



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173

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DATE: June 17, 1996

SUBJ: Gas Chromatography-Mass Spectrometry Analysis of Extractable Organics in Soils and Sediments - NUTMEG VALLEY

FROM: Dr. Agnes VanLangenhove, Chemistry Section *AVL*

THRU: Dr. William J. Andrade, Advanced Analytical Chemistry Specialist *WJA 6/17/96*

TO: Dan Granz

PROJECT NUMBER: 96214

ANALYTICAL PROCEDURE:

All samples were received and logged in by the laboratory according to the chain of custody SOP (G-2, Rev 2, 2/24/92, DCN: CH-001/88).

Sample processing and analysis was done following the EPA Region 1 Standard Operating Procedures BNASOLL1.SOP and GCMS2.MOD. The methods are based on the US EPA, Contract Laboratory Program, Statement of Work for Organic Analysis, Multi-Media, Multi-Concentration, Low Level Preparation for Screening and Analysis of Semivolatiles (BNA), OLM01.2, 1/91. The sample extracts were screened on a gas chromatograph prior to the gas chromatography-mass spectrometry analysis. All values are reported out on a dry weight basis.

The analytical support for this report was performed by ESAT contractors.

Date(s) Samples Received by the Laboratory: 05/13/96

Date Analysis Started: 05/17/96

CC:

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QUALITY CONTROL:

1. A laboratory blank was processed with the samples.
2. Each sample was spiked with 100 ug of base/neutral and 200 ug of acid surrogate compounds. The results for the surrogate recoveries are reported out for each sample.
3. For the MS/MSD analysis, sample 12347 was spiked with 100 ug of base/neutral and 200 ug of acid matrix spike compounds. The results for the analyses are listed below.

Compound	MS Rec.	MSD Rec.	Rec. QC Range	RPD	RPD QC Limit
Acenaphthene	86	96	31-137	11	19
4-Chloro-3-methylphenol	90	97	26-103	7	33
2-Chlorophenol	97	114*	25-102	16	50
1,4-Dichlorobenzene	97	110*	28-104	13	27
2,4-Dinitrotoluene	76	87	28-89	13	47
4-Nitrophenol	66	67	11-114	2	50
N-Nitrosodi-n-propylamine	92	101	41-126	9	38
Pentachlorophenol	54	70	17-109	26	47
Phenol	96*	108*	26-90	12	35
Pyrene	98	109	35-142	11	36
1,2,4-Trichlorobenzene	92	97	38-107	5	23

* = outside QC window

(Cont.)

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COMPOUNDS NOT IN THE SPIKING SOLUTION:

Target Compounds	MS (ug/Kg)	MSD (ug/Kg)	Qualifier
Phenanthrene	320	290	L
Fluoranthene	570	590	L
Benz(a)anthracene	220	220	L
Chrysene	310	350	L
Bis(2-ethylhexyl)phthalate	1200	540	L
Benzo(b)fluoranthene	260	270	L
Benzo(k)fluoranthene	260	250	L
Benzo(a)pyrene	190	220	L

Tentatively Identified Compounds	MS Est. Conc. (ug/Kg)	MSD Est. Conc. (ug/Kg)	
2-Pentanone, 4-hydroxy-4-methyl	43000	40000	J, B, A
Hexanedioic acid, bis(2-ethylhexyl)	3300	3700	J, B
Unknown Aliphatic Hydrocarbon	890	800	J
Unknown Aliphatic Hydrocarbon	3200	6500	J
Unknown Aliphatic Hydrocarbon	1200	1100	J
Unknown Aliphatic Hydrocarbon	810	780	J

Recoveries for Surrogate Compounds:	MS Rec. (%)	MSD Rec. (%)	QC Range (%)
2-Fluorophenol	102	111	25-121
Phenol, d5	91	104	24-113
Nitrobenzene, d5	89	98	23-120
Fluorobiphenyl	89	103	30-115
2,4,6-Tribromophenol	86	91	19-122
p-Terphenyl, d14	95	109	18-137
2-Chlorophenol-d4	99	108	20-130
1,2-Dichlorobenzene-d4	84	96	20-130

NOTE: Phthalates (1,2-Benzenedicarboxylic esters) and adipates (hexanedioic esters) are common method contaminants.

SAMPLES ANALYZED: 12345, 12346, 12347, 12347MS, 12347MSD, 12348, 12349, 12350, 12351, 12353, 12355, BLANK

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ANALYTICAL PARAMETERS

INSTRUMENTS:

Hewlett Packard 5890 Gas Chromatograph
Hewlett Packard 5988 Gas Chromatograph-Mass
Spectrometer

GC/FID Screening Conditions:

Gas:	Hydrogen
Capillary Column:	DB-1, 30m, 0.32mm ID, 0.10 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 3 min at 40°C, programmed at 15°C/min to 320°C for 3 min

GC-MS Conditions:

Gas:	Helium
Capillary Column:	DB-5, 60m, 0.25mm ID, 0.25 micron film thickness
Injection Mode:	Splitless
Temperature Program:	Isothermal for 4 min at 40°C, programmed at 7°C/min to 300°C
Injector, Transfer Temperatures:	300°C, 290°C
Electron Energy:	70 V
Mass Range:	35-550
Scan Rate:	0.9 seconds

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Chemist who reviewed data: Dr. Agnes VanLangenhove

Holding times met (Y/N): Yes

Extraction (Water - 7 days, Soils - 14 days)

Analytical (40 days after extraction)

Method modifications: None

Limitations of data:

The extracts for samples 12347, 12347MS, 12347MSD, 12349, 12350 and 12355 were very dark brown and foamed excessively during concentration. The final volume for these samples was 5 mL.

The extracts for samples 12345, 12346, 12348 and 12353 were concentrated to a final volume of 1 mL but were very dark and viscous so they were diluted before injection into the GC/MS instrument. Even diluted, these samples dirtied up the injection port of the GC to the point where extra injection port maintenance had to be performed to meet QC criteria for standards.

Laboratory blank problems:

There was minor contamination with 72 ppb of di-n-butylphthalate at levels below the reporting limit (<210 ppb). The aldolcondensation artefact 4-methyl-4-hydroxy-2-pentanone, and the plasticizer bis(2-ethylhexyl)hexanedioic acid were found as tentatively identified compounds. The blank contaminants were found in most of the samples.

Instrument performance problems: None

Surrogate and spike recovery problems:

Three matrix spike compounds had high recoveries.

Physical appearance of the samples:

12345, 12353- wet, fine, brown soil with rocks
12346- moist, clumpy, brown soil
12347- wet, sandy, brown soil
12348, 12349, 12350- wet, brown sand and pebbles
12351, 12352, 12355- brown soil with a few stones

FACILITY SAMPLED: NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.:	BLANK	Matrix:	Soil
DATE OF COLLECTION:	Not Applicable	Sample pH:	6
DATE OF EXTRACTION:	05/17/96	Percent Moisture	0
DATE OF ANALYSIS:	05/22/96	Conc. Final Vol.	1000 uL
WET WEIGHT EXTRACTED:	30.1 g	Dilution Factor:	1
		Report Factor:	0.995

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	210	
208-96-8	34200	Acenaphthylene	ND	210	
120-12-7	34220	Anthracene	ND	210	
309-00-2	39330	Aldrin	ND	210	
56-55-3	34526	Benzo(a)anthracene	ND	210	
205-99-2	34230	Benzo(b)fluoranthene	ND	210	
207-08-9	34242	Benzo(k)fluoranthene	ND	210	
50-32-8	34247	Benzo(a)pyrene	ND	210	
191-24-2	34521	Benzo(ghi)perylene	ND	210	
85-68-7	34292	Benzyl butyl phthalate	ND	210	
319-85-7	39338	beta-BHC	ND	210	
319-86-8	34259	delta-BHC	ND	210	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	210	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	210	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	ND	210	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	210	
101-55-3	34636	4-Bromophenylphenyl ether	ND	210	
86-74-8		Carbazole	ND	210	
59-50-7	34452	4-Chloro-3-methylphenol	ND	420	
91-58-7	34581	2-Chloronaphthalene	ND	210	
95-57-8	34586	2-Chlorophenol	ND	420	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	210	
218-01-9	34320	Chrysene	ND	210	
72-54-8	39310	4,4'-DDD	ND	210	
72-55-9	39320	4,4'-DDE	ND	210	
50-29-3	39300	4,4'-DDT	ND	210	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	210	
84-74-2	39110	Di-n-butylphthalate	72	210	L

