SITE INSPECTION PRIORITIZATION REPORT
DIAMOND AEROSOL CORP.
GLEN GARDNER, HUNTERDON COUNTY, NEW JERSEY

CERCLIS ID No.: NJD049644438

VOLUME IV OF IV

EPA Contract No.: 68-W-00-121
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January 2002

Prepared for:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:
Region II Site Assessment Team
Roy F. Weston, Inc.
Edison, New Jersey 08837

200090

REFERENCE NO. 32 (continued)

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FEB 06 2001

SDG NARRATIVE

CASE # 28924
SDG # BPH60
CONTRACT # 68W99070

SAMPLE IDENTIFICATIONS: BPH56, BPH58, BPH60, BPH61, BPH63, BPH66, BPH68, BPH69, BPH70, BPH72, BPH77, BPH78, BPH79, BPH80, BPH81, BPH82, BPH83, BPH84, BPH85, BPH86

The 20 soil samples listed above were received in Encore™ samplers, intact, properly refrigerated at temperatures of 4°C to 6°C, with proper documentation, in sealed shipping containers, on January 24 and 25, 2000. The samples were scheduled for the requested analyses of the volatile, semivolatile, and pesticide/PCB fractions. The samples were prepared and analyzed following the current EPA Contract Laboratory Program (CLP) Statement of Work (SOW), Document OLM04.2. The pH values of these soil samples ranged from 5.7 to 7.6, and the percent moistures ranged from 3 to 85. This portion of the SDG narrative deals with the volatile fractions only.

All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices for Case # 28924, SDG # BPH60 are included in the sample data sections.

Volatiles

Analysis holding time requirements were met for all of these samples.

The common laboratory solvents acetone and/or methylene chloride were identified above the Contract Required Quantitation Limit (CRQL) in most of these samples. Several Target Compound List (TCL) analytes were identified above the CRQL in the initial analysis of BPH56. The TCL analyte 2-butanone was identified at a concentration above the CRQL in BPH83 and BPH85. Tentatively Identified Compounds (TICs) were found in all these samples except BPH66 and BPH69. The sole TIC found in BPH68 was assessed as a blank contaminant, and therefore may not be a sample constituent. The TICs found in the remaining samples could be characterized as aldehydes, alkanes, alkynes, dichlorofluoromethane, dimethyldisulfide, laboratory artifacts, siloxanes, and unknowns.

Manual quantitations were performed on one or more of the process files associated with this SDG, including samples BPH77, BPH82, BPH83, and BPH84. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

In the initial analysis of BPH56 (from the first Encore™ sampler), the on-column amount of toluene exceeded the instrument's analytical range as defined by the highest concentration level of the Initial Calibration. The sample was reanalyzed using a smaller aliquot of raw sample (1.0 g from the dry weight jar) to bring the on-column amount into range. No toluene was present in this analysis. Therefore the other sodium bisulfate preserved Encore™ sampler was analyzed. No toluene was present in this analysis, nor were most of the other analytes which had been present in the first analysis. We have reported the results from the two analyses of the Encore™ samplers. We are attributing the variation in results to differences in the contents of the two Encore™ samplers.

505

All bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

All of the system monitoring compounds met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples.

The four associated method blanks met all quality control criteria. The method blanks contained levels of the common laboratory solvents methylene chloride and/or acetone, and/or the TCL analytes styrene and/or 1,2,4-trichlorobenzene, which were within allowable limits. TICs were present in all four method blanks. Several of these TICs are currently being investigated. There is a theory that they are contaminants, not from the lab but from the pre-preserved vials that we purchase from a vendor. TICs of this sort are given 'B' flags in the associated samples, and should not be considered as sample constituents.

The associated storage blank met all quality control criteria. The method blank contained a level of the common laboratory solvent acetone, which was within allowable limits. Four TICs were present in this storage blank, though all four were labeled as also having been present in the associated method blank, and therefore may not be constituents of this storage blank.

BPH77 was used as the original to prepare the duplicate matrix spikes as requested. The initial analysis of the matrix spike duplicate (MSD) did not meet internal standard area response criteria. The MSD was reprepared using 5.0 g from the dry weight jar, since there were no more Encore™ samplers to use. Internal standard area response criteria were met in this reanalysis. With one exception, the associated duplicate matrix spikes met all accuracy and precision criteria. The Relative Percent Difference (RPD) of chlorobenzene was flagged as an outlier in the comparison of the duplicate matrix spikes.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Michael Steven Schapira 2/5/1

Michael Steven Schapira

Data Reviewer II
February 5, 2001

ALKANE NARRATIVE REPORT
Report date : 02/05/2001
SDG: BPH60

Client Sample ID: BPH60 Lab Sample ID: BPH60-1 File ID: BPH60-1A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	7.57	J

