,4,5-Trichlorophenol	ND	220	
88-06-2	2,4,6-Trichlorophenol	ND	220	
120-83-2	2,4-Dichlorophenol	ND	220	
51-28-5	2,4-Dinitrophenol	ND	430	
121-14-2	2,4-Dinitrotoluene	ND	220	
105-67-9	2,4-dimethylphenol	ND	430	
87-65-0	2,6-Dichlorophenol	ND	220	
606-20-2	2,6-Dinitrotoluene	ND	220	
91-58-7	2-Chloronaphthalene	ND	220	
95-57-8	2-Chlorophenol	ND	220	
91-57-6	2-Methylnaphthalene	ND	220	
95-48-7	2-Methylphenol	ND	220	
88-74-4	2-Nitroaniline	ND	220	
88-75-5	2-Nitrophenol	ND	220	
108-39-4/106-44-	3&4-Methylphenol	ND	430	
91-94-1	3,3'-Dichlorobenzidine	ND	220	
56-49-5	3-Methylcholanthrene	ND	430	
99-09-2	3-Nitroaniline	ND	220	
534-52-1	4,6-Dinitro-2-methylphenol	ND	220	
101-55-3	4-Bromophenyl-phenylether	ND	220	
59-50-7	4-Chloro-3-methylphenol	ND	220	
106-47-8	4-Chloroaniline	ND	220	
7005-72-3	4-Chlorophenyl-phenylether	ND	220	
100-01-6	4-Nitroaniline	ND	220	
100-02-7	4-Nitrophenol	ND	220	
56-57-5	4-nitroquinoline-1-oxide	ND	430	
83-32-9	Acenaphthene	ND	220	
208-96-8	Acenaphthylene	ND	220	
98-86-2	Acetophenone	ND	220	
62-53-3	Aniline	ND	220	
120-12-7	Anthracene	ND	220	

140-57-8	Aramite	ND	220
103-33-3	Azobenzene	ND	220
92-87-5	Benzidine	ND	220
56-55-3	Benzo(a)anthracene	ND	220
50-32-8	Benzo(a)pyrene	ND	220
205-99-2	Benzo(b)fluoranthene	ND	220
191-24-2	Benzo(g,h,i)perylene	ND	220
207-08-9	Benzo(k)fluoranthene	ND	220
65-85-0	Benzoic acid	ND	220
100-51-6	Benzyl alcohol	ND	220
111-44-4	Bis(2-Chloroethyl)ether	ND	220
117-81-7	Bis(2-ethylhexyl)phthalate	ND	220
85-68-7	Butylbenzylphthalate	ND	220
86-74-8	Carbazole	ND	220
510-15-6	Chlorobenzilate	ND	220
218-01-9	Chrysene	ND	220
84-74-2	Di-n-butylphthalate	460	220
117-84-0	Di-n-octyl phthalate	ND	220
53-70-3	Dibenz(a,h)anthracene	ND	220
132-64-9	Dibenzofuran	ND	220
84-66-2	Diethylphthalate	810	220
131-11-3	Dimethyl phthalate	ND	220
88-85-7	Dinoseb	ND	220
62-50-0	Ethyl methanesulfonate	ND	220
206-44-0	Fluoranthene	ND	220
86-73-7	Fluorene	ND	220
118-74-1	Hexachlorobenzene	ND	220
87-68-3	Hexachlorobutadiene	ND	220
77-47-4	Hexachlorocyclopentadiene	ND	220
67-72-1	Hexachloroethane	ND	220
1888-71-7	Hexachloropropene	ND	220
193-39-5	Indeno(1,2,3-cd)pyrene	ND	220
465-73-6	Isodrin	ND	220
78-59-1	Isophorone	ND	220
120-58-1	Isosafrole	ND	220
143-50-0	Kepone	ND	220
66-27-3	Methyl methanesulfonate	ND	220
86-30-6	N-Nitrosodiphenylamine	ND	220
621-64-7	N-nitroso-di-n-propylamine	ND	220
62-75-9	N-nitrosodimethylamine	ND	220
91-20-3	Naphthalene	ND	220
98-95-3	Nitrobenzene	ND	220
608-93-5	Pentachlorobenzene	ND	220
82-68-8	Pentachloronitrobenzene	ND	220
87-86-5	Pentachlorophenol	ND	430
62-44-2	Phenacetin	ND	220
85-01-8	Phenanthrene	ND	220
108-95-2	Phenol	ND	220
129-00-0	Pyrene	ND	220
110-86-1	Pyridine	ND	220
94-59-7	Safrole	ND	220
111-91-1	bis(-2-Chloroethoxy)methane	ND	220

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	53	39 - 106
Phenol-d6 (SS2)	53	38 - 92
Nitrobenzene-d5 (SS3)	50	31 - 102
2,4,6-Tribromophenol (SS5)	38	35 - 102
p-Terphenyl-d14 (SS6)	66	41 - 106

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

Method blank for samples AA92735 - AA92745.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0354
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 6.950 grams
Wet Weight Extracted: 9.272 grams
Final Volume: 1 mL

Lab Sample ID: AA92738
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 75%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	360	
120-82-1	1,2,4-Trichlorobenzene	ND	360	
95-50-1	1,2-Dichlorobenzene	ND	360	
541-73-1	1,3-Dichlorobenzene	ND	360	
99-65-0	1,3-Dinitrobenzene	ND	360	
106-46-7	1,4-Dichlorobenzene	ND	360	
130-15-4	1,4-Naphthoquinone	ND	360	
90-12-0	1-Methylnaphthalene	ND	360	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	360	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	360	
95-95-4	2,4,5-Trichlorophenol	ND	360	
88-06-2	2,4,6-Trichlorophenol	ND	360	
120-83-2	2,4-Dichlorophenol	ND	360	
51-28-5	2,4-Dinitrophenol	ND	720	
121-14-2	2,4-Dinitrotoluene	ND	360	
105-67-9	2,4-dimethylphenol	ND	720	
87-65-0	2,6-Dichlorophenol	ND	360	
606-20-2	2,6-Dinitrotoluene	ND	360	
91-58-7	2-Chloronaphthalene	ND	360	
95-57-8	2-Chlorophenol	ND	360	
91-57-6	2-Methylnaphthalene	ND	360	
95-48-7	2-Methylphenol	ND	360	
88-74-4	2-Nitroaniline	ND	360	
88-75-5	2-Nitrophenol	ND	360	
108-39-4/106-44-	3&4-Methylphenol	ND	720	
91-94-1	3,3'-Dichlorobenzidine	ND	360	
56-49-5	3-Methylcholanthrene	ND	360	
99-09-2	3-Nitroaniline	ND	360	
534-52-1	4,6-Dinitro-2-methylphenol	ND	360	
101-55-3	4-Bromophenyl-phenylether	ND	360	
59-50-7	4-Chloro-3-methylphenol	ND	360	
106-47-8	4-Chloroaniline	ND	360	
7005-72-3	4-Chlorophenyl-phenylether	ND	360	
100-01-6	4-Nitroaniline	ND	360	
100-02-7	4-Nitrophenol	ND	360	
56-57-5	4-nitroquinoline-1-oxide	ND	1400	
83-32-9	Acenaphthene	ND	360	
208-96-8	Acenaphthylene	ND	360	
98-86-2	Acetophenone	ND	360	
62-53-3	Aniline	ND	360	
120-12-7	Anthracene	ND	360	

140-57-8	Aramite	ND	360	
103-33-3	Azobenzene	ND	360	
92-87-5	Benzidine	ND	360	
56-55-3	Benzo(a)anthracene	ND	360	
50-32-8	Benzo(a)pyrene	ND	360	
205-99-2	Benzo(b)fluoranthene	510	360	
191-24-2	Benzo(g,h,i)perylene	ND	360	
207-08-9	Benzo(k)fluoranthene	ND	360	
65-85-0	Benzoic acid	930	720	
100-51-6	Benzyl alcohol	ND	360	
111-44-4	Bis(2-Chloroethyl)ether	ND	360	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	360	
85-68-7	Butylbenzylphthalate	ND	360	
86-74-8	Carbazole	ND	360	
510-15-6	Chlorobenzilate	ND	360	
218-01-9	Chrysene	ND	360	
84-74-2	Di-n-butylphthalate	410	360	B
117-84-0	Di-n-octyl phthalate	ND	360	
53-70-3	Dibenz(a,h)anthracene	ND	360	
132-64-9	Dibenzofuran	ND	360	
84-66-2	Diethylphthalate	1200	360	B
131-11-3	Dimethyl phthalate	ND	360	
88-85-7	Dinoseb	ND	360	
62-50-0	Ethyl methanesulfonate	ND	360	
206-44-0	Fluoranthene	ND	360	
86-73-7	Fluorene	ND	360	
118-74-1	Hexachlorobenzene	ND	360	
87-68-3	Hexachlorobutadiene	ND	360	
77-47-4	Hexachlorocyclopentadiene	ND	360	
67-72-1	Hexachloroethane	ND	360	
1888-71-7	Hexachloropropene	ND	360	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	360	
465-73-6	Isodrin	ND	360	
78-59-1	Isophorone	ND	360	
120-58-1	Isosafrole	ND	360	
143-50-0	Kepone	ND	720	
66-27-3	Methyl methanesulfonate	ND	360	
86-30-6	N-Nitrosodiphenylamine	ND	360	
621-64-7	N-nitroso-di-n-propylamine	ND	360	
62-75-9	N-nitrosodimethylamine	ND	360	
91-20-3	Naphthalene	ND	360	
98-95-3	Nitrobenzene	ND	360	
608-93-5	Pentachlorobenzene	ND	360	
82-68-8	Pentachloronitrobenzene	ND	360	
87-86-5	Pentachlorophenol	ND	360	
62-44-2	Phenacetin	ND	360	
85-01-8	Phenanthrene	ND	360	
108-95-2	Phenol	ND	360	
129-00-0	Pyrene	ND	360	
110-86-1	Pyridine	ND	360	
94-59-7	Safrole	ND	360	
111-91-1	bis(-2-Chloroethoxy)methane	ND	360	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	68	39 - 106
Phenol-d6 (SS2)	68	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	78	35 - 102
p-Terphenyl-d14 (SS6)	85	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0355
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 6.362 grams
Wet Weight Extracted: 9.194 grams
Final Volume: 1 mL