541-73-1 34566 1,3-Dichlorobenzene ND 210

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: BLANK
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	210	
106-46-7	34571	1,4-Dichlorobenzene	ND	210	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	210	
120-83-2	34601	2,4-Dichlorophenol	ND	420	
60-57-1	39380	Dieldrin	ND	210	
84-66-2	34336	Diethylphthalate	ND	210	
105-67-9	34606	2-4-Dimethylphenol	ND	420	
131-11-3	34341	Dimethylphthalate	ND	210	
51-28-5	34616	2,4-Dinitrophenol	ND	520	
121-14-2	34611	2,4-Dinitrotoluene	ND	210	
606-20-2	34626	2,6-Dinitrotoluene	ND	210	
117-84-0	34596	Di-n-octylphthalate	ND	210	
206-44-0	34376	Fluoranthene	ND	210	
86-73-7	34381	Fluorene	ND	210	
76-44-8	39410	Heptachlor	ND	210	
1024-57-3	39420	Heptachlor epoxide	ND	210	
118-74-1	39700	Hexachlorobenzene	ND	210	
87-68-3	34391	Hexachlorobutadiene	ND	210	
77-47-4	34386	Hexachlorocyclopentadiene	ND	210	
67-72-1	34396	Hexachloroethane	ND	210	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	210	
78-59-1	34408	Isophorone	ND	210	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	520	
91-20-3	34696	Naphthalene	ND	210	
98-95-3	34447	Nitrobenzene	ND	210	
88-75-5	34591	2-Nitrophenol	ND	420	
100-02-7	34646	4-Nitrophenol	ND	520	
86-30-3	34433	N-Nitrosodiphenylamine	ND	210	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	210	
87-86-5	39032	Pentachlorophenol	ND	520	
85-01-8	34461	Phenanthrene	ND	210	
108-95-2	34694	Phenol	ND	420	
129-00-0	34469	Pyrene	ND	210	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
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GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: BLANK
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	210	
88-06-2	34621	2,4,6-Trichlorophenol	ND	420	
Hazardous Substances					
65-53-3	77089	Aniline	ND	210	
65-85-0	77247	Benzoic Acid	ND	520	
100-51-6	77147	Benzyl Alcohol	ND	210	
106-47-8		4-Chloroaniline	ND	210	
132-64-9	81302	Dibenzofuran	ND	210	
91-57-6		2-Methylnaphthalene	ND	210	
95-48-7		2-Methylphenol	ND	210	
106-44-5		4-Methylphenol	ND	210	
88-74-4		2-Nitroaniline	ND	520	
99-09-2		3-Nitroaniline	ND	520	
100-01-6		4-Nitroaniline	ND	520	
95-95-4	34621	2,4,5-Trichlorophenol	ND	520	
Other Compounds Quantitated					
Diphenylhydrazine			ND	210	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
2-Pentanone,4-hydroxy-4-methyl			18000		J,A
Hexanedioic Acid,bis(2-ethylhexyl)			3700		J

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 GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: BLANK
 Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	91	25-121
Phenol,d5	87	24-113
Nitrobenzene,d5	81	23-120
Fluorobiphenyl	79	30-115
2,4,6-Tribromophenol	70	19-122
p-Terphenyl,d14	80	18-137
2-Chlorophenol-d4	87	20-130
1,2-Dichlorobenzene-d4	76	20-130

Notes:

- RL = Reporting limit
- ND = None detected
- ~ = Approximate
- < = Less than
- > = Greater than
- NA = Not available, due to sample dilution or interference
- E = Estimated value exceeds the calibration range
- L = Estimated value is below the calibration range
- B = Analyte is associated with lab blank or trip blank contamination. Values are qualified when the observed concentration of the contaminant in the sample extract is less than ten times the concentration in the blank extract for the common contaminants (phthalates and adipates), or less than five times for the remaining contaminants.
- C = This compound is confirmation for the pesticide analyses. See the pesticide report for the quantitation.
- A = Suspected aldolcondensation product
- J = Estimated concentration

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY
 REGION I LABORATORY
 GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12345
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/22/96
 WET WEIGHT EXTRACTED: 30.9 g

Matrix: Soil
 Sample pH: 6.18
 Percent Moisture 22
 Conc. Final Vol. 1000 uL
 Dilution Factor: 2.0
 Report Factor: 2.48

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	520	
208-96-8	34200	Acenaphthylene	ND	520	
120-12-7	34220	Anthracene	ND	520	
309-00-2	39330	Aldrin	ND	520	
56-55-3	34526	Benzo(a)anthracene	200	520	L
205-99-2	34230	Benzo(b)fluoranthene	180	520	L
207-08-9	34242	Benzo(k)fluoranthene	200	520	L
50-32-8	34247	Benzo(a)pyrene	190	520	L
191-24-2	34521	Benzo(ghi)perylene	ND	520	
85-68-7	34292	Benzyl butyl phthalate	ND	520	
319-85-7	39338	beta-BHC	ND	520	
319-86-8	34259	delta-BHC	ND	520	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	520	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	520	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	740	520	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	520	
101-55-3	34636	4-Bromophenylphenyl ether	ND	520	
86-74-8		Carbazole	ND	520	
59-50-7	34452	4-Chloro-3-methylphenol	ND	1000	
91-58-7	34581	2-Chloronaphthalene	ND	520	
95-57-8	34586	2-Chlorophenol	ND	1000	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	520	
218-01-9	34320	Chrysene	240	520	L
72-54-8	39310	4,4'-DDD	ND	520	
72-55-9	39320	4,4'-DDE	ND	520	
50-29-3	39300	4,4'-DDT	ND	520	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	520	
84-74-2	39110	Di-n-butylphthalate	110	520	L,B
541-73-1	34566	1,3-Dichlorobenzene	ND	520	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12345

Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	520	
106-46-7	34571	1,4-Dichlorobenzene	ND	520	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	520	
120-83-2	34601	2,4-Dichlorophenol	ND	1000	
60-57-1	39380	Dieldrin	ND	520	
84-66-2	34336	Diethylphthalate	ND	520	
105-67-9	34606	2-4-Dimethylphenol	ND	1000	
131-11-3	34341	Dimethylphthalate	ND	520	
51-28-5	34616	2,4-Dinitrophenol	ND	1300	
121-14-2	34611	2,4-Dinitrotoluene	ND	520	
606-20-2	34626	2,6-Dinitrotoluene	ND	520	
117-84-0	34596	Di-n-octylphthalate	ND	520	
206-44-0	34376	Fluoranthene	490	520	
86-73-7	34381	Fluorene	ND	520	
76-44-8	39410	Heptachlor	ND	520	
1024-57-3	39420	Heptachlor epoxide	ND	520	
118-74-1	39700	Hexachlorobenzene	ND	520	
87-68-3	34391	Hexachlorobutadiene	ND	520	
77-47-4	34386	Hexachlorocyclopentadiene	ND	520	
67-72-1	34396	Hexachloroethane	ND	520	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	520	
78-59-1	34408	Isophorone	ND	520	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	1300	
91-20-3	34696	Naphthalene	790	520	
98-95-3	34447	Nitrobenzene	ND	520	
88-75-5	34591	2-Nitrophenol	ND	1000	
100-02-7	34646	4-Nitrophenol	ND	1300	
86-30-3	34433	N-Nitrosodiphenylamine	ND	520	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	520	
87-86-5	39032	Pentachlorophenol	ND	1300	
85-01-8	34461	Phenanthrene	290	520	L
108-95-2	34694	Phenol	ND	1000	
129-00-0	34469	Pyrene	450	520	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
 REGION I LABORATORY
 GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12345
 Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	520	
88-06-2	34621	2,4,6-Trichlorophenol	ND	1000	
Hazardous Substances					
65-53-3	77089	Aniline	ND	520	
65-85-0	77247	Benzoic Acid	ND	1300	
100-51-6	77147	Benzyl Alcohol	ND	520	
106-47-8		4-Chloroaniline	ND	520	
132-64-9	81302	Dibenzofuran	ND	520	
91-57-6		2-Methylnaphthalene	ND	520	
95-48-7		2-Methylphenol	ND	520	
106-44-5		4-Methylphenol	ND	520	
88-74-4		2-Nitroaniline	ND	1300	
99-09-2		3-Nitroaniline	ND	1300	
100-01-6		4-Nitroaniline	ND	1300	
95-95-4	34621	2,4,5-Trichlorophenol	ND	1300	
Other Compounds Quantitated					
Diphenylhydrazine			ND	520	