Client Sample ID: BPH61 Lab Sample ID: BPH60-2 File ID: BPH60-2A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	14.54	J

Client Sample ID: BPH68 Lab Sample ID: BPH60-4 File ID: BPH60-4A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	9.21	J

Client Sample ID: BPH72 Lab Sample ID: BPH60-5 File ID: BPH60-5A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	23.98	J

Client Sample ID: BPH77 Lab Sample ID: BPH60-6 File ID: BPH60-6A59

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.13	18.64	J

Client Sample ID: BPH78 Lab Sample ID: BPH60-7 File ID: BPH60-7A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.17	57.60	J

Client Sample ID: BPH81 Lab Sample ID: BPH60-10 File ID: BPH60-10A59

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.17	1731	J

Client Sample ID: BPH82 Lab Sample ID: BPH60-11 File ID: BPH60-11A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.18	204.1	J

Client Sample ID: BPH83 Lab Sample ID: BPH60-12 File ID: BPH60-12A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	6.88	36.52	J

Client Sample ID: BPH84 Lab Sample ID: BPH60-13 File ID: BPH60-13A59

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.18	52.57	J

Client Sample ID: BPH56 Lab Sample ID: BPH60-16 File ID: BPH60-16A59

Compound	RT	Est. Conc.	Q
Branched Alkane	6.30	327.7	J
Branched Alkane	6.59	391.9	J
Cyclic Alkane	7.61	336.1	J

Client Sample ID: BPH58 Lab Sample ID: BPH60-17 File ID: BPH60-17A59

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.17	18.20	J

Client Sample ID: BPH66 Lab Sample ID: BPH60-18 File ID: BPH60-18A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.17	9.36	J

Client Sample ID: BPH69 Lab Sample ID: BPH60-19 File ID: BPH60-19

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.18	28.22	J

Client Sample ID: BPH85 Lab Sample ID: BPH60-14 File ID: BPH60-14RB59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.16	28.96	J

COMPUCHEM
A division of Liberty Analytical Corporation
501 Madison Ave.
Cary, NC 27513

SDG NARRATIVE

CASE #28924
SDG #BPH60
CONTRACT #68W99070

SAMPLE IDENTIFICATIONS:

BPH56 BPH58 BPH60 BPH61 BPH63 BPH66 BPH68 BPH69 BPH70 BPH72
BPH77 BPH78 BPH79 BPH80 BPH81 BPH82 BPH83 BPH84 BPH85 BPH86

This portion of the SDG narrative deals with the semivolatile fractions for the twenty samples above only. For the receiving information associated with these samples, please refer to the volatile SDG narrative.

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for Case #28924, SDG #BPH60 are included in the sample data sections.

SEMIVOLATILE
The semivolatile fractions were extracted and analyzed within the required holding time. The percent moisture values for the samples ranged from 3% to 61% and the pH values ranged from 5.7 to 7.6.

One Target Compound List (TCL) analyte, bis(2-ethylhexyl)phthalate was detected with a concentration above the Contract Required Quantitation Limit (CRQL) in sample BPH60.

One to twenty-one Tentatively Identified Compounds (TIC) were detected in fourteen the samples. Many of these TICs were assessed as unknowns, aldehydes, carboxylic acids, glycine, lindane, BHC and phthalates. Other TICs were detected and assessed as unknown alkanes in some of the samples. The TICs that were characterized as alkanes have been summarized on the Alkane Narrative Report that is located in the narrative section of the data package. The TIC spectra for the alkanes are located in the data section for the individual samples.

QC SUMMARY
All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria for the semivolatile fractions, with some exceptions. The recoveries of 2-fluorobiphenyl were flagged as outliers in BPH61, BPH81 and BPH58. The

recovery of the advisory surrogate 1,2-dichlorobenzene-d4 was also flagged as an outlier in BPH58.

The internal standards met area response and retention time criteria. The associated blanks met Quality Control criteria.
BPH77 was used as the original to prepare the duplicate matrix spikes as requested. The duplicate matrix spikes met accuracy and precison criteria.

In the analyses of the Initial and Continuing Calibration standards and all of the samples, manual quantitations were performed. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature:

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
05 February 2001

Note: This report is paginated for reference and accountability in numerical sequence.