Lab Sample ID: AA92739
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 69%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	270	
120-82-1	1,2,4-Trichlorobenzene	ND	270	
95-50-1	1,2-Dichlorobenzene	ND	270	
541-73-1	1,3-Dichlorobenzene	ND	270	
99-65-0	1,3-Dinitrobenzene	ND	270	
106-46-7	1,4-Dichlorobenzene	ND	270	
130-15-4	1,4-Naphthoquinone	ND	270	
90-12-0	1-Methylnaphthalene	ND	270	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	270	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	270	
95-95-4	2,4,5-Trichlorophenol	ND	270	
88-06-2	2,4,6-Trichlorophenol	ND	270	
120-83-2	2,4-Dichlorophenol	ND	270	
51-28-5	2,4-Dinitrophenol	ND	550	
121-14-2	2,4-Dinitrotoluene	ND	270	
105-67-9	2,4-dimethylphenol	ND	550	
87-65-0	2,6-Dichlorophenol	ND	270	
606-20-2	2,6-Dinitrotoluene	ND	270	
91-58-7	2-Chloronaphthalene	ND	270	
95-57-8	2-Chlorophenol	ND	270	
91-57-6	2-Methylnaphthalene	ND	270	
95-48-7	2-Methylphenol	ND	270	
88-74-4	2-Nitroaniline	ND	270	
88-75-5	2-Nitrophenol	ND	270	
108-39-4/106-44-	3&4-Methylphenol	ND	550	
91-94-1	3,3'-Dichlorobenzidine	ND	270	
56-49-5	3-Methylcholanthrene	ND	270	
99-09-2	3-Nitroaniline	ND	270	
534-52-1	4,6-Dinitro-2-methylphenol	ND	270	
101-55-3	4-Bromophenyl-phenylether	ND	270	
59-50-7	4-Chloro-3-methylphenol	ND	270	
106-47-8	4-Chloroaniline	ND	270	
7005-72-3	4-Chlorophenyl-phenylether	ND	270	
100-01-6	4-Nitroaniline	ND	270	
100-02-7	4-Nitrophenol	ND	270	
56-57-5	4-nitroquinoline-1-oxide	ND	1100	
83-32-9	Acenaphthene	ND	270	
208-96-8	Acenaphthylene	ND	270	
98-86-2	Acetophenone	ND	270	
62-53-3	Aniline	ND	270	
120-12-7	Anthracene	ND	270	

140-57-8	Aramite	ND	270	
103-33-3	Azobenzene	ND	270	
92-87-5	Benzidine	ND	270	
56-55-3	Benzo(a)anthracene	ND	270	
50-32-8	Benzo(a)pyrene	ND	270	
205-99-2	Benzo(b)fluoranthene	490	270	
191-24-2	Benzo(g,h,i)perylene	ND	270	
207-08-9	Benzo(k)fluoranthene	ND	270	
65-85-0	Benzoic acid	1200	550	
100-51-6	Benzyl alcohol	ND	270	
111-44-4	Bis(2-Chloroethyl)ether	ND	270	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	270	
85-68-7	Butylbenzylphthalate	ND	270	
86-74-8	Carbazole	ND	270	
510-15-6	Chlorobenzilate	ND	270	
218-01-9	Chrysene	ND	270	
84-74-2	Di-n-butylphthalate	ND	270	
117-84-0	Di-n-octyl phthalate	ND	270	
53-70-3	Dibenz(a,h)anthracene	ND	270	
132-64-9	Dibenzofuran	ND	270	
84-66-2	Diethylphthalate	1000	270	
131-11-3	Dimethyl phthalate	ND	270	
88-85-7	Dinoseb	ND	270	
62-50-0	Ethyl methanesulfonate	ND	270	
206-44-0	Fluoranthene	390	270	
86-73-7	Fluorene	ND	270	
118-74-1	Hexachlorobenzene	ND	270	
87-68-3	Hexachlorobutadiene	ND	270	
77-47-4	Hexachlorocyclopentadiene	ND	270	
67-72-1	Hexachloroethane	ND	270	
1888-71-7	Hexachloropropene	ND	270	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	270	
465-73-6	Isodrin	ND	270	
78-59-1	Isophorone	ND	270	
120-58-1	Isosafrole	ND	270	
143-50-0	Kepone	ND	550	
66-27-3	Methyl methanesulfonate	ND	270	
86-30-6	N-Nitrosodiphenylamine	ND	270	
621-64-7	N-nitroso-di-n-propylamine	ND	270	
62-75-9	N-nitrosodimethylamine	ND	270	
91-20-3	Naphthalene	ND	270	
98-95-3	Nitrobenzene	ND	270	
608-93-5	Pentachlorobenzene	ND	270	
82-68-8	Pentachloronitrobenzene	ND	270	
87-86-5	Pentachlorophenol	ND	270	
62-44-2	Phenacetin	ND	270	
85-01-8	Phenanthrene	ND	270	
108-95-2	Phenol	ND	270	
129-00-0	Pyrene	290	270	
110-86-1	Pyridine	ND	270	
94-59-7	Safrole	ND	270	
111-91-1	bis(-2-Chloroethoxy)methane	ND	270	

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Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	60	39 - 106
Phenol-d6 (SS2)	63	38 - 92
Nitrobenzene-d5 (SS3)	60	31 - 102
2,4,6-Tribromophenol (SS5)	73	35 - 102
p-Terphenyl-d14 (SS6)	75	41 - 106
2-Fluorobiphenyl (SS4)	70	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0377
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 7.003 grams
Wet Weight Extracted: 10.486 grams
Final Volume: 1 mL

Lab Sample ID: AA92740
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 67%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	360	
120-82-1	1,2,4-Trichlorobenzene	ND	360	
95-50-1	1,2-Dichlorobenzene	ND	360	
541-73-1	1,3-Dichlorobenzene	ND	360	
99-65-0	1,3-Dinitrobenzene	ND	360	
106-46-7	1,4-Dichlorobenzene	ND	360	
130-15-4	1,4-Naphthoquinone	ND	360	
90-12-0	1-Methylnaphthalene	400	360	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	360	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	360	
95-95-4	2,4,5-Trichlorophenol	ND	360	
88-06-2	2,4,6-Trichlorophenol	ND	360	
120-83-2	2,4-Dichlorophenol	ND	360	
51-28-5	2,4-Dinitrophenol	ND	720	
121-14-2	2,4-Dinitrotoluene	ND	360	
105-67-9	2,4-dimethylphenol	ND	720	
87-65-0	2,6-Dichlorophenol	ND	360	
606-20-2	2,6-Dinitrotoluene	ND	360	
91-58-7	2-Chloronaphthalene	ND	360	
95-57-8	2-Chlorophenol	ND	360	
91-57-6	2-Methylnaphthalene	660	360	
95-48-7	2-Methylphenol	ND	360	
88-74-4	2-Nitroaniline	ND	360	
88-75-5	2-Nitrophenol	ND	360	
108-39-4/106-44-	3&4-Methylphenol	ND	720	
91-94-1	3,3'-Dichlorobenzidine	ND	360	
56-49-5	3-Methylcholanthrene	ND	360	
99-09-2	3-Nitroaniline	ND	360	
534-52-1	4,6-Dinitro-2-methylphenol	ND	360	
101-55-3	4-Bromophenyl-phenylether	ND	360	
59-50-7	4-Chloro-3-methylphenol	ND	360	
106-47-8	4-Chloroaniline	ND	360	
7005-72-3	4-Chlorophenyl-phenylether	ND	360	
100-01-6	4-Nitroaniline	ND	360	
100-02-7	4-Nitrophenol	ND	360	
56-57-5	4-nitroquinoline-1-oxide	ND	1400	
83-32-9	Acenaphthene	4600	360	
208-96-8	Acenaphthylene	ND	360	
98-86-2	Acetophenone	ND	360	
62-53-3	Aniline	ND	360	
120-12-7	Anthracene	16000	7100	

140-57-8	Aramite	ND	360	
103-33-3	Azobenzene	ND	360	
92-87-5	Benzidine	ND	360	
56-55-3	Benzo(a)anthracene	40000	7100	
50-32-8	Benzo(a)pyrene	9600	360	
205-99-2	Benzo(b)fluoranthene	52000	7100	
191-24-2	Benzo(g,h,i)perylene	18000	7100	
207-08-9	Benzo(k)fluoranthene	13000	360	
65-85-0	Benzoic acid	ND	720	
100-51-6	Benzyl alcohol	ND	360	
111-44-4	Bis(2-Chloroethyl)ether	ND	360	
117-81-7	Bis(2-ethylhexyl)phthalate	370	360	
85-68-7	Butylbenzylphthalate	ND	360	
86-74-8	Carbazole	13000	360	
510-15-6	Chlorobenzilate	ND	360	
218-01-9	Chrysene	39000	7100	
84-74-2	Di-n-butylphthalate	450	360	B
117-84-0	Di-n-octyl phthalate	ND	360	
53-70-3	Dibenz(a,h)anthracene	6400	360	
132-64-9	Dibenzofuran	2800	360	
84-66-2	Diethylphthalate	1400	360	B
131-11-3	Dimethyl phthalate	ND	360	
88-85-7	Dinoseb	ND	360	
62-50-0	Ethyl methanesulfonate	ND	360	
206-44-0	Fluoranthene	95000	7100	
86-73-7	Fluorene	5800	360	
118-74-1	Hexachlorobenzene	ND	360	
87-68-3	Hexachlorobutadiene	ND	360	
77-47-4	Hexachlorocyclopentadiene	ND	360	
67-72-1	Hexachloroethane	ND	360	
1888-71-7	Hexachloropropene	ND	360	
193-39-5	Indeno(1,2,3-cd)pyrene	19000	7100	
465-73-6	Isodrin	ND	360	
78-59-1	Isophorone	ND	360	
120-58-1	Isosafrole	ND	360	
143-50-0	Kepone	ND	720	
66-27-3	Methyl methanesulfonate	ND	360	
86-30-6	N-Nitrosodiphenylamine	ND	360	
621-64-7	N-nitroso-di-n-propylamine	ND	360	
62-75-9	N-nitrosodimethylamine	ND	360	
91-20-3	Naphthalene	1000	360	
98-95-3	Nitrobenzene	ND	360	
608-93-5	Pentachlorobenzene	ND	360	
82-68-8	Pentachloronitrobenzene	ND	360	
87-86-5	Pentachlorophenol	ND	360	
62-44-2	Phenacetin	ND	360	
85-01-8	Phenanthrene	70000	7100	
108-95-2	Phenol	ND	360	
129-00-0	Pyrene	69000	7100	
110-86-1	Pyridine	ND	360	
94-59-7	Safrole	ND	360	
111-91-1	bis(-2-Chloroethoxy)methane	ND	360	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	70	39 - 106
Phenol-d6 (SS2)	73	38 - 92
Nitrobenzene-d5 (SS3)	75	31 - 102
2,4,6-Tribromophenol (SS5)	83	35 - 102
p-Terphenyl-d14 (SS6)	100	41 - 106
2-Fluorobiphenyl (SS4)	85	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

Phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, inden(1,2,3-cd)pyrene, and benzo(g,h,i)perylene are reported from a 20x dilution.