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12345
Sample Results Continued:

Tentatively Identified Compounds	Est. Conc. (ug/Kg)	
2-Pentanone,4-hydroxy-4-methyl	57000	J,B,A
Benzene,propyl isomer	440	J
ethyl-methyl-Benzene isomer	2500	J
trimethyl-Benzene isomer	700	J
methyl-propyl-Benzene isomer	1400	J
methyl-propyl-Benzene isomer	910	J
tetramethyl-Benzene isomer	1600	J
methyl-propyl-Benzene isomer	510	J
tetramethyl-Benzene isomer	970	J
tetramethyl-Benzene isomer	960	J
tetramethyl-Benzene isomer	1100	J
tetramethyl-Benzene isomer	1500	J
Unknown	440	J
dihydro-methyl-1H-Indene isomer	580	J
dihydro-methyl-1H-Indene isomer	1100	J
Unknown Aliphatic Hydrocarbon	400	J
Unknown Aliphatic Hydrocarbon	840	J
Unknown Aliphatic Hydrocarbon	2800	J
Unknown	470	J
Dodecanoic acid	3800	J
Tetradecanoic acid	3000	J
Hexadecanoic acid	3100	J
Hexanedioic acid,bis(2-ethylhexyl)	4800	J,B
Unknown Aliphatic Hydrocarbon	690	J
Unknown Aliphatic Hydrocarbon	1400	J
Unknown Aliphatic Hydrocarbon	340	J
Unknown Hydrocarbon	1000	J
trimethyl-Benzene isomer	1100	J
trimethyl-Benzene isomer	700	J
trimethyl-Benzene isomer	3000	J
tetramethyl-Benzene isomer	2000	J
Unknown Aliphatic hydrocarbon	11000	J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12345
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	103	25-121
Phenol,d5	98	24-113
Nitrobenzene,d5	95	23-120
Fluorobiphenyl	90	30-115
2,4,6-Tribromophenol	79	19-122
p-Terphenyl,d14	91	18-137
2-Chlorophenol-d4	97	20-130
1,2-Dichlorobenzene-d4	87	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12346
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/22/96
 WET WEIGHT EXTRACTED: 30.7 g

Matrix: Soil
 Sample pH: 6.01
 Percent Moisture 29
 Conc. Final Vol. 1000 uL
 Dilution Factor: 5.0
 Report Factor: 6.83

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	1400	
208-96-8	34200	Acenaphthylene	1900	1400	
120-12-7	34220	Anthracene	1600	1400	
309-00-2	39330	Aldrin	ND	1400	
56-55-3	34526	Benzo(a)anthracene	3900	1400	
205-99-2	34230	Benzo(b)fluoranthene	3300	1400	
207-08-9	34242	Benzo(k)fluoranthene	3500	1400	
50-32-8	34247	Benzo(a)pyrene	3400	1400	
191-24-2	34521	Benzo(ghi)perylene	950	1400	L
85-68-7	34292	Benzyl butyl phthalate	ND	1400	
319-85-7	39338	beta-BHC	ND	1400	
319-86-8	34259	delta-BHC	ND	1400	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	1400	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	1400	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	320	1400	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	1400	
101-55-3	34636	4-Bromophenylphenyl ether	ND	1400	
86-74-8		Carbazole	1000	1400	L
59-50-7	34452	4-Chloro-3-methylphenol	ND	2900	
91-58-7	34581	2-Chloronaphthalene	ND	1400	
95-57-8	34586	2-Chlorophenol	ND	2900	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	1400	
218-01-9	34320	Chrysene	4300	1400	
72-54-8	39310	4,4'-DDD	ND	1400	
72-55-9	39320	4,4'-DDE	ND	1400	
50-29-3	39300	4,4'-DDT	ND	1400	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	1400	
84-74-2	39110	Di-n-butylphthalate	ND	1400	
541-73-1	34566	1,3-Dichlorobenzene	ND	1400	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12346
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	1400	
106-46-7	34571	1,4-Dichlorobenzene	ND	1400	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	1400	
120-83-2	34601	2,4-Dichlorophenol	ND	2900	
60-57-1	39380	Dieldrin	ND	1400	
84-66-2	34336	Diethylphthalate	ND	1400	
105-67-9	34606	2-4-Dimethylphenol	ND	2900	
131-11-3	34341	Dimethylphthalate	ND	1400	
51-28-5	34616	2,4-Dinitrophenol	ND	3600	
121-14-2	34611	2,4-Dinitrotoluene	ND	1400	
606-20-2	34626	2,6-Dinitrotoluene	ND	1400	
117-84-0	34596	Di-n-octylphthalate	ND	1400	
206-44-0	34376	Fluoranthene	8100	1400	
86-73-7	34381	Fluorene	420	1400	L
76-44-8	39410	Heptachlor	ND	1400	
1024-57-3	39420	Heptachlor epoxide	ND	1400	
118-74-1	39700	Hexachlorobenzene	ND	1400	
87-68-3	34391	Hexachlorobutadiene	ND	1400	
77-47-4	34386	Hexachlorocyclopentadiene	ND	1400	
67-72-1	34396	Hexachloroethane	ND	1400	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	1200	1400	L
78-59-1	34408	Isophorone	ND	1400	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	3600	
91-20-3	34696	Naphthalene	ND	1400	
98-95-3	34447	Nitrobenzene	ND	1400	
88-75-5	34591	2-Nitrophenol	ND	2900	
100-02-7	34646	4-Nitrophenol	ND	3600	
86-30-3	34433	N-Nitrosodiphenylamine	ND	1400	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	1400	
87-86-5	39032	Pentachlorophenol	ND	3600	
85-01-8	34461	Phenanthrene	5300	1400	
108-95-2	34694	Phenol	ND	2900	
129-00-0	34469	Pyrene	7400	1400	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12346
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	1400	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2900	
Hazardous Substances					
65-53-3	77089	Aniline	ND	1400	
65-85-0	77247	Benzoic Acid	ND	3600	
100-51-6	77147	Benzyl Alcohol	ND	1400	
106-47-8		4-Chloroaniline	ND	1400	
132-64-9	81302	Dibenzofuran	ND	1400	
91-57-6		2-Methylnaphthalene	ND	1400	
95-48-7		2-Methylphenol	ND	1400	
106-44-5		4-Methylphenol	ND	1400	
88-74-4		2-Nitroaniline	ND	3600	
99-09-2		3-Nitroaniline	ND	3600	
100-01-6		4-Nitroaniline	ND	3600	
95-95-4	34621	2,4,5-Trichlorophenol	ND	3600	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	1400	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-hydroxy-4-methyl	60000		J,A,B
		methyl-Anthracene isomer	1200		J
		methyl-Anthracene isomer	1600		J
		methyl-Anthracene isomer	1100		J
		Unknown	1200		J
		9,10-Anthracenedione	1100		J
		Unknown PAH	920		J
		11H-Benzofluorene isomer	2200		J
		11H-Benzofluorene isomer	1100		J
		Unknown	960		J
		Hexanedioic acid,bis(2-ethylhexyl)	4800		J,B
		p-Terphenyl	1000		J
		Unknown	1400		J
		Benzo(e)pyrene	1700		J
		Unknown aliphatic	1000		J
		Unknown PAH	2100		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12346
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	104	25-121
Phenol,d5	94	24-113
Nitrobenzene,d5	88	23-120
Fluorobiphenyl	91	30-115
2,4,6-Tribromophenol	86	19-122
p-Terphenyl,d14	94	18-137
2-Chlorophenol-d4	101	20-130
1,2-Dichlorobenzene-d4	89	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12347
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 33.9 g

Matrix: Soil
 Sample pH: 6.41
 Percent Moisture 21
 Conc. Final Vol. 5000 uL
 Dilution Factor: 1.0
 Report Factor: 5.62