ALKANE NARRATIVE REPORT
Report date : 02/05/2001
SDG: BPH60

Client Sample ID: BPH68 Lab Sample ID: BPH60-4 File ID: BPH60-4A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	25.66	159.4	J
Straight-Chain Alkane	27.47	96.18	J

Client Sample ID: BPH79 Lab Sample ID: BPH60-8 File ID: BPH60-8A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	25.66	129.4	J

Client Sample ID: BPH81 Lab Sample ID: BPH60-10 File ID: BPH60-10A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	23.33	177.5	J
Branched Alkane	24.38	396.1	J
Straight-Chain Alkane	25.66	537.4	J
Straight-Chain Alkane	27.46	214.7	J

Client Sample ID: BPH82 Lab Sample ID: BPH60-11 File ID: BPH60-11A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	27.30	175.1	J

Client Sample ID: BPH83 Lab Sample ID: BPH60-12 File ID: BPH60-12A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	24.29	124.1	J
Straight-Chain Alkane	25.56	186.6	J
Straight-Chain Alkane	27.30	130.6	J

Client Sample ID: BPH66 Lab Sample ID: BPH60-18 File ID: BPH60-18A60

Compound	RT	Est. Conc.	Q
Unknown Alkane	23.78	86.96	J
Straight-Chain Alkane	25.56	87.24	J

Client Sample ID: BPH70 Lab Sample ID: BPH60-20 File ID: BPH60-20A60

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	25.54	97.75	J

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a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, North Carolina 27513

SDG NARRATIVE

CASE: 28924
SDG: BPH60
CONTRACT: 68W99070

SAMPLE IDENTIFICATION: BPH56, BPH58, BPH60, BPH61, BPH63, BPH66, BPH68, BPH69, BPH70, BPH72, BPH77, BPH78, BPH79, BPH80, BPH81, BPH82, BPH83, BPH84, BPH85, BPH86

This portion of the SDG narrative covers only the pesticide fractions of the twenty (20) samples listed above. For receiving information pertaining to these samples, please refer to the portion of the SDG narrative that covers the volatile fractions.

PESTICIDES

Extraction and analysis holding time requirements were met for all of these samples. The pesticide Target Compound List (TCL) analyte delta-BHC was confirmed by dual column analysis at a concentration above the Contract Required Quantitation Limit (CRQL) in BPH68, BPH69, and BPH72. BPH69 also contained the pesticide TCL analytes alpha-BHC, beta-BHC, and gamma-BHC at a concentration above the CRQL. BPH82 also contained beta-BHC at a concentration above the CRQL. No PCB TCL analytes were confirmed by dual column analysis at a concentration above the CRQL in any of these samples.

Manual quantitations were performed on several of the process files associated with this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All of the surrogates met recovery and retention time criteria in the analyses of these samples. The associated method blank met all quality control criteria. No pesticide or PCB TCL analytes were confirmed by dual column analysis in the method blank.

BPH77 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions listed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Stephanie W. Winfield 2-5-01
Stephanie W. Winfield
Technical Reviewer
February 5, 2001

512

LIBERTY ANALYTICAL
501 Madison Avenue
Cary, NC 27513

ORIGINAL

SAMPLE DELIVERY GROUP(SDG) TRAFFIC REPORT(TR) COVER SHEET

SDG Number BPH60

Laboratory Name COMPUCHEM

Laboratory Code LIBRTY

Contract No. 68W99070

Case No. 28924

Analysis Price

SDG turnaround 21 DAY

EPA Sample Numbers in SDG (Listed in Numerical order):

1)	BPH56	7)	BPH68	13)	BPH79	19)	BPH85
2)	BPH58	8)	BPH69	14)	BPH80	20)	BPH86
3)	BPH60	9)	BPH70	15)	BPH81	~~21)~~	
4)	BPH61	10)	BPH72	16)	BPH82	22)	
5)	BPH63	11)	BPH77	17)	BPH83	23)	
6)	BPH66	12)	BPH78	18)	BPH84	~~24)~~	

M.S. 1/25/01

BPH60
First Sample in SDG

BPH70
Last Sample in SDG

01/24/01
First Sample Receipt Date

01/25/01
Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples (excluding PE samples) in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Signature: Melissa Stevens Date: 01/25/01