Tentatively Identified non-Target Compounds

Benzo[e]pyrene	20,000 ppb J
Benz[e]acephenanthrylene	29,000 ppb J

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0378
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 7.951 grams
Wet Weight Extracted: 11.57 grams
Final Volume: 1 mL

Lab Sample ID: AA92741
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 69%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	320	
120-82-1	1,2,4-Trichlorobenzene	ND	320	
95-50-1	1,2-Dichlorobenzene	ND	320	
541-73-1	1,3-Dichlorobenzene	ND	320	
99-65-0	1,3-Dinitrobenzene	ND	320	
106-46-7	1,4-Dichlorobenzene	ND	320	
130-15-4	1,4-Naphthoquinone	ND	320	
90-12-0	1-Methylnaphthalene	ND	320	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	320	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	320	
95-95-4	2,4,5-Trichlorophenol	ND	320	
88-06-2	2,4,6-Trichlorophenol	ND	320	
120-83-2	2,4-Dichlorophenol	ND	320	
51-28-5	2,4-Dinitrophenol	ND	630	
121-14-2	2,4-Dinitrotoluene	ND	320	
105-67-9	2,4-dimethylphenol	ND	630	
87-65-0	2,6-Dichlorophenol	ND	320	
606-20-2	2,6-Dinitrotoluene	ND	320	
91-58-7	2-Chloronaphthalene	ND	320	
95-57-8	2-Chlorophenol	ND	320	
91-57-6	2-Methylnaphthalene	ND	320	
95-48-7	2-Methylphenol	ND	320	
88-74-4	2-Nitroaniline	ND	320	
88-75-5	2-Nitrophenol	ND	320	
108-39-4/106-44-	3&4-Methylphenol	ND	630	
91-94-1	3,3'-Dichlorobenzidine	ND	320	
56-49-5	3-Methylcholanthrene	ND	320	
99-09-2	3-Nitroaniline	ND	320	
534-52-1	4,6-Dinitro-2-methylphenol	ND	320	
101-55-3	4-Bromophenyl-phenylether	ND	320	
59-50-7	4-Chloro-3-methylphenol	ND	320	
106-47-8	4-Chloroaniline	ND	320	
7005-72-3	4-Chlorophenyl-phenylether	ND	320	
100-01-6	4-Nitroaniline	ND	320	
100-02-7	4-Nitrophenol	ND	320	
56-57-5	4-nitroquinoline-1-oxide	ND	1300	
83-32-9	Acenaphthene	ND	320	
208-96-8	Acenaphthylene	ND	320	
98-86-2	Acetophenone	ND	320	
62-53-3	Aniline	ND	320	
120-12-7	Anthracene	ND	320	

140-57-8	Aramite	ND	320	
103-33-3	Azobenzene	ND	320	
92-87-5	Benzidine	ND	320	
56-55-3	Benzo(a)anthracene	320	320	
50-32-8	Benzo(a)pyrene	340	320	
205-99-2	Benzo(b)fluoranthene	820	320	
191-24-2	Benzo(g,h,i)perylene	ND	320	
207-08-9	Benzo(k)fluoranthene	ND	320	
65-85-0	Benzoic acid	780	630	
100-51-6	Benzyl alcohol	ND	320	
111-44-4	Bis(2-Chloroethyl)ether	ND	320	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	320	
85-68-7	Butylbenzylphthalate	ND	320	
86-74-8	Carbazole	ND	320	
510-15-6	Chlorobenzilate	ND	320	
218-01-9	Chrysene	450	320	
84-74-2	Di-n-butylphthalate	ND	320	
117-84-0	Di-n-octyl phthalate	ND	320	
53-70-3	Dibenz(a,h)anthracene	ND	320	
132-64-9	Dibenzofuran	ND	320	
84-66-2	Diethylphthalate	990	320	B
131-11-3	Dimethyl phthalate	ND	320	
88-85-7	Dinoseb	ND	320	
62-50-0	Ethyl methanesulfonate	ND	320	
206-44-0	Fluoranthene	970	320	
86-73-7	Fluorene	ND	320	
118-74-1	Hexachlorobenzene	ND	320	
87-68-3	Hexachlorobutadiene	ND	320	
77-47-4	Hexachlorocyclopentadiene	ND	320	
67-72-1	Hexachloroethane	ND	320	
1888-71-7	Hexachloropropene	ND	320	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	320	
465-73-6	Isodrin	ND	320	
78-59-1	Isophorone	ND	320	
120-58-1	Isosafrole	ND	320	
143-50-0	Kepone	ND	630	
66-27-3	Methyl methanesulfonate	ND	320	
86-30-6	N-Nitrosodiphenylamine	ND	320	
621-64-7	N-nitroso-di-n-propylamine	ND	320	
62-75-9	N-nitrosodimethylamine	ND	320	
91-20-3	Naphthalene	ND	320	
98-95-3	Nitrobenzene	ND	320	
608-93-5	Pentachlorobenzene	ND	320	
82-68-8	Pentachloronitrobenzene	ND	320	
87-86-5	Pentachlorophenol	ND	320	
62-44-2	Phenacetin	ND	320	
85-01-8	Phenanthrene	460	320	
108-95-2	Phenol	ND	320	
129-00-0	Pyrene	730	320	
110-86-1	Pyridine	ND	320	
94-59-7	Safrole	ND	320	
111-91-1	bis(-2-Chloroethoxy)methane	ND	320	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	75	39 - 106
Phenol-d6 (SS2)	75	38 - 92
Nitrobenzene-d5 (SS3)	75	31 - 102
2,4,6-Tribromophenol (SS5)	88	35 - 102
p-Terphenyl-d14 (SS6)	95	41 - 106
2-Fluorobiphenyl (SS4)	85	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0379
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 10.149 grams
Wet Weight Extracted: 13.658 grams
Final Volume: 1 mL

Lab Sample ID: AA92742
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 74%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	250	
120-82-1	1,2,4-Trichlorobenzene	ND	250	
95-50-1	1,2-Dichlorobenzene	ND	250	
541-73-1	1,3-Dichlorobenzene	ND	250	
99-65-0	1,3-Dinitrobenzene	ND	250	
106-46-7	1,4-Dichlorobenzene	ND	250	
130-15-4	1,4-Naphthoquinone	ND	250	
90-12-0	1-Methylnaphthalene	ND	250	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	250	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	250	
95-95-4	2,4,5-Trichlorophenol	ND	250	
88-06-2	2,4,6-Trichlorophenol	ND	250	
120-83-2	2,4-Dichlorophenol	ND	250	
51-28-5	2,4-Dinitrophenol	ND	490	
121-14-2	2,4-Dinitrotoluene	ND	250	
105-67-9	2,4-dimethylphenol	ND	490	
87-65-0	2,6-Dichlorophenol	ND	250	
606-20-2	2,6-Dinitrotoluene	ND	250	
91-58-7	2-Chloronaphthalene	ND	250	
95-57-8	2-Chlorophenol	ND	250	
91-57-6	2-Methylnaphthalene	ND	250	
95-48-7	2-Methylphenol	ND	250	
88-74-4	2-Nitroaniline	ND	250	
88-75-5	2-Nitrophenol	ND	250	
108-39-4/106-44-	3&4-Methylphenol	ND	490	
91-94-1	3,3'-Dichlorobenzidine	ND	250	
56-49-5	3-Methylcholanthrene	ND	250	
99-09-2	3-Nitroaniline	ND	250	
534-52-1	4,6-Dinitro-2-methylphenol	ND	250	
101-55-3	4-Bromophenyl-phenylether	ND	250	
59-50-7	4-Chloro-3-methylphenol	ND	250	
106-47-8	4-Chloroaniline	ND	250	
7005-72-3	4-Chlorophenyl-phenylether	ND	250	
100-01-6	4-Nitroaniline	ND	250	
100-02-7	4-Nitrophenol	ND	250	
56-57-5	4-nitroquinoline-1-oxide	ND	990	
83-32-9	Acenaphthene	ND	250	
208-96-8	Acenaphthylene	ND	250	
98-86-2	Acetophenone	ND	250	
62-53-3	Aniline	ND	250	
120-12-7	Anthracene	ND	250	

140-57-8	Aramite	ND	250	
103-33-3	Azobenzene	ND	250	
92-87-5	Benzidine	ND	250	
56-55-3	Benzo(a)anthracene	340	250	
50-32-8	Benzo(a)pyrene	320	250	
205-99-2	Benzo(b)fluoranthene	680	250	
191-24-2	Benzo(g,h,i)perylene	ND	250	
207-08-9	Benzo(k)fluoranthene	ND	250	
65-85-0	Benzoic acid	980	490	
100-51-6	Benzyl alcohol	ND	250	
111-44-4	Bis(2-Chloroethyl)ether	ND	250	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	250	
85-68-7	Butylbenzylphthalate	ND	250	
86-74-8	Carbazole	ND	250	
510-15-6	Chlorobenzilate	ND	250	
218-01-9	Chrysene	380	250	
84-74-2	Di-n-butylphthalate	280	250	B
117-84-0	Di-n-octyl phthalate	ND	250	
53-70-3	Dibenz(a,h)anthracene	ND	250	
132-64-9	Dibenzofuran	ND	250	
84-66-2	Diethylphthalate	770	250	B
131-11-3	Dimethyl phthalate	ND	250	
88-85-7	Dinoseb	ND	250	
62-50-0	Ethyl methanesulfonate	ND	250	
206-44-0	Fluoranthene	700	250	
86-73-7	Fluorene	ND	250	
118-74-1	Hexachlorobenzene	ND	250	
87-68-3	Hexachlorobutadiene	ND	250	
77-47-4	Hexachlorocyclopentadiene	ND	250	
67-72-1	Hexachloroethane	ND	250	
1888-71-7	Hexachloropropene	ND	250	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	250	
465-73-6	Isodrin	ND	250	
78-59-1	Isophorone	ND	250	
120-58-1	Isosafrole	ND	250	
143-50-0	Kepone	ND	490	
66-27-3	Methyl methanesulfonate	ND	250	
86-30-6	N-Nitrosodiphenylamine	ND	250	
621-64-7	N-nitroso-di-n-propylamine	ND	250	
62-75-9	N-nitrosodimethylamine	ND	250	
91-20-3	Naphthalene	ND	250	
98-95-3	Nitrobenzene	ND	250	
608-93-5	Pentachlorobenzene	ND	250	
82-68-8	Pentachloronitrobenzene	ND	250	
87-86-5	Pentachlorophenol	ND	250	
62-44-2	Phenacetin	ND	250	
85-01-8	Phenanthrene	ND	250	
108-95-2	Phenol	ND	250	
129-00-0	Pyrene	620	250	
110-86-1	Pyridine	ND	250	
94-59-7	Safrole	ND	250	
111-91-1	bis(-2-Chloroethoxy)methane	ND	250	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	75	39 - 106
Phenol-d6 (SS2)	75	38 - 92
Nitrobenzene-d5 (SS3)	70	31 - 102
2,4,6-Tribromophenol (SS5)	85	35 - 102
p-Terphenyl-d14 (SS6)	90	41 - 106
2-Fluorobiphenyl (SS4)	80	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0380
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 9.844 grams
Wet Weight Extracted: 11.735 grams
Final Volume: 1 mL

Lab Sample ID: AA92743
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 84%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	260	
120-82-1	1,2,4-Trichlorobenzene	ND	260	
95-50-1	1,2-Dichlorobenzene	ND	260	
541-73-1	1,3-Dichlorobenzene	ND	260	
99-65-0	1,3-Dinitrobenzene	ND	260	
106-46-7	1,4-Dichlorobenzene	ND	260	
130-15-4	1,4-Naphthoquinone	ND	260	
90-12-0	1-Methylnaphthalene	ND	260	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	260	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	260	
95-95-4	2,4,5-Trichlorophenol	ND	260	
88-06-2	2,4,6-Trichlorophenol	ND	260	
120-83-2	2,4-Dichlorophenol	ND	260	
51-28-5	2,4-Dinitrophenol	ND	510	
121-14-2	2,4-Dinitrotoluene	ND	260	
105-67-9	2,4-dimethylphenol	ND	510	
87-65-0	2,6-Dichlorophenol	ND	260	
606-20-2	2,6-Dinitrotoluene	ND	260	
91-58-7	2-Chloronaphthalene	ND	260	
95-57-8	2-Chlorophenol	ND	260	
91-57-6	2-Methylnaphthalene	ND	260	
95-48-7	2-Methylphenol	ND	260	
88-74-4	2-Nitroaniline	ND	260	
88-75-5	2-Nitrophenol	ND	260	
108-39-4/106-44-	3&4-Methylphenol	ND	510	
91-94-1	3,3'-Dichlorobenzidine	ND	260	
56-49-5	3-Methylcholanthrene	ND	260	
99-09-2	3-Nitroaniline	ND	260	
534-52-1	4,6-Dinitro-2-methylphenol	ND	260	
101-55-3	4-Bromophenyl-phenylether	ND	260	
59-50-7	4-Chloro-3-methylphenol	ND	260	
106-47-8	4-Chloroaniline	ND	260	
7005-72-3	4-Chlorophenyl-phenylether	ND	260	
100-01-6	4-Nitroaniline	ND	260	
100-02-7	4-Nitrophenol	ND	260	
56-57-5	4-nitroquinoline-1-oxide	ND	1000	
83-32-9	Acenaphthene	ND	260	
208-96-8	Acenaphthylene	ND	260	
98-86-2	Acetophenone	ND	260	
62-53-3	Aniline	ND	260	
120-12-7	Anthracene	ND	260	