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	1200	
208-96-8	34200	Acenaphthylene	ND	1200	
120-12-7	34220	Anthracene	ND	1200	
309-00-2	39330	Aldrin	ND	1200	
56-55-3	34526	Benzo(a)anthracene	250	1200	L
205-99-2	34230	Benzo(b)fluoranthene	290	1200	L
207-08-9	34242	Benzo(k)fluoranthene	260	1200	L
50-32-8	34247	Benzo(a)pyrene	270	1200	L
191-24-2	34521	Benzo(ghi)perylene	ND	1200	
85-68-7	34292	Benzyl butyl phthalate	ND	1200	
319-85-7	39338	beta-BHC	ND	1200	
319-86-8	34259	delta-BHC	ND	1200	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	1200	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	1200	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	790	1200	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	1200	
101-55-3	34636	4-Bromophenylphenyl ether	ND	1200	
86-74-8		Carbazole	ND	1200	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2400	
91-58-7	34581	2-Chloronaphthalene	ND	1200	
95-57-8	34586	2-Chlorophenol	ND	2400	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	1200	
218-01-9	34320	Chrysene	350	1200	L
72-54-8	39310	4,4'-DDD	ND	1200	
72-55-9	39320	4,4'-DDE	ND	1200	
50-29-3	39300	4,4'-DDT	ND	1200	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	1200	
84-74-2	39110	Di-n-butylphthalate	ND	1200	
541-73-1	34566	1,3-Dichlorobenzene	ND	1200	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12347

Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	1200	
106-46-7	34571	1,4-Dichlorobenzene	ND	1200	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	1200	
120-83-2	34601	2,4-Dichlorophenol	ND	2400	
60-57-1	39380	Dieldrin	ND	1200	
84-66-2	34336	Diethylphthalate	580	1200	L
105-67-9	34606	2-4-Dimethylphenol	ND	2400	
131-11-3	34341	Dimethylphthalate	ND	1200	
51-28-5	34616	2,4-Dinitrophenol	ND	2900	
121-14-2	34611	2,4-Dinitrotoluene	ND	1200	
606-20-2	34626	2,6-Dinitrotoluene	ND	1200	
117-84-0	34596	Di-n-octylphthalate	ND	1200	
206-44-0	34376	Fluoranthene	710	1200	L
86-73-7	34381	Fluorene	ND	1200	
76-44-8	39410	Heptachlor	ND	1200	
1024-57-3	39420	Heptachlor epoxide	ND	1200	
118-74-1	39700	Hexachlorobenzene	ND	1200	
87-68-3	34391	Hexachlorobutadiene	ND	1200	
77-47-4	34386	Hexachlorocyclopentadiene	ND	1200	
67-72-1	34396	Hexachloroethane	ND	1200	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	1200	
78-59-1	34408	Isophorone	ND	1200	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	2900	
91-20-3	34696	Naphthalene	ND	1200	
98-95-3	34447	Nitrobenzene	ND	1200	
88-75-5	34591	2-Nitrophenol	ND	2400	
100-02-7	34646	4-Nitrophenol	ND	2900	
86-30-3	34433	N-Nitrosodiphenylamine	ND	1200	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	1200	
87-86-5	39032	Pentachlorophenol	ND	2900	
85-01-8	34461	Phenanthrene	340	1200	L
108-95-2	34694	Phenol	ND	2400	
129-00-0	34469	Pyrene	660	1200	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12347
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	1200	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2400	
Hazardous Substances					
65-53-3	77089	Aniline	ND	1200	
65-85-0	77247	Benzoic Acid	ND	2900	
100-51-6	77147	Benzyl Alcohol	ND	1200	
106-47-8		4-Chloroaniline	ND	1200	
132-64-9	81302	Dibenzofuran	ND	1200	
91-57-6		2-Methylnaphthalene	ND	1200	
95-48-7		2-Methylphenol	ND	1200	
106-44-5		4-Methylphenol	ND	1200	
88-74-4		2-Nitroaniline	ND	2900	
99-09-2		3-Nitroaniline	ND	2900	
100-01-6		4-Nitroaniline	ND	2900	
95-95-4	34621	2,4,5-Trichlorophenol	ND	2900	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	1200	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-hydroxy-4-methyl	51000		J,A,B
		Hexanedioic acid,bis(2-ethylhexyl)	4400		J,B
		Unknown Aliphatic Hydrocarbon	790		J
		Unknown Aliphatic Hydrocarbon	790		J
		Unknown Aliphatic Hydrocarbon	6300		J
		Unknown Aliphatic Hydrocarbon	1300		J
		Unknown Aliphatic Hydrocarbon	970		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12347
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	107	25-121
Phenol,d5	97	24-113
Nitrobenzene,d5	88	23-120
Fluorobiphenyl	95	30-115
2,4,6-Tribromophenol	85	19-122
p-Terphenyl,d14	99	18-137
2-Chlorophenol-d4	103	20-130
1,2-Dichlorobenzene-d4	92	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12348
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 32.6 g

Matrix: Soil
 Sample pH: 6.55
 Percent Moisture 23
 Conc. Final Vol. 1000 uL
 Dilution Factor: 2.0
 Report Factor: 2.39

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	500	
208-96-8	34200	Acenaphthylene	ND	500	
120-12-7	34220	Anthracene	ND	500	
309-00-2	39330	Aldrin	ND	500	
56-55-3	34526	Benzo(a)anthracene	250	500	L
205-99-2	34230	Benzo(b)fluoranthene	260	500	L
207-08-9	34242	Benzo(k)fluoranthene	260	500	L
50-32-8	34247	Benzo(a)pyrene	250	500	L
191-24-2	34521	Benzo(ghi)perylene	ND	500	
85-68-7	34292	Benzyl butyl phthalate	ND	500	
319-85-7	39338	beta-BHC	ND	500	
319-86-8	34259	delta-BHC	ND	500	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	500	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	500	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	ND	500	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	500	
101-55-3	34636	4-Bromophenylphenyl ether	ND	500	
86-74-8		Carbazole	ND	500	
59-50-7	34452	4-Chloro-3-methylphenol	ND	1000	
91-58-7	34581	2-Chloronaphthalene	ND	500	
95-57-8	34586	2-Chlorophenol	ND	1000	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	500	
218-01-9	34320	Chrysene	280	500	L
72-54-8	39310	4,4'-DDD	ND	500	
72-55-9	39320	4,4'-DDE	ND	500	
50-29-3	39300	4,4'-DDT	ND	500	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	500	
84-74-2	39110	Di-n-butylphthalate	ND	500	
541-73-1	34566	1,3-Dichlorobenzene	ND	500	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12348

Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	500	
106-46-7	34571	1,4-Dichlorobenzene	ND	500	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	500	
120-83-2	34601	2,4-Dichlorophenol	ND	1000	
60-57-1	39380	Dieldrin	ND	500	
84-66-2	34336	Diethylphthalate	ND	500	
105-67-9	34606	2-4-Dimethylphenol	ND	1000	
131-11-3	34341	Dimethylphthalate	ND	500	
51-28-5	34616	2,4-Dinitrophenol	ND	1200	
121-14-2	34611	2,4-Dinitrotoluene	ND	500	
606-20-2	34626	2,6-Dinitrotoluene	ND	500	
117-84-0	34596	Di-n-octylphthalate	ND	500	
206-44-0	34376	Fluoranthene	500	500	
86-73-7	34381	Fluorene	ND	500	
76-44-8	39410	Heptachlor	ND	500	
1024-57-3	39420	Heptachlor epoxide	ND	500	
118-74-1	39700	Hexachlorobenzene	ND	500	
87-68-3	34391	Hexachlorobutadiene	ND	500	
77-47-4	34386	Hexachlorocyclopentadiene	ND	500	
67-72-1	34396	Hexachloroethane	ND	500	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	500	
78-59-1	34408	Isophorone	ND	500	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	1200	
91-20-3	34696	Naphthalene	ND	500	
98-95-3	34447	Nitrobenzene	ND	500	
88-75-5	34591	2-Nitrophenol	ND	1000	
100-02-7	34646	4-Nitrophenol	ND	1200	
86-30-3	34433	N-Nitrosodiphenylamine	ND	500	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	500	
87-86-5	39032	Pentachlorophenol	ND	1200	
85-01-8	34461	Phenanthrene	240	500	L
108-95-2	34694	Phenol	ND	1000	
129-00-0	34469	Pyrene	490	500	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12348
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	500	
88-06-2	34621	2,4,6-Trichlorophenol	ND	1000	
Hazardous Substances					
65-53-3	77089	Aniline	ND	500	
65-85-0	77247	Benzoic Acid	ND	1200	
100-51-6	77147	Benzyl Alcohol	ND	500	
106-47-8		4-Chloroaniline	ND	500	
132-64-9	81302	Dibenzofuran	ND	500	
91-57-6		2-Methylnaphthalene	ND	500	
95-48-7		2-Methylphenol	ND	500	
106-44-5		4-Methylphenol	ND	500	
88-74-4		2-Nitroaniline	ND	1200	
99-09-2		3-Nitroaniline	ND	1200	
100-01-6		4-Nitroaniline	ND	1200	
95-95-4	34621	2,4,5-Trichlorophenol	ND	1200	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	500	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-hydroxy-4-methyl	63000		J,B,A
		Hexandioic acid,bis(2-ethylhexyl)	4500		J,B
		Unknown Aliphatic Hydrocarbon	1400		J
		Unknown Hydrocarbon	420		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12348

Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	94	25-121
Phenol,d5	88	24-113
Nitrobenzene,d5	88	23-120
Fluorobiphenyl	90	30-115
2,4,6-Tribromophenol	83	19-122
p-Terphenyl,d14	93	18-137
2-Chlorophenol-d4	90	20-130
1,2-Dichlorobenzene-d4	85	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12349

DATE OF COLLECTION: 05/13/96

DATE OF EXTRACTION: 05/17/96

DATE OF ANALYSIS: 05/23/96

WET WEIGHT EXTRACTED: 31.1 g

Matrix:

Soil

Sample pH:

6.33

Percent Moisture

23

Conc. Final Vol. 5000 uL

Dilution Factor: 1.0

Report Factor: 6.26

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	1300	
208-96-8	34200	Acenaphthylene	ND	1300	
120-12-7	34220	Anthracene	ND	1300	
309-00-2	39330	Aldrin	ND	1300	
56-55-3	34526	Benzo(a)anthracene	ND	1300	
205-99-2	34230	Benzo(b)fluoranthene	ND	1300	
207-08-9	34242	Benzo(k)fluoranthene	ND	1300	
50-32-8	34247	Benzo(a)pyrene	ND	1300	
191-24-2	34521	Benzo(ghi)perylene	ND	1300	
85-68-7	34292	Benzyl butyl phthalate	ND	1300	
319-85-7	39338	beta-BHC	ND	1300	
319-86-8	34259	delta-BHC	ND	1300	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	1300	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	1300	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	410	1300	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	1300	
101-55-3	34636	4-Bromophenylphenyl ether	ND	1300	
86-74-8		Carbazole	ND	1300	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2600	
91-58-7	34581	2-Chloronaphthalene	ND	1300	
95-57-8	34586	2-Chlorophenol	ND	2600	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	1300	
218-01-9	34320	Chrysene	ND	1300	
72-54-8	39310	4,4'-DDD	ND	1300	
72-55-9	39320	4,4'-DDE	ND	1300	
50-29-3	39300	4,4'-DDT	ND	1300	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	1300	
84-74-2	39110	Di-n-butylphthalate	ND	1300	
541-73-1	34566	1,3-Dichlorobenzene	ND	1300	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12349

Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	1300	
106-46-7	34571	1,4-Dichlorobenzene	ND	1300	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	1300	
120-83-2	34601	2,4-Dichlorophenol	ND	2600	
60-57-1	39380	Dieldrin	ND	1300	
84-66-2	34336	Diethylphthalate	ND	1300	
105-67-9	34606	2-4-Dimethylphenol	ND	2600	
131-11-3	34341	Dimethylphthalate	ND	1300	
51-28-5	34616	2,4-Dinitrophenol	ND	3260	
121-14-2	34611	2,4-Dinitrotoluene	ND	1300	
606-20-2	34626	2,6-Dinitrotoluene	ND	1300	
117-84-0	34596	Di-n-octylphthalate	ND	1300	
206-44-0	34376	Fluoranthene	500	1300	L
86-73-7	34381	Fluorene	ND	1300	
76-44-8	39410	Heptachlor	ND	1300	
1024-57-3	39420	Heptachlor epoxide	ND	1300	
118-74-1	39700	Hexachlorobenzene	ND	1300	
87-68-3	34391	Hexachlorobutadiene	ND	1300	
77-47-4	34386	Hexachlorocyclopentadiene	ND	1300	
67-72-1	34396	Hexachloroethane	ND	1300	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	1300	
78-59-1	34408	Isophorone	ND	1300	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	3300	
91-20-3	34696	Naphthalene	ND	1300	
98-95-3	34447	Nitrobenzene	ND	1300	
88-75-5	34591	2-Nitrophenol	ND	2600	
100-02-7	34646	4-Nitrophenol	ND	3300	
86-30-3	34433	N-Nitrosodiphenylamine	ND	1300	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	1300	
87-86-5	39032	Pentachlorophenol	ND	3300	
85-01-8	34461	Phenanthrene	ND	1300	
108-95-2	34694	Phenol	ND	2600	
129-00-0	34469	Pyrene	490	1300	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12349

Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	1300	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2600	
Hazardous Substances					
65-53-3	77089	Aniline	ND	1300	
65-85-0	77247	Benzoic Acid	ND	3300	
100-51-6	77147	Benzyl Alcohol	ND	1300	
106-47-8		4-Chloroaniline	ND	1300	
132-64-9	81302	Dibenzofuran	ND	1300	
91-57-6		2-Methylnaphthalene	ND	1300	
95-48-7		2-Methylphenol	ND	1300	
106-44-5		4-Methylphenol	ND	1300	
88-74-4		2-Nitroaniline	ND	3300	
99-09-2		3-Nitroaniline	ND	3300	
100-01-6		4-Nitroaniline	ND	3300	
95-95-4	34621	2,4,5-Trichlorophenol	ND	3300	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	1300	
		Tentatively Identified Compounds	Est. Conc. (ug/Kg)		
		2-Pentanone, 4-hydroxy-4-methyl	71000		A, J, B
		Hexanedioic acid, bis(2-ethylhexyl)	5400		J, B

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12349

Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	99	25-121
Phenol,d5	96	24-113
Nitrobenzene,d5	94	23-120
Fluorobiphenyl	102	30-115
2,4,6-Tribromophenol	85	19-122
p-Terphenyl,d14	109	18-137
2-Chlorophenol-d4	100	20-130
1,2-Dichlorobenzene-d4	92	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12350
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 34.0 g

Matrix: Soil
 Sample pH: 6.51
 Percent Moisture 18
 Conc. Final Vol. 5000 uL
 Dilution Factor: 1.0
 Report Factor: 5.38