140-57-8	Aramite	ND	260
103-33-3	Azobenzene	ND	260
92-87-5	Benidine	ND	260
56-55-3	Benzo(a)anthracene	ND	260
50-32-8	Benzo(a)pyrene	ND	260
205-99-2	Benzo(b)fluoranthene	370	260
191-24-2	Benzo(g,h,i)perylene	ND	260
207-08-9	Benzo(k)fluoranthene	ND	260
65-85-0	Benzoic acid	560	510
100-51-6	Benzyl alcohol	ND	260
111-44-4	Bis(2-Chloroethyl)ether	ND	260
117-81-7	Bis(2-ethylhexyl)phthalate	ND	260
85-68-7	Butylbenzylphthalate	ND	260
86-74-8	Carbazole	ND	260
510-15-6	Chlorobenzilate	ND	260
218-01-9	Chrysene	ND	260
84-74-2	Di-n-butylphthalate	ND	260
117-84-0	Di-n-octyl phthalate	ND	260
53-70-3	Dibenz(a,h)anthracene	ND	260
132-64-9	Dibenzofuran	ND	260
84-66-2	Diethylphthalate	760	260
131-11-3	Dimethyl phthalate	ND	260
88-85-7	Dinoseb	ND	260
62-50-0	Ethyl methanesulfonate	ND	260
206-44-0	Fluoranthene	ND	260
86-73-7	Fluorene	ND	260
118-74-1	Hexachlorobenzene	ND	260
87-68-3	Hexachlorobutadiene	ND	260
77-47-4	Hexachlorocyclopentadiene	ND	260
67-72-1	Hexachloroethane	ND	260
1888-71-7	Hexachloropropene	ND	260
193-39-5	Indeno(1,2,3-cd)pyrene	ND	260
465-73-6	Isodrin	ND	260
78-59-1	Isophorone	ND	260
120-58-1	Isosafrole	ND	260
143-50-0	Kepone	ND	510
66-27-3	Methyl methanesulfonate	ND	260
86-30-6	N-Nitrosodiphenylamine	ND	260
621-64-7	N-nitroso-di-n-propylamine	ND	260
62-75-9	N-nitrosodimethylamine	ND	260
91-20-3	Naphthalene	ND	260
98-95-3	Nitrobenzene	ND	260
608-93-5	Pentachlorobenzene	ND	260
82-68-8	Pentachloronitrobenzene	ND	260
87-86-5	Pentachlorophenol	ND	260
62-44-2	Phenacetin	ND	260
85-01-8	Phenanthrene	ND	260
108-95-2	Phenol	ND	260
129-00-0	Pyrene	ND	260
110-86-1	Pyridine	ND	260
94-59-7	Safrole	ND	260
111-91-1	bis(-2-Chloroethoxy)methane	ND	260

B

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	145	39 - 106
Phenol-d6 (SS2)	145	38 - 92
Nitrobenzene-d5 (SS3)	145	31 - 102
2,4,6-Tribromophenol (SS5)	155	35 - 102
p-Terphenyl-d14 (SS6)	180	41 - 106
2-Fluorobiphenyl (SS4)	155	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0381
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 6.23 grams
Wet Weight Extracted: 8.517 grams
Final Volume: 1 mL

Lab Sample ID: AA92744
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 73%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	400	
120-82-1	1,2,4-Trichlorobenzene	ND	400	
95-50-1	1,2-Dichlorobenzene	ND	400	
541-73-1	1,3-Dichlorobenzene	ND	400	
99-65-0	1,3-Dinitrobenzene	ND	400	
106-46-7	1,4-Dichlorobenzene	ND	400	
130-15-4	1,4-Naphthoquinone	ND	400	
90-12-0	1-Methylnaphthalene	ND	400	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	400	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	400	
95-95-4	2,4,5-Trichlorophenol	ND	400	
88-06-2	2,4,6-Trichlorophenol	ND	400	
120-83-2	2,4-Dichlorophenol	ND	400	
51-28-5	2,4-Dinitrophenol	ND	810	
121-14-2	2,4-Dinitrotoluene	ND	400	
105-67-9	2,4-dimethylphenol	ND	810	
87-65-0	2,6-Dichlorophenol	ND	400	
606-20-2	2,6-Dinitrotoluene	ND	400	
91-58-7	2-Chloronaphthalene	ND	400	
95-57-8	2-Chlorophenol	ND	400	
91-57-6	2-Methylnaphthalene	ND	400	
95-48-7	2-Methylphenol	ND	400	
88-74-4	2-Nitroaniline	ND	400	
88-75-5	2-Nitrophenol	ND	400	
108-39-4/106-44-	3&4-Methylphenol	ND	810	
91-94-1	3,3'-Dichlorobenzidine	ND	400	
56-49-5	3-Methylcholanthrene	ND	400	
99-09-2	3-Nitroaniline	ND	400	
534-52-1	4,6-Dinitro-2-methylphenol	ND	400	
101-55-3	4-Bromophenyl-phenylether	ND	400	
59-50-7	4-Chloro-3-methylphenol	ND	400	
106-47-8	4-Chloroaniline	ND	400	
7005-72-3	4-Chlorophenyl-phenylether	ND	400	
100-01-6	4-Nitroaniline	ND	400	
100-02-7	4-Nitrophenol	ND	400	
56-57-5	4-nitroquinoline-1-oxide	ND	1600	
83-32-9	Acenaphthene	ND	400	
208-96-8	Acenaphthylene	ND	400	
98-86-2	Acetophenone	ND	400	
62-53-3	Aniline	ND	400	
120-12-7	Anthracene	ND	400	

140-57-8	Aramite	ND	400	
103-33-3	Azobenzene	ND	400	
92-87-5	Benzidine	ND	400	
56-55-3	Benzo(a)anthracene	ND	400	
50-32-8	Benzo(a)pyrene	ND	400	
205-99-2	Benzo(b)fluoranthene	650	400	
191-24-2	Benzo(g,h,i)perylene	ND	400	
207-08-9	Benzo(k)fluoranthene	ND	400	
65-85-0	Benzoic acid	1000	810	
100-51-6	Benzyl alcohol	ND	400	
111-44-4	Bis(2-Chloroethyl)ether	ND	400	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	400	
85-68-7	Butylbenzylphthalate	ND	400	
86-74-8	Carbazole	ND	400	
510-15-6	Chlorobenzilate	ND	400	
218-01-9	Chrysene	ND	400	
84-74-2	Di-n-butylphthalate	580	400	B
117-84-0	Di-n-octyl phthalate	ND	400	
53-70-3	Dibenz(a,h)anthracene	ND	400	
132-64-9	Dibenzofuran	ND	400	
84-66-2	Diethylphthalate	1200	400	B
131-11-3	Dimethyl phthalate	ND	400	
88-85-7	Dinoseb	ND	400	
62-50-0	Ethyl methanesulfonate	ND	400	
206-44-0	Fluoranthene	470	400	
86-73-7	Fluorene	ND	400	
118-74-1	Hexachlorobenzene	ND	400	
87-68-3	Hexachlorobutadiene	ND	400	
77-47-4	Hexachlorocyclopentadiene	ND	400	
67-72-1	Hexachloroethane	ND	400	
1888-71-7	Hexachloropropene	ND	400	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	400	
465-73-6	Isodrin	ND	400	
78-59-1	Isophorone	ND	400	
120-58-1	Isosafrole	ND	400	
143-50-0	Kepone	ND	810	
66-27-3	Methyl methanesulfonate	ND	400	
86-30-6	N-Nitrosodiphenylamine	ND	400	
621-64-7	N-nitroso-di-n-propylamine	ND	400	
62-75-9	N-nitrosodimethylamine	ND	400	
91-20-3	Naphthalene	ND	400	
98-95-3	Nitrobenzene	ND	400	
608-93-5	Pentachlorobenzene	ND	400	
82-68-8	Pentachloronitrobenzene	ND	400	
87-86-5	Pentachlorophenol	ND	400	
62-44-2	Phenacetin	ND	400	
85-01-8	Phenanthrene	ND	400	
108-95-2	Phenol	ND	400	
129-00-0	Pyrene	ND	400	
110-86-1	Pyridine	ND	400	
94-59-7	Safrole	ND	400	
111-91-1	bis(-2-Chloroethoxy)methane	ND	400	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	78	39 - 106
Phenol-d6 (SS2)	78	38 - 92
Nitrobenzene-d5 (SS3)	80	31 - 102
2,4,6-Tribromophenol (SS5)	90	35 - 102
p-Terphenyl-d14 (SS6)	95	41 - 106
2-Fluorobiphenyl (SS4)	85	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0421
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/23/09
Dry Weight Extracted: 7.783 grams
Wet Weight Extracted: 10.295 grams
Final Volume: 1 mL

Lab Sample ID: AA92745
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 76%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	320	
120-82-1	1,2,4-Trichlorobenzene	ND	320	
95-50-1	1,2-Dichlorobenzene	ND	320	
541-73-1	1,3-Dichlorobenzene	ND	320	
99-65-0	1,3-Dinitrobenzene	ND	320	
106-46-7	1,4-Dichlorobenzene	ND	320	
130-15-4	1,4-Naphthoquinone	ND	320	
90-12-0	1-Methylnaphthalene	ND	320	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	320	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	320	
95-95-4	2,4,5-Trichlorophenol	ND	320	
88-06-2	2,4,6-Trichlorophenol	ND	320	
120-83-2	2,4-Dichlorophenol	ND	320	
51-28-5	2,4-Dinitrophenol	ND	640	
121-14-2	2,4-Dinitrotoluene	ND	320	
105-67-9	2,4-dimethylphenol	ND	640	
87-65-0	2,6-Dichlorophenol	ND	320	
606-20-2	2,6-Dinitrotoluene	ND	320	
91-58-7	2-Chloronaphthalene	ND	320	
95-57-8	2-Chlorophenol	ND	320	
91-57-6	2-Methylnaphthalene	ND	320	
95-48-7	2-Methylphenol	ND	320	
88-74-4	2-Nitroaniline	ND	320	
88-75-5	2-Nitrophenol	ND	320	
108-39-4/106-44-	3&4-Methylphenol	ND	640	
91-94-1	3,3'-Dichlorobenzidine	ND	320	
56-49-5	3-Methylcholanthrene	ND	320	
99-09-2	3-Nitroaniline	ND	320	
534-52-1	4,6-Dinitro-2-methylphenol	ND	320	
101-55-3	4-Bromophenyl-phenylether	ND	320	
59-50-7	4-Chloro-3-methylphenol	ND	320	
106-47-8	4-Chloroaniline	ND	320	
7005-72-3	4-Chlorophenyl-phenylether	ND	320	
100-01-6	4-Nitroaniline	ND	320	
100-02-7	4-Nitrophenol	ND	320	
56-57-5	4-nitroquinoline-1-oxide	ND	1300	
83-32-9	Acenaphthene	ND	320	
208-96-8	Acenaphthylene	ND	320	
98-86-2	Acetophenone	ND	320	
62-53-3	Aniline	ND	320	
120-12-7	Anthracene	ND	320	