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	1100	
208-96-8	34200	Acenaphthylene	ND	1100	
120-12-7	34220	Anthracene	ND	1100	
309-00-2	39330	Aldrin	ND	1100	
56-55-3	34526	Benzo(a)anthracene	620	1100	L
205-99-2	34230	Benzo(b)fluoranthene	610	1100	L
207-08-9	34242	Benzo(k)fluoranthene	670	1100	L
50-32-8	34247	Benzo(a)pyrene	600	1100	L
191-24-2	34521	Benzo(ghi)perylene	ND	1100	
85-68-7	34292	Benzyl butyl phthalate	ND	1100	
319-85-7	39338	beta-BHC	ND	1100	
319-86-8	34259	delta-BHC	ND	1100	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	1100	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	1100	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	210	1100	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	1100	
101-55-3	34636	4-Bromophenylphenyl ether	ND	1100	
86-74-8		Carbazole	ND	1100	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2300	
91-58-7	34581	2-Chloronaphthalene	ND	1100	
95-57-8	34586	2-Chlorophenol	ND	2300	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	1100	
218-01-9	34320	Chrysene	700	1100	L
72-54-8	39310	4,4'-DDD	ND	1100	
72-55-9	39320	4,4'-DDE	ND	1100	
50-29-3	39300	4,4'-DDT	ND	1100	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	1100	
84-74-2	39110	Di-n-butylphthalate	ND	1100	
541-73-1	34566	1,3-Dichlorobenzene	ND	1100	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12350
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	1100	
106-46-7	34571	1,4-Dichlorobenzene	ND	1100	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	1100	
120-83-2	34601	2,4-Dichlorophenol	ND	2300	
60-57-1	39380	Dieldrin	ND	1100	
84-66-2	34336	Diethylphthalate	ND	1100	
105-67-9	34606	2-4-Dimethylphenol	ND	2300	
131-11-3	34341	Dimethylphthalate	ND	1100	
51-28-5	34616	2,4-Dinitrophenol	ND	2800	
121-14-2	34611	2,4-Dinitrotoluene	ND	1100	
606-20-2	34626	2,6-Dinitrotoluene	ND	1100	
117-84-0	34596	Di-n-octylphthalate	ND	1100	
206-44-0	34376	Fluoranthene	1500	1100	
86-73-7	34381	Fluorene	ND	1100	
76-44-8	39410	Heptachlor	ND	1100	
1024-57-3	39420	Heptachlor epoxide	ND	1100	
118-74-1	39700	Hexachlorobenzene	ND	1100	
87-68-3	34391	Hexachlorobutadiene	ND	1100	
77-47-4	34386	Hexachlorocyclopentadiene	ND	1100	
67-72-1	34396	Hexachloroethane	ND	1100	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	1100	
78-59-1	34408	Isophorone	ND	1100	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	2800	
91-20-3	34696	Naphthalene	ND	1100	
98-95-3	34447	Nitrobenzene	ND	1100	
88-75-5	34591	2-Nitrophenol	ND	2300	
100-02-7	34646	4-Nitrophenol	ND	2800	
86-30-3	34433	N-Nitrosodiphenylamine	ND	1100	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	1100	
87-86-5	39032	Pentachlorophenol	ND	2800	
85-01-8	34461	Phenanthrene	460	1100	L
108-95-2	34694	Phenol	ND	2300	
129-00-0	34469	Pyrene	1300	1100	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12350
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	1100	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2300	
Hazardous Substances					
65-53-3	77089	Aniline	ND	1100	
65-85-0	77247	Benzoic Acid	ND	2800	
100-51-6	77147	Benzyl Alcohol	ND	1100	
106-47-8		4-Chloroaniline	ND	1100	
132-64-9	81302	Dibenzofuran	ND	1100	
91-57-6		2-Methylnaphthalene	ND	1100	
95-48-7		2-Methylphenol	ND	1100	
106-44-5		4-Methylphenol	ND	1100	
88-74-4		2-Nitroaniline	ND	2800	
99-09-2		3-Nitroaniline	ND	2800	
100-01-6		4-Nitroaniline	ND	2800	
95-95-4	34621	2,4,5-Trichlorophenol	ND	2800	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	1100	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone, 4-hydroxy-4-methyl	60000		J, B, A
		Hexanedioic acid, bis(2-ethylhexyl)	4100		J, B

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12350
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	104	25-121
Phenol,d5	98	24-113
Nitrobenzene,d5	96	23-120
Fluorobiphenyl	107	30-115
2,4,6-Tribromophenol	97	19-122
p-Terphenyl,d14	115	18-137
2-Chlorophenol-d4	103	20-130
1,2-Dichlorobenzene-d4	97	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY
 REGION I LABORATORY
 GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12351
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 32.0 g

Matrix: Soil
 Sample pH: 6.21
 Percent Moisture 8
 Conc. Final Vol. 1000 uL
 Dilution Factor: 1.0
 Report Factor: 1.02

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	210	
208-96-8	34200	Acenaphthylene	ND	210	
120-12-7	34220	Anthracene	ND	210	
309-00-2	39330	Aldrin	ND	210	
56-55-3	34526	Benzo(a)anthracene	100	210	L
205-99-2	34230	Benzo(b)fluoranthene	130	210	L
207-08-9	34242	Benzo(k)fluoranthene	120	210	L
50-32-8	34247	Benzo(a)pyrene	100	210	L
191-24-2	34521	Benzo(ghi)perylene	ND	210	
85-68-7	34292	Benzyl butyl phthalate	ND	210	
319-85-7	39338	beta-BHC	ND	210	
319-86-8	34259	delta-BHC	ND	210	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	210	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	210	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	99	210	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	210	
101-55-3	34636	4-Bromophenylphenyl ether	ND	210	
86-74-8		Carbazole	ND	210	
59-50-7	34452	4-Chloro-3-methylphenol	ND	430	
91-58-7	34581	2-Chloronaphthalene	ND	210	
95-57-8	34586	2-Chlorophenol	ND	430	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	210	
218-01-9	34320	Chrysene	140	210	L
72-54-8	39310	4,4'-DDD	ND	210	
72-55-9	39320	4,4'-DDE	ND	210	
50-29-3	39300	4,4'-DDT	ND	210	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	210	
84-74-2	39110	Di-n-butylphthalate	66	210	L,B
541-73-1	34566	1,3-Dichlorobenzene	ND	210	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12351
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	210	
106-46-7	34571	1,4-Dichlorobenzene	ND	210	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	210	
120-83-2	34601	2,4-Dichlorophenol	ND	430	
60-57-1	39380	Dieldrin	ND	210	
84-66-2	34336	Diethylphthalate	ND	210	
105-67-9	34606	2-4-Dimethylphenol	ND	430	
131-11-3	34341	Dimethylphthalate	ND	210	
51-28-5	34616	2,4-Dinitrophenol	ND	530	
121-14-2	34611	2,4-Dinitrotoluene	ND	210	
606-20-2	34626	2,6-Dinitrotoluene	ND	210	
117-84-0	34596	Di-n-octylphthalate	ND	210	
206-44-0	34376	Fluoranthene	290	210	
86-73-7	34381	Fluorene	ND	210	
76-44-8	39410	Heptachlor	ND	210	
1024-57-3	39420	Heptachlor epoxide	ND	210	
118-74-1	39700	Hexachlorobenzene	ND	210	
87-68-3	34391	Hexachlorobutadiene	ND	210	
77-47-4	34386	Hexachlorocyclopentadiene	ND	210	
67-72-1	34396	Hexachloroethane	ND	210	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	210	
78-59-1	34408	Isophorone	ND	210	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	530	
91-20-3	34696	Naphthalene	ND	210	
98-95-3	34447	Nitrobenzene	ND	210	
88-75-5	34591	2-Nitrophenol	ND	430	
100-02-7	34646	4-Nitrophenol	ND	530	
86-30-3	34433	N-Nitrosodiphenylamine	ND	210	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	210	
87-86-5	39032	Pentachlorophenol	ND	530	
85-01-8	34461	Phenanthrene	120	210	L
108-95-2	34694	Phenol	ND	430	
129-00-0	34469	Pyrene	260	210	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12351
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	210	
88-06-2	34621	2,4,6-Trichlorophenol	ND	430	
Hazardous Substances					
65-53-3	77089	Aniline	ND	210	
65-85-0	77247	Benzoic Acid	ND	530	
100-51-6	77147	Benzyl Alcohol	ND	210	
106-47-8		4-Chloroaniline	ND	210	
132-64-9	81302	Dibenzofuran	ND	210	
91-57-6		2-Methylnaphthalene	ND	210	
95-48-7		2-Methylphenol	ND	210	
106-44-5		4-Methylphenol	ND	210	
88-74-4		2-Nitroaniline	ND	530	
99-09-2		3-Nitroaniline	ND	530	
100-01-6		4-Nitroaniline	ND	530	
95-95-4	34621	2,4,5-Trichlorophenol	ND	530	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	210	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone, 4-hydroxy-4-methyl	55000		J, B, A
		Unknown	170		J
		Hexanedioic acid, bis(2-ethylhexyl)	4200		J, B
		Unknown Aliphatic Hydrocarbon	200		J
		Unknown Aliphatic Hydrocarbon	450		J
		Unknown Aliphatic Compound	800		J
		Unknown Aliphatic Compound	390		J
		Unknown Aliphatic Aldehyde	160		J
		Unknown Aliphatic Hydrocarbon	1800		J
		Unknown Aliphatic Hydrocarbon	360		J
		Unknown Aliphatic aldehyde	180		J
		Unknown Aliphatic aldehyde	240		J
		Unknown Hydrocarbon	400		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12351

Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	98	25-121
Phenol,d5	95	24-113
Nitrobenzene,d5	92	23-120
Fluorobiphenyl	96	30-115
2,4,6-Tribromophenol	86	19-122
p-Terphenyl,d14	96	18-137
2-Chlorophenol-d4	93	20-130
1,2-Dichlorobenzene-d4	91	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12352