140-57-8	Aramite	ND	320	
103-33-3	Azobenzene	ND	320	
92-87-5	Benzidine	ND	320	
56-55-3	Benzo(a)anthracene	ND	320	
50-32-8	Benzo(a)pyrene	ND	320	
205-99-2	Benzo(b)fluoranthene	690	320	
191-24-2	Benzo(g,h,i)perylene	ND	320	
207-08-9	Benzo(k)fluoranthene	ND	320	
65-85-0	Benzoic acid	720	640	
100-51-6	Benzyl alcohol	ND	320	
111-44-4	Bis(2-Chloroethyl)ether	ND	320	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	320	
85-68-7	Butylbenzylphthalate	ND	320	
86-74-8	Carbazole	ND	320	
510-15-6	Chlorobenzilate	ND	320	
218-01-9	Chrysene	ND	320	
84-74-2	Di-n-butylphthalate	ND	320	
117-84-0	Di-n-octyl phthalate	ND	320	
53-70-3	Dibenz(a,h)anthracene	ND	320	
132-64-9	Dibenzofuran	ND	320	
84-66-2	Diethylphthalate	970	320	B
131-11-3	Dimethyl phthalate	ND	320	
88-85-7	Dinoseb	ND	320	
62-50-0	Ethyl methanesulfonate	ND	320	
206-44-0	Fluoranthene	560	320	
86-73-7	Fluorene	ND	320	
118-74-1	Hexachlorobenzene	ND	320	
87-68-3	Hexachlorobutadiene	ND	320	
77-47-4	Hexachlorocyclopentadiene	ND	320	
67-72-1	Hexachloroethane	ND	320	
1888-71-7	Hexachloropropene	ND	320	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	320	
465-73-6	Isodrin	ND	320	
78-59-1	Isophorone	ND	320	
120-58-1	Isosafrole	ND	320	
143-50-0	Kepone	ND	640	
66-27-3	Methyl methanesulfonate	ND	320	
86-30-6	N-Nitrosodiphenylamine	ND	320	
621-64-7	N-nitroso-di-n-propylamine	ND	320	
62-75-9	N-nitrosodimethylamine	ND	320	
91-20-3	Naphthalene	ND	320	
98-95-3	Nitrobenzene	ND	320	
608-93-5	Pentachlorobenzene	ND	320	
82-68-8	Pentachloronitrobenzene	ND	320	
87-86-5	Pentachlorophenol	ND	320	
62-44-2	Phenacetin	ND	320	
85-01-8	Phenanthrene	ND	320	
108-95-2	Phenol	ND	320	
129-00-0	Pyrene	500	320	
110-86-1	Pyridine	ND	320	
94-59-7	Safrole	ND	320	
111-91-1	bis(-2-Chloroethoxy)methane	ND	320	

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	133	39 - 106
Phenol-d6 (SS2)	130	38 - 92
Nitrobenzene-d5 (SS3)	135	31 - 102
2,4,6-Tribromophenol (SS5)	158	35 - 102
p-Terphenyl-d14 (SS6)	170	41 - 106
2-Fluorobiphenyl (SS4)	145	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

St John's Cemetery

BNAs in Soils Medium Level

Client Sample ID: R01-090413CY-0423
Date of Collection: 4/16/2009
Date of Extraction: 4/21/09
Date of Analysis: 4/22/09
Dry Weight Extracted: 15.871 grams
Wet Weight Extracted: 15.871 grams
Final Volume: 1 mL

Lab Sample ID: AA92746
Matrix: Soil
Volume Extracted: N/A
Percent Solids: 100%
Extract Dilution: 1
pH: N/A
GPC Factor: N/A

CAS Number	Compound	Concentration ug/Kg	RL ug/Kg	Qualifier
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	160	
120-82-1	1,2,4-Trichlorobenzene	ND	160	
95-50-1	1,2-Dichlorobenzene	ND	160	
541-73-1	1,3-Dichlorobenzene	ND	160	
99-65-0	1,3-Dinitrobenzene	ND	160	
106-46-7	1,4-Dichlorobenzene	ND	160	
130-15-4	1,4-Naphthoquinone	ND	160	
90-12-0	1-Methylnaphthalene	ND	160	
108-60-1	2,2'-oxybis(1-chloropropane)	ND	160	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	160	
95-95-4	2,4,5-Trichlorophenol	ND	160	
88-06-2	2,4,6-Trichlorophenol	2100	160	
120-83-2	2,4-Dichlorophenol	2400	160	
51-28-5	2,4-Dinitrophenol	ND	320	
121-14-2	2,4-Dinitrotoluene	ND	160	
105-67-9	2,4-dimethylphenol	ND	320	
87-65-0	2,6-Dichlorophenol	ND	160	
606-20-2	2,6-Dinitrotoluene	ND	160	
91-58-7	2-Chloronaphthalene	2200	160	
95-57-8	2-Chlorophenol	ND	160	
91-57-6	2-Methylnaphthalene	ND	160	
95-48-7	2-Methylphenol	ND	160	
88-74-4	2-Nitroaniline	ND	160	
88-75-5	2-Nitrophenol	ND	160	
108-39-4/106-44-	3&4-Methylphenol	ND	320	
91-94-1	3,3'-Dichlorobenzidine	ND	160	
56-49-5	3-Methylcholanthrene	ND	160	
99-09-2	3-Nitroaniline	ND	160	
534-52-1	4,6-Dinitro-2-methylphenol	ND	160	
101-55-3	4-Bromophenyl-phenylether	ND	160	
59-50-7	4-Chloro-3-methylphenol	ND	160	
106-47-8	4-Chloroaniline	ND	160	
7005-72-3	4-Chlorophenyl-phenylether	ND	160	
100-01-6	4-Nitroaniline	ND	160	
100-02-7	4-Nitrophenol	ND	160	
56-57-5	4-nitroquinoline-1-oxide	ND	630	
83-32-9	Acenaphthene	ND	160	
208-96-8	Acenaphthylene	ND	160	
98-86-2	Acetophenone	ND	160	
62-53-3	Aniline	ND	160	
120-12-7	Anthracene	ND	160	

140-57-8	Aramite	ND	160
103-33-3	Azobenzene	ND	160
92-87-5	Benzidine	ND	160
56-55-3	Benzo(a)anthracene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
205-99-2	Benzo(b)fluoranthene	2200	160
191-24-2	Benzo(g,h,i)perylene	2100	160
207-08-9	Benzo(k)fluoranthene	1400	160
65-85-0	Benzoic acid	ND	320
100-51-6	Benzyl alcohol	ND	160
111-44-4	Bis(2-Chloroethyl)ether	ND	160
117-81-7	Bis(2-ethylhexyl)phthalate	ND	160
85-68-7	Butylbenzylphthalate	1100	160
86-74-8	Carbazole	2100	160
510-15-6	Chlorobenzilate	ND	160
218-01-9	Chrysene	1600	160
84-74-2	Di-n-butylphthalate	ND	160
117-84-0	Di-n-octyl phthalate	1500	160
53-70-3	Dibenz(a,h)anthracene	ND	160
132-64-9	Dibenzofuran	ND	160
84-66-2	Diethylphthalate	2000	160
131-11-3	Dimethyl phthalate	ND	160
88-85-7	Dinoseb	ND	160
62-50-0	Ethyl methanesulfonate	ND	160
206-44-0	Fluoranthene	ND	160
86-73-7	Fluorene	ND	160
118-74-1	Hexachlorobenzene	1200	160
87-68-3	Hexachlorobutadiene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
67-72-1	Hexachloroethane	ND	160
1888-71-7	Hexachloropropene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160
465-73-6	Isodrin	ND	160
78-59-1	Isophorone	1800	160
120-58-1	Isosafrole	ND	160
143-50-0	Kepone	ND	320
66-27-3	Methyl methanesulfonate	ND	160
86-30-6	N-Nitrosodiphenylamine	1400	160
621-64-7	N-nitroso-di-n-propylamine	ND	160
62-75-9	N-nitrosodimethylamine	ND	160
91-20-3	Naphthalene	1800	160
98-95-3	Nitrobenzene	1200	160
608-93-5	Pentachlorobenzene	ND	160
82-68-8	Pentachloronitrobenzene	ND	160
87-86-5	Pentachlorophenol	ND	160
62-44-2	Phenacetin	ND	160
85-01-8	Phenanthrene	1400	160
108-95-2	Phenol	1500	160
129-00-0	Pyrene	ND	160
110-86-1	Pyridine	ND	160
94-59-7	Safrole	ND	160
111-91-1	bis(-2-Chloroethoxy)methane	ND	160

Surrogate Compounds	Recoveries (%)	QC Ranges
2-Fluorophenol (SS1)	73	39 - 106
Phenol-d6 (SS2)	70	38 - 92
Nitrobenzene-d5 (SS3)	55	31 - 102
2,4,6-Tribromophenol (SS5)	48	35 - 102
p-Terphenyl-d14 (SS6)	80	41 - 106
2-Fluorobiphenyl (SS4)	75	39 - 103

Comments: The reporting levels for 2,4-dimethyl phenol, 2,4-dinitrophenol, and kepone have been raised to 5.0 based on the most recent MDL study (2008).