DATE OF COLLECTION: 05/13/96

DATE OF EXTRACTION: 05/17/96

DATE OF ANALYSIS: 05/23/96

WET WEIGHT EXTRACTED: 32.6 g

Matrix: Soil

Sample pH: 6.31

Percent Moisture 7

Conc. Final Vol. 1000 uL

Dilution Factor: 1.0

Report Factor: 0.992

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	210	L
208-96-8	34200	Acenaphthylene	64	210	L
120-12-7	34220	Anthracene	72	210	L
309-00-2	39330	Aldrin	ND	210	
56-55-3	34526	Benzo(a)anthracene	260	210	
205-99-2	34230	Benzo(b)fluoranthene	260	210	
207-08-9	34242	Benzo(k)fluoranthene	240	210	
50-32-8	34247	Benzo(a)pyrene	250	210	
191-24-2	34521	Benzo(ghi)perylene	94	210	
85-68-7	34292	Benzyl butyl phthalate	ND	210	
319-85-7	39338	beta-BHC	ND	210	
319-86-8	34259	delta-BHC	ND	210	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	210	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	210	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	290	210	
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	210	
101-55-3	34636	4-Bromophenylphenyl ether	ND	210	
86-74-8		Carbazole	ND	210	
59-50-7	34452	4-Chloro-3-methylphenol	ND	420	
91-58-7	34581	2-Chloronaphthalene	ND	210	
95-57-8	34586	2-Chlorophenol	ND	420	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	210	
218-01-9	34320	Chrysene	280	210	
72-54-8	39310	4,4'-DDD	ND	210	
72-55-9	39320	4,4'-DDE	ND	210	
50-29-3	39300	4,4'-DDT	ND	210	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	210	
84-74-2	39110	Di-n-butylphthalate	40	210	L,B
541-73-1	34566	1,3-Dichlorobenzene	ND	210	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12352
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	210	
106-46-7	34571	1,4-Dichlorobenzene	ND	210	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	210	
120-83-2	34601	2,4-Dichlorophenol	ND	420	
60-57-1	39380	Dieldrin	ND	210	
84-66-2	34336	Diethylphthalate	ND	210	
105-67-9	34606	2-4-Dimethylphenol	ND	420	
131-11-3	34341	Dimethylphthalate	ND	210	
51-28-5	34616	2,4-Dinitrophenol	ND	520	
121-14-2	34611	2,4-Dinitrotoluene	ND	210	
606-20-2	34626	2,6-Dinitrotoluene	ND	210	
117-84-0	34596	Di-n-octylphthalate	ND	210	
206-44-0	34376	Fluoranthene	580	210	
86-73-7	34381	Fluorene	ND	210	
76-44-8	39410	Heptachlor	ND	210	
1024-57-3	39420	Heptachlor epoxide	ND	210	
118-74-1	39700	Hexachlorobenzene	ND	210	
87-68-3	34391	Hexachlorobutadiene	ND	210	
77-47-4	34386	Hexachlorocyclopentadiene	ND	210	
67-72-1	34396	Hexachloroethane	ND	210	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	97	210	L
78-59-1	34408	Isophorone	ND	210	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	520	
91-20-3	34696	Naphthalene	ND	210	
98-95-3	34447	Nitrobenzene	ND	210	
88-75-5	34591	2-Nitrophenol	ND	420	
100-02-7	34646	4-Nitrophenol	ND	520	
86-30-3	34433	N-Nitrosodiphenylamine	ND	210	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	210	
87-86-5	39032	Pentachlorophenol	ND	520	
85-01-8	34461	Phenanthrene	190	210	L
108-95-2	34694	Phenol	ND	420	
129-00-0	34469	Pyrene	530	210	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12352
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	210	
88-06-2	34621	2,4,6-Trichlorophenol	ND	420	
Hazardous Substances					
65-53-3	77089	Aniline	ND	210	
65-85-0	77247	Benzoic Acid	ND	520	
100-51-6	77147	Benzyl Alcohol	ND	210	
106-47-8		4-Chloroaniline	ND	210	
132-64-9	81302	Dibenzofuran	ND	210	
91-57-6		2-Methylnaphthalene	ND	210	
95-48-7		2-Methylphenol	ND	210	
106-44-5		4-Methylphenol	ND	210	
88-74-4		2-Nitroaniline	ND	520	
99-09-2		3-Nitroaniline	ND	520	
100-01-6		4-Nitroaniline	ND	520	
95-95-4	34621	2,4,5-Trichlorophenol	ND	520	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	210	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-Hydroxy-4-methyl	53000		J, B
		Unknown Alcohol	140		J
		Hexanedioic acid,bis(2-ethylhexyl)	4300		J, B
		Unknown Aliphatic Hydrocarbon	260		J
		Unknown Aliphatic Hydrocarbon	300		J
		Unknown Aliphatic Compound	280		J
		Unknown Aliphatic aldehyde	170		J
		Benzo[e]pyrene	170		J
		Unknown Aliphatic Hydrocarbon	1800		J
		Unknown Aliphatic Hydrocarbon	180		J
		Unknown Aliphatic Hydrocarbon	140		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12352
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	98	25-121
Phenol,d5	96	24-113
Nitrobenzene,d5	89	23-120
Fluorobiphenyl	87	30-115
2,4,6-Tribromophenol	88	19-122
p-Terphenyl,d14	93	18-137
2-Chlorophenol-d4	98	20-130
1,2-Dichlorobenzene-d4	90	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY

REGION I LABORATORY

GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12353
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 33.7 g

Matrix: Soil
 Sample pH: 7.26
 Percent Moisture 12
 Conc. Final Vol. 1000 uL
 Dilution Factor: 2.0
 Report Factor: 2.03

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	430	
208-96-8	34200	Acenaphthylene	ND	430	
120-12-7	34220	Anthracene	ND	430	
309-00-2	39330	Aldrin	ND	430	
56-55-3	34526	Benzo(a)anthracene	82	430	L
205-99-2	34230	Benzo(b)fluoranthene	110	430	L
207-08-9	34242	Benzo(k)fluoranthene	89	430	L
50-32-8	34247	Benzo(a)pyrene	80	430	L
191-24-2	34521	Benzo(ghi)perylene	ND	430	
85-68-7	34292	Benzyl butyl phthalate	ND	430	
319-85-7	39338	beta-BHC	ND	430	
319-86-8	34259	delta-BHC	ND	430	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	430	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	430	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	97	430	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	430	
101-55-3	34636	4-Bromophenylphenyl ether	ND	430	
86-74-8		Carbazole	ND	430	
59-50-7	34452	4-Chloro-3-methylphenol	ND	850	
91-58-7	34581	2-Chloronaphthalene	ND	430	
95-57-8	34586	2-Chlorophenol	ND	850	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	430	
218-01-9	34320	Chrysene	120	430	L
72-54-8	39310	4,4'-DDD	ND	430	
72-55-9	39320	4,4'-DDE	ND	430	
50-29-3	39300	4,4'-DDT	ND	430	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	430	
84-74-2	39110	Di-n-butylphthalate	ND	430	
541-73-1	34566	1,3-Dichlorobenzene	ND	430	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12353
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	430	
106-46-7	34571	1,4-Dichlorobenzene	ND	430	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	430	
120-83-2	34601	2,4-Dichlorophenol	ND	850	
60-57-1	39380	Dieldrin	ND	430	
84-66-2	34336	Diethylphthalate	ND	430	
105-67-9	34606	2-4-Dimethylphenol	ND	850	
131-11-3	34341	Dimethylphthalate	ND	430	
51-28-5	34616	2,4-Dinitrophenol	ND	1100	
121-14-2	34611	2,4-Dinitrotoluene	ND	430	
606-20-2	34626	2,6-Dinitrotoluene	ND	430	
117-84-0	34596	Di-n-octylphthalate	ND	430	
206-44-0	34376	Fluoranthene	170	430	L
86-73-7	34381	Fluorene	ND	430	
76-44-8	39410	Heptachlor	ND	430	
1024-57-3	39420	Heptachlor epoxide	ND	430	
118-74-1	39700	Hexachlorobenzene	ND	430	
87-68-3	34391	Hexachlorobutadiene	ND	430	
77-47-4	34386	Hexachlorocyclopentadiene	ND	430	
67-72-1	34396	Hexachloroethane	ND	430	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	430	
78-59-1	34408	Isophorone	ND	430	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	1100	
91-20-3	34696	Naphthalene	ND	430	
98-95-3	34447	Nitrobenzene	ND	430	
88-75-5	34591	2-Nitrophenol	ND	850	
100-02-7	34646	4-Nitrophenol	ND	1100	
86-30-3	34433	N-Nitrosodiphenylamine	ND	430	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	430	
87-86-5	39032	Pentachlorophenol	ND	1100	
85-01-8	34461	Phenanthrene	84	430	L
108-95-2	34694	Phenol	ND	850	
129-00-0	34469	Pyrene	200	430	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12353
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	430	
88-06-2	34621	2,4,6-Trichlorophenol	ND	850	
Hazardous Substances					
65-53-3	77089	Aniline	ND	430	
65-85-0	77247	Benzoic Acid	ND	1100	
100-51-6	77147	Benzyl Alcohol	ND	430	
106-47-8		4-Chloroaniline	ND	430	
132-64-9	81302	Dibenzofuran	ND	430	
91-57-6		2-Methylnaphthalene	ND	430	
95-48-7		2-Methylphenol	ND	430	
106-44-5		4-Methylphenol	ND	430	
88-74-4		2-Nitroaniline	ND	1100	
99-09-2		3-Nitroaniline	ND	1100	
100-01-6		4-Nitroaniline	ND	1100	
95-95-4	34621	2,4,5-Trichlorophenol	ND	1100	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	430	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-hydroxy-4-methyl	49000		J,B,A
		Hexandioic acid,bis(2-ethylhexyl)	3400		J,B
		Unknown Aliphatic Hydrocarbon	360		J