The reporting level for 4-nitroquinoline-1-oxide has been raised to 10.0 ppb to reflect the calibration curve used.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

BNA MATRIX SPIKE (MS) RESULTS

St John's Cemetery

Sample ID: AA92728

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
1,2,4,5-Tetrachlorobenzene	5720	ND	4125	72	34 - 101
1,2,4-Trichlorobenzene	5720	ND	4049	71	26 - 105
1,2-Dichlorobenzene	5720	ND	3849	67	24 - 99
1,3-Dichlorobenzene	5720	ND	3674	64	17 - 104
1,3-Dinitrobenzene	5720	ND	4428	77	24 - 120
1,4-Dichlorobenzene	5720	ND	3656	64	17 - 101
1,4-Naphthoquinone	5720	ND	2858	50	21 - 101
1-Methylnaphthalene	5720	ND	4199	73	38 - 107
2,2'-oxybis(1-chloropropane)	5720	ND	3843	67	10 - 146
2,3,4,6-Tetrachlorophenol	5720	ND	4800	84	10 - 137
2,4,5-Trichlorophenol	5720	ND	4675	82	26 - 120
2,4,6-Trichlorophenol	5720	ND	4724	83	36 - 108
2,4-Dichlorophenol	5720	ND	4426	77	36 - 110
2,4-Dinitrophenol	5720	ND	3973	70	10 - 104
2,4-Dinitrotoluene	5720	ND	4359	76	24 - 121
2,4-dimethylphenol	5720	ND	3709	65	47 - 106
2,6-Dichlorophenol	5720	ND	4120	72	36 - 108
2,6-Dinitrotoluene	5720	ND	4698	82	37 - 108
2-Chloronaphthalene	5720	ND	3273	57	39 - 102
2-Chlorophenol	5720	ND	4259	75	19 - 136
2-Methylnaphthalene	5720	ND	3990	70	37 - 112
2-Methylphenol	5720	ND	4110	72	25 - 130
2-Nitroaniline	5720	ND	5531	97	29 - 126
2-Nitrophenol	5720	ND	4378	77	33 - 102
3&4-Methylphenol	11540	ND	4162	36	30 - 125
3,3'-Dichlorobenzidine	5720	ND	747	13	11 - 124
3-Methylcholanthrene	5720	ND	4424	77	10 - 188
3-Nitroaniline	5720	ND	3309	58	26 - 107
4,6-Dinitro-2-methylphenol	5720	ND	3882	68	10 - 112
4-Bromophenyl-phenylether	5720	ND	4614	81	27 - 123
4-Chloro-3-methylphenol	5720	ND	4609	81	6.9 - 138
4-Chloroaniline	5720	ND	2765	48	10 - 115
4-Chlorophenyl-phenylether	5720	ND	4511	79	34 - 118
4-Nitroaniline	5720	ND	2809	49	10 - 162
4-Nitrophenol	5720	ND	4055	71	10 - 163
4-nitroquinoline-1-oxide	5720	ND	3029	53	10 - 90
Acenaphthene	5720	ND	4466	78	26 - 128
Acenaphthylene	5720	ND	4417	77	43 - 106
Acetophenone	5720	ND	4187	73	29 - 113
Aniline	5720	ND	1632	29	10 - 117
Anthracene	5720	ND	4461	78	44 - 113
Aramite	5720	ND	3643	64	33 - 135
Azobenzene	5720	ND	4324	76	31 - 119
Benzidine	5720	ND	0		10 - 83
Benzo(a)anthracene	5720	ND	4948	87	38 - 127
Benzo(a)pyrene	5720	ND	5011	88	19 - 142
Benzo(b)fluoranthene	5720	520	5112	80	14 - 145
Benzo(g,h,i)perylene	5720	ND	4727	83	10 - 172
Benzo(k)fluoranthene	5720	ND	3955	69	23 - 135
Benzoic acid	5720	ND	4666	82	10 - 193

Benzyl alcohol	5720	ND	4119	72	14 - 114
Bis(2-Chloroethyl)ether	5720	ND	4058	71	26 - 115
Bis(2-ethylhexyl)phthalate	5720	ND	5156	90	40 - 160
Butylbenzylphthalate	5720	ND	5004	88	5 - 180
Carbazole	5720	ND	4389	77	42 - 117
Chlorobenzilate	5720	ND	4673	82	27 - 139
Chrysene	5720	ND	4321	76	25 - 146
Di-n-butylphthalate	5720	ND	5192	91	34 - 126
Di-n-octyl phthalate	5720	ND	4733	83	40 - 160
Dibenz(a,h)anthracene	5720	ND	4917	86	10 - 172
Dibenzofuran	5720	ND	4314	75	39 - 111
Diethylphthalate	5720	ND	4604	81	38 - 122
Dimethyl phthalate	5720	ND	4514	79	46 - 102
Dinoseb	5720	ND	0		10 - 123
Ethyl methanesulfonate	5720	ND	4047	71	32 - 100
Fluoranthene	5720	ND	4925	86	26 - 123
Fluorene	5720	ND	4548	80	30 - 130
Hexachlorobenzene	5720	ND	4201	73	22 - 132
Hexachlorobutadiene	5720	ND	4040	71	18 - 108
Hexachlorocyclopentadiene	5720	ND	2775	49	10 - 85
Hexachloroethane	5720	ND	3636	64	8.2 - 114
Hexachloropropene	5720	ND	3456	60	19 - 85
Indeno(1,2,3-cd)pyrene	5720	ND	4877	85	11 - 169
Isodrin	5720	ND	4496	79	22 - 117
Isophorone	5720	ND	4667	82	45 - 96
Isosafrole	5720	ND	4289	75	39 - 103
Kepone	5720	ND	0		10 - 100
Methyl methanesulfonate	5720	ND	4016	70	12 - 127
N-Nitrosodiphenylamine	5720	ND	4203	74	47 - 110
N-nitroso-di-n-propylamine	5720	ND	4271	75	25 - 126
N-nitrosodimethylamine	5720	ND	3556	62	8.6 - 110
Naphthalene	5720	ND	4111	72	35 - 110
Nitrobenzene	5720	ND	4068	71	42 - 98
Pentachlorobenzene	5720	ND	4260	75	26 - 120
Pentachloronitrobenzene	5720	ND	4556	80	20 - 136
Pentachlorophenol	5720	ND	4183	73	10 - 151
Phenacetin	5720	ND	4768	83	30 - 127
Phenanthrene	5720	ND	4445	78	49 - 109
Phenol	5720	ND	4215	74	29 - 122
Pyrene	5720	ND	4465	78	40 - 160
Pyridine	5720	ND	2359	41	10 - 83
Safrole	5720	ND	4629	81	36 - 101
bis(-2-Chloroethoxy)methane	5720	ND	4144	72	38 - 106

Comments:

BNA MATRIX SPIKE (MS) RESULTS

St John's Cemetery

Sample ID: AA92737

PARAMETER	SPIKE ADDED ug/Kg	SAMPLE CONCENTRATION ug/Kg	MS CONCENTRATION ug/Kg	MS % REC	QC LIMITS (% REC)
1,2,4,5-Tetrachlorobenzene	7744	ND	6040	78	34 - 101
1,2,4-Trichlorobenzene	7744	ND	5657	73	26 - 105
1,2-Dichlorobenzene	7744	ND	5327	69	24 - 99
1,3-Dichlorobenzene	7744	ND	5129	66	17 - 104
1,3-Dinitrobenzene	7744	ND	6059	78	24 - 120
1,4-Dichlorobenzene	7744	ND	5095	66	17 - 101
1,4-Naphthoquinone	7744	ND	4180	54	21 - 101
1-Methylnaphthalene	7744	ND	5932	77	38 - 107
2,2'-oxybis(1-chloropropane)	7744	ND	5525	71	10 - 146
2,3,4,6-Tetrachlorophenol	7744	ND	6724	87	10 - 137
2,4,5-Trichlorophenol	7744	ND	6418	83	26 - 120
2,4,6-Trichlorophenol	7744	ND	6780	88	36 - 108
2,4-Dichlorophenol	7744	ND	6288	81	36 - 110
2,4-Dinitrophenol	7744	ND	5778	75	10 - 104
2,4-Dinitrotoluene	7744	ND	6040	78	24 - 121
2,4-dimethylphenol	7744	ND	5518	71	47 - 106
2,6-Dichlorophenol	7744	ND	5952	77	36 - 108
2,6-Dinitrotoluene	7744	ND	6748	87	37 - 108
2-Chloronaphthalene	7744	ND	7250	94	39 - 102
2-Chlorophenol	7744	ND	5930	77	19 - 136
2-Methylnaphthalene	7744	ND	5623	73	37 - 112
2-Methylphenol	7744	ND	5832	75	25 - 130
2-Nitroaniline	7744	ND	7556	98	29 - 126
2-Nitrophenol	7744	ND	6488	84	33 - 102
3&4-Methylphenol	15488	ND	5828	38	30 - 125
3,3'-Dichlorobenzidine	7744	ND	707	9	11 - 124
3-Methylcholanthrene	7744	ND	6394	83	10 - 188
3-Nitroaniline	7744	ND	2919	38	26 - 107
4,6-Dinitro-2-methylphenol	7744	ND	5751	74	10 - 112
4-Bromophenyl-phenylether	7744	ND	6327	82	27 - 123
4-Chloro-3-methylphenol	7744	ND	6221	80	6.9 - 138
4-Chloroaniline	7744	ND	2270	29	10 - 115
4-Chlorophenyl-phenylether	7744	ND	6302	81	34 - 118
4-Nitroaniline	7744	ND	3150	41	10 - 162
4-Nitrophenol	7744	ND	6068	78	10 - 163
4-nitroquinoline-1-oxide	7744	ND	4669	60	10 - 90
Acenaphthene	7744	ND	6270	81	26 - 128
Acenaphthylene	7744	ND	6268	81	43 - 106
Acetophenone	7744	ND	5843	76	29 - 113
Aniline	7744	ND	1068	14	10 - 117
Anthracene	7744	ND	6243	81	44 - 113
Aramite	7744	ND	6488	84	33 - 135
Azobenzene	7744	ND	6212	80	31 - 119
Benzidine	7744	ND	0		10 - 83
Benzo(a)anthracene	7744	ND	6941	90	38 - 127
Benzo(a)pyrene	7744	ND	7082	91	19 - 142
Benzo(b)fluoranthene	7744	720	6916	80	14 - 145
Benzo(g,h,i)perylene	7744	ND	7180	93	10 - 172
Benzo(k)fluoranthene	7744	ND	5944	77	23 - 135
Benzoic acid	7744	2100	8542	83	10 - 193
Benzyl alcohol	7744	ND	5737	74	14 - 114
Bis(2-Chloroethyl)ether	7744	ND	5755	74	26 - 115
Bis(2-ethylhexyl)phthalate	7744	ND	8518	110	40 - 160
Butylbenzylphthalate	7744	ND	8369	108	5 - 180
Carbazole	7744	ND	6362	82	42 - 117

Chlorobenzilate	7744	ND	8385	108	27 - 139
Chrysene	7744	ND	6300	81	25 - 146
Di-n-butylphthalate	7744	ND	8320	107	34 - 126
Di-n-octyl phthalate	7744	ND	7841	101	40 - 160
Dibenz(a,h)anthracene	7744	ND	7688	99	10 - 172
Dibenzofuran	7744	ND	6026	78	39 - 111
Diethylphthalate	7744	1800	8097	81	38 - 122
Dimethyl phthalate	7744	ND	6540	84	46 - 102
Dinoseb	7744	ND	0		10 - 123
Ethyl methanesulfonate	7744	ND	5603	72	32 - 100
Fluoranthene	7744	417	7660	94	26 - 123
Fluorene	7744	ND	6332	82	30 - 130
Hexachlorobenzene	7744	ND	6145	79	22 - 132
Hexachlorobutadiene	7744	ND	5934	77	18 - 108
Hexachlorocyclopentadiene	7744	ND	4358	56	10 - 85
Hexachloroethane	7744	ND	5224	68	8.2 - 114
Hexachloropropene	7744	ND	5000	65	19 - 85
Indeno(1,2,3-cd)pyrene	7744	ND	7555	98	11 - 169
Isodrin	7744	ND	7104	92	22 - 117
Isophorone	7744	ND	6775	88	45 - 96
Isosafrole	7744	660	6462	75	39 - 103
Kepone	7744	ND	2286	30	10 - 100
Methyl methanesulfonate	7744	ND	5451	70	12 - 127
N-Nitrosodiphenylamine	7744	ND	5897	76	47 - 110
N-nitroso-di-n-propylamine	7744	ND	6062	78	25 - 126
N-nitrosodimethylamine	7744	ND	4953	64	8.6 - 110
Naphthalene	7744	ND	5699	74	35 - 110
Nitrobenzene	7744	ND	5791	75	42 - 98
Pentachlorobenzene	7744	ND	6107	79	26 - 120
Pentachloronitrobenzene	7744	ND	6867	89	20 - 136
Pentachlorophenol	7744	ND	6634	86	10 - 151
Phenacetin	7744	ND	7274	94	30 - 127
Phenanthrene	7744	ND	6313	82	49 - 109
Phenol	7744	ND	5833	75	29 - 122
Pyrene	7744	ND	7112	92	40 - 160
Pyridine	7744	ND	2015	26	10 - 83
Safrole	7744	ND	6654	86	36 - 101
bis(-2-Chloroethoxy)methane	7744	ND	5929	77	38 - 106

Comments:

Laboratory Duplicate Results

St John's Cemetery

Sample ID: AA92728

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
1,2,4,5-Tetrachlorobenzene	ND	0	0	50
1,2,4-Trichlorobenzene	ND	0	0	50
1,2-Dichlorobenzene	ND	0	0	50
1,3-Dichlorobenzene	ND	0	0	50
1,3-Dinitrobenzene	ND	0	0	50
1,4-Dichlorobenzene	ND	0	0	50
1,4-Naphthoquinone	ND	0	0	50
1-Methylnaphthalene	ND	0	0	50
2,2'-oxybis(1-chloropropane)	ND	0	0	50
2,3,4,6-Tetrachlorophenol	ND	0	0	50
2,4,5-Trichlorophenol	ND	0	0	50
2,4,6-Trichlorophenol	ND	0	0	50
2,4-Dichlorophenol	ND	0	0	50
2,4-Dinitrophenol	ND	0	0	50
2,4-Dinitrotoluene	ND	0	0	50
2,4-dimethylphenol	ND	0	0	50
2,6-Dichlorophenol	ND	0	0	50
2,6-Dinitrotoluene	ND	0	0	50
2-Chloronaphthalene	ND	0	0	50
2-Chlorophenol	ND	0	0	50
2-Methylnaphthalene	ND	0	0	50
2-Methylphenol	ND	0	0	50
2-Nitroaniline	ND	0	0	50
2-Nitrophenol	ND	0	0	50
3&4-Methylphenol	ND	0	0	50
3,3'-Dichlorobenzidine	ND	0	0	50
3-Methylcholanthrene	ND	0	0	50
3-Nitroaniline	ND	0	0	50
4,6-Dinitro-2-methylphenol	ND	0	0	50
4-Bromophenyl-phenylether	ND	0	0	50
4-Chloro-3-methylphenol	ND	0	0	50
4-Chloroaniline	ND	0	0	50
4-Chlorophenyl-phenylether	ND	0	0	50
4-Nitroaniline	ND	0	0	50
4-Nitrophenol	ND	0	0	50
4-nitroquinoline-1-oxide	ND	0	0	50
Acenaphthene	ND	0	0	50
Acenaphthylene	ND	0	0	50
Acetophenone	ND	0	0	50
Aniline	ND	0	0	50
Anthracene	ND	0	0	50
Aramite	ND	0	0	50
Azobenzene	ND	0	0	50
Benzidine	ND	0	0	50
Benzo(a)anthracene	ND	0	0	50
Benzo(a)pyrene	ND	0	0	50
Benzo(b)fluoranthene	520	490	6	50
Benzo(g,h,i)perylene	ND	0	0	50
Benzo(k)fluoranthene	ND	0	0	50
Benzoic acid	ND	0	0	50
Benzyl alcohol	ND	0	0	50
Bis(2-Chloroethyl)ether	ND	0	0	50
Bis(2-ethylhexyl)phthalate	ND	0	0	50
Butylbenzylphthalate	ND	0	0	50
Carbazole	ND	0	0	50

Chlorobenzilate	ND	0	.0	50
Chrysene	ND	0	0	50
Di-n-butylphthalate	ND	0	0	50
Di-n-octyl phthalate	ND	0	0	50
Dibenz(a,h)anthracene	ND	0	0	50
Dibenzofuran	ND	0	0	50
Diethylphthalate	ND	0	0	50
Dimethyl phthalate	ND	0	0	50
Dinoseb	ND	0	0	50
Ethyl methanesulfonate	ND	0	0	52
Fluoranthene	ND	0	0	50
Fluorene	ND	0	0	50
Hexachlorobenzene	ND	0	0	50
Hexachlorobutadiene	ND	0	0	50
Hexachlorocyclopentadiene	ND	0	0	50
Hexachloroethane	ND	0	0	50
Hexachloropropene	ND	0	0	50
Indeno(1,2,3-cd)pyrene	ND	0	0	50
Isodrin	ND	0	0	50
Isophorone	ND	0	0	50
Isosafrole	ND	0	0	50
Kepone	ND	0	0	50
Methyl methanesulfonate	ND	0	0	50
N-Nitrosodiphenylamine	ND	0	0	50
N-nitroso-di-n-propylamine	ND	0	0	50
N-nitrosodimethylamine	ND	0	0	50
Naphthalene	ND	0	0	50
Nitrobenzene	ND	0	0	50
Pentachlorobenzene	ND	0	0	50
Pentachloronitrobenzene	ND	0	0	50
Pentachlorophenol	ND	0	0	50
Phenacetin	ND	0	0	50
Phenanthrene	ND	0	0	50
Phenol	ND	0	0	50
Pyrene	ND	0	0	50
Pyridine	ND	0	0	50
Safrole	ND	0	0	50
bis(-2-Chloroethoxy)methane	ND	0	0	50

Laboratory Duplicate Results

St John's Cemetery

Sample ID: AA92737

PARAMETER	SAMPLE RESULT ug/Kg	SAMPLE DUPLICATE RESULT ug/Kg	PRECISION RPD %	QC LIMITS
1,2,4,5-Tetrachlorobenzene	ND	0	0	50
1,2,4-Trichlorobenzene	ND	0	0	50
1,2-Dichlorobenzene	ND	0	0	50
1,3-Dichlorobenzene	ND	0	0	50
1,3-Dinitrobenzene	ND	0	0	50
1,4-Dichlorobenzene	ND	0	0	50
1,4-Naphthoquinone	ND	0	0	50
1-Methylnaphthalene	ND	0	0	50
2,2'-oxybis(1-chloropropane)	ND	0	0	50
2,3,4,6-Tetrachlorophenol	ND	0	0	50
2,4,5-Trichlorophenol	ND	0	0	50
2,4,6-Trichlorophenol	ND	0	0	50
2,4-Dichlorophenol	ND	0	0	50
2,4-Dinitrophenol	ND	0	0	50
2,4-Dinitrotoluene	ND	0	0	50
2,4-dimethylphenol	ND	0	0	50
2,6-Dichlorophenol	ND	0	0	50
2,6-Dinitrotoluene	ND	0	0	50
2-Chloronaphthalene	ND	0	0	50
2-Chlorophenol	ND	0	0	50
2-Methylnaphthalene	ND	0	0	50
2-Methylphenol	ND	0	0	50
2-Nitroaniline	ND	0	0	50
2-Nitrophenol	ND	0	0	50
3&4-Methylphenol	ND	0	0	50
3,3'-Dichlorobenzidine	ND	0	0	50
3-Methylcholanthrene	ND	0	0	50
3-Nitroaniline	ND	0	0	50
4,6-Dinitro-2-methylphenol	ND	0	0	50
4-Bromophenyl-phenylether	ND	0	0	50
4-Chloro-3-methylphenol	ND	0	0	50
4-Chloroaniline	ND	0	0	50
4-Chlorophenyl-phenylether	ND	0	0	50
4-Nitroaniline	ND	0	0	50
4-Nitrophenol	ND	0	0	50
4-nitroquinoline-1-oxide	ND	0	0	50
Acenaphthene	ND	0	0	50
Acenaphthylene	ND	0	0	50
Acetophenone	ND	0	0	50
Aniline	ND	0	0	50
Anthracene	ND	0	0	50
Aramite	ND	0	0	50
Azobenzene	ND	0	0	50
Benzidine	ND	0	0	50
Benzo(a)anthracene	ND	0	0	50
Benzo(a)pyrene	ND	0	0	50
Benzo(b)fluoranthene	720	802	11	50
Benzo(g,h,i)perylene	ND	0	0	50
Benzo(k)fluoranthene	ND	0	0	50
Benzoic acid	2100	1995	0	50
Benzyl alcohol	ND	0	0	50
Bis(2-Chloroethyl)ether	ND	0	0	50
Bis(2-ethylhexyl)phthalate	ND	0	0	50
Butylbenzylphthalate	ND	0	0	50
Carbazole	ND	0	0	50

Chlorobenzilate	ND	0	0	50
Chrysene	ND	0	0	50
Di-n-butylphthalate	ND	0	0	50
Di-n-octyl-phthalate	ND	0	0	50
Dibenz(a,h)anthracene	ND	0	0	50
Dibenzofuran	ND	0	0	50
Diethylphthalate	1800	1516	17	50
Dimethyl phthalate	ND	0	0	50
Dinoseb	ND	0	0	50
Ethyl methanesulfonate	ND	0	0	52
Fluoranthene	417	558	29	50
Fluorene	ND	0	0	50
Hexachlorobenzene	ND	0	0	50
Hexachlorobutadiene	ND	0	0	50
Hexachlorocyclopentadiene	ND	0	0	50
Hexachloroethane	ND	0	0	50
Hexachloropropene	ND	0	0	50
Indeno(1,2,3-cd)pyrene	ND	0	0	50
Isodrin	ND	0	0	50
Isophorone	ND	0	0	50
Isosafrole	660	960	37	50
Kepone	ND	0	0	50
Methyl methanesulfonate	ND	0	0	50
N-Nitrosodiphenylamine	ND	0	0	50
N-nitroso-di-n-propylamine	ND	0	0	50
N-nitrosodimethylamine	ND	0	0	50
Naphthalene	ND	0	0	50
Nitrobenzene	ND	0	0	50
Pentachlorobenzene	ND	0	0	50
Pentachloronitrobenzene	ND	0	0	50
Pentachlorophenol	ND	0	0	50
Phenacetin	ND	0	0	50
Phenanthrene	ND	0	0	50
Phenol	ND	0	0	50
Pyrene	ND	0	0	50
Pyridine	ND	0	0	50
Safrole	ND	0	0	50
bis(-2-Chloroethoxy)methane	ND	0	0	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