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12353
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	98	25-121
Phenol,d5	92	24-113
Nitrobenzene,d5	92	23-120
Fluorobiphenyl	91	30-115
2,4,6-Tribromophenol	81	19-122
p-Terphenyl,d14	99	18-137
2-Chlorophenol-d4	96	20-130
1,2-Dichlorobenzene-d4	91	20-130

FACILITY SAMPLED:

NUTMEG VALLEY

US ENVIRONMENTAL PROTECTION AGENCY
 REGION I LABORATORY
 GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12355
 DATE OF COLLECTION: 05/13/96
 DATE OF EXTRACTION: 05/17/96
 DATE OF ANALYSIS: 05/23/96
 WET WEIGHT EXTRACTED: 31.6 g

Matrix: Soil
 Sample pH: 3.63
 Percent Moisture 10
 Conc. Final Vol. 1000 uL
 Dilution Factor: 5.0
 Report Factor: 5.30

SAMPLE RESULTS:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment

Priority Pollutants					
83-32-9	34205	Acenaphthene	ND	1100	
208-96-8	34200	Acenaphthylene	ND	1100	
120-12-7	34220	Anthracene	ND	1100	
309-00-2	39330	Aldrin	ND	1100	
56-55-3	34526	Benzo(a)anthracene	ND	1100	
205-99-2	34230	Benzo(b)fluoranthene	ND	1100	
207-08-9	34242	Benzo(k)fluoranthene	ND	1100	
50-32-8	34247	Benzo(a)pyrene	ND	1100	
191-24-2	34521	Benzo(ghi)perylene	ND	1100	
85-68-7	34292	Benzyl butyl phthalate	ND	1100	
319-85-7	39338	beta-BHC	ND	1100	
319-86-8	34259	delta-BHC	ND	1100	
111-44-4	34273	Bis(2-chloroethyl)ether	ND	1100	
111-91-1	34278	Bis(2-chloroethoxy)methane	ND	1100	
117-81-7	39100	Bis(2-ethylhexyl)phthalate	300	1100	L
108-60-1	34283	Bis(2-chloroisopropyl)ether	ND	1100	
101-55-3	34636	4-Bromophenylphenyl ether	ND	1100	
86-74-8		Carbazole	ND	1100	
59-50-7	34452	4-Chloro-3-methylphenol	ND	2200	
91-58-7	34581	2-Chloronaphthalene	ND	1100	
95-57-8	34586	2-Chlorophenol	ND	2200	
7005-72-3	34641	4-Chlorophenylphenyl ether	ND	1100	
218-01-9	34320	Chrysene	ND	1100	
72-54-8	39310	4,4'-DDD	ND	1100	
72-55-9	39320	4,4'-DDE	ND	1100	
50-29-3	39300	4,4'-DDT	ND	1100	
53-70-3	34556	Dibenzo(a,h)anthracene	ND	1100	
84-74-2	39110	Di-n-butylphthalate	ND	1100	
541-73-1	34566	1,3-Dichlorobenzene	ND	1100	

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12355
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
95-50-1	34536	1,2-Dichlorobenzene	ND	1100	
106-46-7	34571	1,4-Dichlorobenzene	ND	1100	
91-94-1	34631	3,3'-Dichlorobenzidine	ND	1100	
120-83-2	34601	2,4-Dichlorophenol	ND	2200	
60-57-1	39380	Dieldrin	ND	1100	
84-66-2	34336	Diethylphthalate	ND	1100	
105-67-9	34606	2-4-Dimethylphenol	ND	2200	
131-11-3	34341	Dimethylphthalate	ND	1100	
51-28-5	34616	2,4-Dinitrophenol	ND	2800	
121-14-2	34611	2,4-Dinitrotoluene	ND	1100	
606-20-2	34626	2,6-Dinitrotoluene	ND	1100	
117-84-0	34596	Di-n-octylphthalate	ND	1100	
206-44-0	34376	Fluoranthene	320	1100	L
86-73-7	34381	Fluorene	ND	1100	
76-44-8	39410	Heptachlor	ND	1100	
1024-57-3	39420	Heptachlor epoxide	ND	1100	
118-74-1	39700	Hexachlorobenzene	ND	1100	
87-68-3	34391	Hexachlorobutadiene	ND	1100	
77-47-4	34386	Hexachlorocyclopentadiene	ND	1100	
67-72-1	34396	Hexachloroethane	ND	1100	
193-39-5	34403	Indeno(1,2,3-cd)pyrene	ND	1100	
78-59-1	34408	Isophorone	ND	1100	
534-52-1	34657	2-Methyl-4,6-dinitrophenol	ND	2800	
91-20-3	34696	Naphthalene	ND	1100	
98-95-3	34447	Nitrobenzene	ND	1100	
88-75-5	34591	2-Nitrophenol	ND	2200	
100-02-7	34646	4-Nitrophenol	ND	2800	
86-30-3	34433	N-Nitrosodiphenylamine	ND	1100	
621-64-7	34428	N-Nitrosodi-n-propylamine	ND	1100	
87-86-5	39032	Pentachlorophenol	ND	2800	
85-01-8	34461	Phenanthrene	ND	1100	
108-95-2	34694	Phenol	ND	2200	
129-00-0	34469	Pyrene	300	1100	L

(con't)

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12355
Sample Results Continued:

CAS NO.	STORET NO.	Compound	Conc. (ug/Kg)	RL (ug/Kg)	Qualifier or Comment
120-82-1	34551	1,2,4-Trichlorobenzene	ND	1100	
88-06-2	34621	2,4,6-Trichlorophenol	ND	2200	
Hazardous Substances					
65-53-3	77089	Aniline	ND	1100	
65-85-0	77247	Benzoic Acid	ND	2800	
100-51-6	77147	Benzyl Alcohol	ND	1100	
106-47-8		4-Chloroaniline	ND	1100	
132-64-9	81302	Dibenzofuran	ND	1100	
91-57-6		2-Methylnaphthalene	ND	1100	
95-48-7		2-Methylphenol	ND	1100	
106-44-5		4-Methylphenol	ND	1100	
88-74-4		2-Nitroaniline	ND	2800	
99-09-2		3-Nitroaniline	ND	2800	
100-01-6		4-Nitroaniline	ND	2800	
95-95-4	34621	2,4,5-Trichlorophenol	ND	2800	
Other Compounds Quantitated					
		Diphenylhydrazine	ND	1100	
Tentatively Identified Compounds			Est. Conc. (ug/Kg)		
		2-Pentanone,4-hydroxy-4-methyl	57000	J,B,A	
		Hexandioic acid,bis(2-ethylhexyl)	3500	B	
		Unknown Aliphatic Hydrocarbon	2500	J	
		Unknown Aliphatic Hydrocarbon	3900	J	

US ENVIRONMENTAL PROTECTION AGENCY
REGION I LABORATORY
GC/MS EXTRACTABLE ORGANIC ANALYSIS

SAMPLE NO.: 12355
Sample Results Continued:

Sample Recoveries For Surrogate Compounds:	Recoveries (%)	QC Range (%)
2-Fluorophenol	106	25-121
Phenol,d5	99	24-113
Nitrobenzene,d5	97	23-120
Fluorobiphenyl	104	30-115
2,4,6-Tribromophenol	87	19-122
p-Terphenyl,d14	112	18-137
2-Chlorophenol-d4	102	20-130
1,2-Dichlorobenzene-d4	98	20-130