St John's Cemetery

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
1,2,4,5-Tetrachlorobenzene	3240	2634	81	38 - 130
1,2,4-Trichlorobenzene	3240	2488	77	16 - 138
1,2-Dichlorobenzene	3240	2336	72	20 - 123
1,3-Dichlorobenzene	3240	2288	71	19 - 120
1,3-Dinitrobenzene	3240	2772	86	17 - 171
1,4-Dichlorobenzene	3240	2277	70	26 - 114
1,4-Naphthoquinone	3240	2557	79	30 - 154
1-Methylnaphthalene	3240	2595	80	35 - 127
2,2'-oxybis(1-chloropropane)	3240	2325	72	10 - 154
2,3,4,6-Tetrachlorophenol	3240	2908	90	8.2 - 178
2,4,5-Trichlorophenol	3240	2867	89	34 - 146
2,4,6-Trichlorophenol	3240	2951	91	40 - 141
2,4-Dichlorophenol	3240	2735	84	28 - 149
2,4-Dinitrophenol	3240	1257	39	10 - 129
2,4-Dinitrotoluene	3240	2657	82	22 - 160
2,4-dimethylphenol	3240	2304	71	40 - 135
2,6-Dichlorophenol	3240	2607	80	26 - 150
2,6-Dinitrotoluene	3240	3004	93	26 - 153
2-Chloronaphthalene	3240	3166	98	45 - 120
2-Chlorophenol	3240	2509	77	31 - 143
2-Methylnaphthalene	3240	2446	76	35 - 126
2-Methylphenol	3240	2471	76	16 - 160
2-Nitroaniline	3240	3345	103	36 - 154
2-Nitrophenol	3240	2749	85	14 - 150
3&4-Methylphenol	6480	2564	40	29 - 147
3,3'-Dichlorobenzidine	3240	2411	74	16 - 155
3-Methylcholanthrene	3240	2761	85	10 - 195
3-Nitroaniline	3240	2496	77	14 - 154
4,6-Dinitro-2-methylphenol	3240	1911	59	10 - 147
4-Bromophenyl-phenylether	3240	3011	93	21 - 151
4-Chloro-3-methylphenol	3240	2819	87	26 - 149
4-Chloroaniline	3240	2186	68	10 - 163
4-Chlorophenyl-phenylether	3240	2829	87	40 - 137
4-Nitroaniline	3240	2424	75	15 - 172
4-Nitrophenol	3240	2233	69	10 - 189
4-nitroquinoline-1-oxide	3240	2681	83	10 - 193
Acenaphthene	3240	2728	84	46 - 120
Acenaphthylene	3240	2755	85	59 - 111
Acetophenone	3240	2472	76	27 - 135
Aniline	3240	1705	53	18 - 134
Anthracene	3240	2798	86	71 - 103
Aramite	3240	2680	83	24 - 162
Azobenzene	3240	2825	87	71 - 100
Benzidine	3240	952	29	2.0 - 97
Benzo(a)anthracene	3240	2991	92	62 - 116
Benzo(a)pyrene	3240	3123	96	26 - 148
Benzo(b)fluoranthene	3240	3272	101	17 - 161
Benzo(g,h,i)perylene	3240	2894	89	29 - 137
Benzo(k)fluoranthene	3240	2643	82	38 - 132
Benzoic acid	3240	1445	45	10 - 122

Benzyl alcohol	3240	2483	77	12 - 164
Bis(2-Chloroethyl)ether	3240	2389	74	22 - 134
Bis(2-ethylhexyl)phthalate	3240	3688	114	45 - 141
Butylbenzylphthalate	3240	3531	109	49 - 136
Carbazole	3240	2685	83	68 - 108
Chlorobenzilate	3240	3576	110	27 - 156
Chrysene	3240	2690	83	66 - 115
Di-n-butylphthalate	3240	5959	184	57 - 123
Di-n-octyl phthalate	3240	3375	104	21 - 151
Dibenz(a,h)anthracene	3240	3139	97	7.8 - 172
Dibenzofuran	3240	2679	83	61 - 110
Diethylphthalate	3240	3427	106	61 - 127
Dimethyl phthalate	3240	2831	87	51 - 129
Dinoseb	ND	0		10 - 174
Ethyl methanesulfonate	3240	2407	74	16 - 149
Fluoranthene	3240	2950	91	64 - 111
Fluorene	3240	2825	87	57 - 122
Hexachlorobenzene	3240	2807	87	18 - 156
Hexachlorobutadiene	3240	2581	80	10 - 150
Hexachlorocyclopentadiene	3240	2877	89	10 - 119
Hexachloroethane	3240	2335	72	11 - 126
Hexachloropropene	3240	2573	79	10 - 149
Indeno(1,2,3-cd)pyrene	3240	3045	94	36 - 144
Isodrin	3240	2945	91	19 - 157
Isophorone	3240	2906	90	39 - 135
Isosafrole	3240	2652	82	23 - 139
Kepone	3240	0		12 - 84
Methyl methanesulfonate	3240	2416	75	29 - 146
N-Nitrosodiphenylamine	3240	2821	87	64 - 116
N-nitroso-di-n-propylamine	3240	2569	79	31 - 134
N-nitrosodimethylamine	3240	2160	67	36 - 113
Naphthalene	3240	2498	77	44 - 118
Nitrobenzene	3240	2514	78	40 - 130
Pentachlorobenzene	3240	2729	84	22 - 151
Pentachloronitrobenzene	3240	2986	92	32 - 158
Pentachlorophenol	3240	2242	69	10 - 157
Phenacetin	3240	2998	93	46 - 145
Phenanthrene	3240	2700	83	71 - 106
Phenol	3240	2494	77	26 - 152
Pyrene	3240	2863	88	60 - 125
Pyridine	3240	1559	48	19 - 93
Safrole	3240	2905	90	48 - 125
bis(-2-Chloroethoxy)methane	3240	2553	79	32 - 131

Laboratory Fortified Blank (LFB) Results

St John's Cemetery

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
1,2,4,5-Tetrachlorobenzene	2690	1911	71	38 - 130
1,2,4-Trichlorobenzene	2690	1766	66	16 - 138
1,2-Dichlorobenzene	2690	1662	62	20 - 123
1,3-Dichlorobenzene	2690	1607	60	19 - 120
1,3-Dinitrobenzene	2690	2131	79	17 - 171
1,4-Dichlorobenzene	2690	1587	59	26 - 114
1,4-Naphthoquinone	2690	1883	70	30 - 154
1-Methylnaphthalene	2690	1873	70	35 - 127
2,2'-oxybis(1-chloropropane)	2690	1673	62	10 - 154
2,3,4,6-Tetrachlorophenol	2690	1845	69	8.2 - 178
2,4,5-Trichlorophenol	2690	2105	78	34 - 146
2,4,6-Trichlorophenol	2690	2092	78	40 - 141
2,4-Dichlorophenol	2690	1946	72	28 - 149
2,4-Dinitrophenol	2690	505	19	10 - 129
2,4-Dinitrotoluene	2690	2088	78	22 - 160
2,4-dimethylphenol	2690	1787	66	40 - 135
2,6-Dichlorophenol	2690	1830	68	26 - 150
2,6-Dinitrotoluene	2690	2263	84	26 - 153
2-Chloronaphthalene	2690	2360	88	45 - 120
2-Chlorophenol	2690	1847	69	31 - 143
2-Methylnaphthalene	2690	1794	67	35 - 126
2-Methylphenol	2690	1849	69	16 - 160
2-Nitroaniline	2690	2562	95	36 - 154
2-Nitrophenol	2690	1814	67	14 - 150
3&4-Methylphenol	5380	1920	36	29 - 147
3,3'-Dichlorobenzidine	2690	1851	69	16 - 155
3-Methylcholanthrene	2690	2088	78	10 - 195
3-Nitroaniline	2690	2029	75	14 - 154
4,6-Dinitro-2-methylphenol	2690	962	36	10 - 147
4-Bromophenyl-phenylether	2690	2148	80	21 - 151
4-Chloro-3-methylphenol	2690	2122	79	26 - 149
4-Chloroaniline	2690	1692	63	10 - 163
4-Chlorophenyl-phenylether	2690	2128	79	40 - 137
4-Nitroaniline	2690	1999	74	15 - 172
4-Nitrophenol	2690	1799	67	10 - 189
4-nitroquinoline-1-oxide	2690	1830	68	10 - 193
Acenaphthene	2690	1972	73	46 - 120
Acenaphthylene	2690	2042	76	59 - 111
Acetophenone	2690	1846	69	27 - 135
Aniline	2690	1328	49	18 - 134
Anthracene	2690	2127	79	71 - 103
Aramite	2690	1952	73	24 - 162
Azobenzene	2690	2043	76	71 - 100
Benzidine	2690	855	32	2.0 - 97
Benzo(a)anthracene	2690	2280	85	62 - 116
Benzo(a)pyrene	2690	2340	87	26 - 148
Benzo(b)fluoranthene	2690	2313	86	17 - 161
Benzo(g,h,i)perylene	2690	2255	84	29 - 137
Benzo(k)fluoranthene	2690	1991	74	38 - 132
Benzoic acid	2690	3174	118	10 - 122
Benzyl alcohol	2690	1862	69	12 - 164
Bis(2-Chloroethyl)ether	2690	1709	64	22 - 134
Bis(2-ethylhexyl)phthalate	2690	2773	103	45 - 141

Butylbenzylphthalate	2690	2576	96	49 - 136
Carbazole	2690	2075	77	68 - 108
Chlorobenzilate	2690	2558	95	27 - 156
Chrysene	2690	2052	76	66 - 115
Di-n-butylphthalate	2690	3066	114	57 - 123
Di-n-octyl phthalate	2690	2469	92	21 - 151
Dibenz(a,h)anthracene	2690	2427	90	7.8 - 172
Dibenzofuran	2690	2018	75	61 - 110
Diethylphthalate	2690	2760	103	61 - 127
Dimethyl phthalate	2690	2146	80	51 - 129
Dinoseb	2690	0	0	10 - 174
Ethyl methanesulfonate	2690	1760	65	16 - 149
Fluoranthene	2690	2205	82	64 - 111
Fluorene	2690	2139	80	57 - 122
Hexachlorobenzene	2690	2083	77	18 - 156
Hexachlorobutadiene	2690	1808	67	10 - 150
Hexachlorocyclopentadiene	2690	1932	72	10 - 119
Hexachloroethane	2690	1606	60	11 - 126
Hexachloropropene	2690	1814	67	10 - 149
Indeno(1,2,3-cd)pyrene	2690	2350	87	36 - 144
Isodrin	2690	2193	82	19 - 157
Isophorone	2690	2090	78	39 - 135
Isosafrole	2690	1939	72	23 - 139
Kepone	2690	0	0	12 - 84
Methyl methanesulfonate	2690	1741	65	29 - 146
N-Nitrosodiphenylamine	2690	2085	78	64 - 116
N-nitroso-di-n-propylamine	2690	1881	70	31 - 134
N-nitrosodimethylamine	2690	1563	58	36 - 113
Naphthalene	2690	1796	67	44 - 118
Nitrobenzene	2690	1786	66	40 - 130
Pentachlorobenzene	2690	2052	76	22 - 151
Pentachloronitrobenzene	2690	2209	82	32 - 158
Pentachlorophenol	2690	1198	45	10 - 157
Phenacetin	2690	2289	85	46 - 145
Phenanthrene	2690	2080	77	71 - 106
Phenol	2690	1841	69	26 - 152
Pyrene	2690	2277	85	60 - 125
Pyridine	2690	1093	41	19 - 93
Safrole	2690	2106	78	48 - 125
bis(-2-Chloroethoxy)methane	2690	1839	68	32 - 131

Samples in Batch: AA92725, AA92726, AA92727, AA92728, AA92729, AA92730, AA92731, AA92732, AA92733, AA92734, AA92735, AA92736, AA92737, AA92738, AA92739, AA92740, AA92741, AA92742, AA92743, AA92744, AA92745, AA92746

Comments: Dinoseb is not present in the LFB/MS spike solution.

There were two MS and LFB run for this project.

For the first set of QC there was no recovery for kepone in the LFB and no recovery of benzidine in the MS.

For the second set of QC there was no recovery for kepone in the LFB and no recovery of kepone or benzidine in the MS.