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 5.35(g/mL) G Lab File ID: BPH60-16A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 25 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	56	J
74-87-3	Chloromethane	12	UJ
75-01-4	Vinyl Chloride	12	UJ
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	60	
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	27	~~B~~ UJ
75-15-0	Carbon Disulfide	13	
79-20-9	Methyl Acetate	12	UJ
75-09-2	Methylene Chloride	12	UJ
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	3	J
78-93-3	2-Butanone	12	UJ
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	24	
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 5.35(g/mL) G Lab File ID: BPH60-16A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 25 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	
108-87-2	Methylcyclohexane	1	J
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U J
108-88-3	Toluene	1100	~~E~~ J
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U J
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	2	J
1330-20-7	Xylene (Total)	8	J
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U J
120-82-1	1,2,4-Trichlorobenzene	12	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 5.35 (g/mL) G Lab File ID: BPH60-16A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 25 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 6 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-43-4	METHANE, DICHLOROFLUORO-	4.95	41	NJ
2.	UNKNOWN	5.17	19	J
3.	UNKNOWN	6.88	1200	J
4. 2809-69-0	2,4-HEXADIYNE	8.65	11	NJ
5. 624-92-0	DISULFIDE, DIMETHYL	10.40	85	NJ
6.	LABORATORY ARTIFACT	10.81	7	~~J~~ R
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FORM I VOA-TIC OLM04.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 5.78(g/mL) G Lab File ID: BPH60-17A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 18 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3	J
67-64-1	Acetone	98	~~B~~
75-15-0	Carbon Disulfide	3	J
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11 ~~8~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 5.78(g/mL) G Lab File ID: BPH60-17A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 18 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	3	J
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 5.78 (g/mL) G Lab File ID: BPH60-17A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 18 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.83	7	J
2. 624-92-0	DISULFIDE, DIMETHYL	10.39	29	NJ
3.				
4.				
5.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 6.10(g/mL) G Lab File ID: BPH60-1A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	11	UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10 5	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	UJ
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 6.10(g/mL) G Lab File ID: BPH60-1A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 6.10 (g/mL) G Lab File ID: BPH60-1A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.47	11	J
2.	UNKNOWN	4.29	6	~~JB~~ R
3.				
4.				
5.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 6.17(g/mL) G Lab File ID: BPH60-2A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 25 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	20	UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11 ~~2~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	UJ
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 6.17(g/mL) G Lab File ID: BPH60-2A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 25 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 6.17 (g/mL) G Lab File ID: BPH60-2A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 25 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.47	17	J
2.		UNKNOWN	4.32	9	~~JB~~ K
3.		LABORATORY ARTIFACT	10.78	11	~~J~~ K
4.		UNKNOWN	11.21	6	J
5.					
6.					
7.					
8.					
9.					
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11.					
12.					
13.					
14.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 5.90(g/mL) G Lab File ID: BPH60-3A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 10 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	10 ~~4~~	~~JB~~ U
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10 ~~2~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 5.90(g/mL) G Lab File ID: BPH60-3A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 10 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 5.90 (g/mL) G Lab File ID: BPH60-3A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 10 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.47	16	J
2.	UNKNOWN	4.29	9	~~JB~~ R
3.	UNKNOWN	5.13	13	J
4.	UNKNOWN	6.84	6	J
5.	LABORATORY ARTIFACT	10.78	6	~~J~~ R
6.				
7.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 5.79(g/mL) G Lab File ID: BPH60-18A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U J
74-87-3	Chloromethane	11	U J
75-01-4	Vinyl Chloride	11	U J
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	15	~~B~~ U J
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U J
75-09-2	Methylene Chloride	~~11.6~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U J
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 5.79(g/mL) G Lab File ID: BPH60-18A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 5.79 (g/mL) G Lab File ID: BPH60-18A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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3.				
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 6.11(g/mL) G Lab File ID: BPH60-4A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	16	UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10 ~~2~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	UJ
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 6.11(g/mL) G Lab File ID: BPH60-4A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 6.11 (g/mL) G Lab File ID: BPH60-4A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	13	~~JB~~ K
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 5.71(g/mL) G Lab File ID: BPH60-19A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 16 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U J
74-87-3	Chloromethane	10	U J
75-01-4	Vinyl Chloride	10	U J
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	17	~~B~~ U J
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U J
75-09-2	Methylene Chloride	10 ~~8~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U J
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 5.71(g/mL) G Lab File ID: BPH60-19A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 16 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 5.71 (g/mL) G Lab File ID: BPH60-19A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 16 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 5.50(g/mL) G Lab File ID: BPH60-20A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	27	~~B~~ U
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11	U
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	U
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 5.50(g/mL) G Lab File ID: BPH60-20A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 5.50 (g/mL) G Lab File ID: BPH60-20A59

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: not dec. 20 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.17	14	J
2.				
3.				
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 5.35(g/mL) G Lab File ID: BPH60-5A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	13	UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11	UJ
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11	UJ
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 5.35(g/mL) G Lab File ID: BPH60-5A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 5.35 (g/mL) G Lab File ID: BPH60-5A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 12 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.47	12	J
2.	UNKNOWN	4.31	14	~~JB~~ R
3.				
4.				
5.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 2.88(g/mL) G Lab File ID: BPH60-6A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	20	U
74-87-3	Chloromethane	20	U
75-01-4	Vinyl Chloride	20	U
74-83-9	Bromomethane	20	U
75-00-3	Chloroethane	20	U
75-69-4	Trichlorofluoromethane	20	U
75-35-4	1,1-Dichloroethene	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20	U
67-64-1	Acetone	69	J
75-15-0	Carbon Disulfide	20	U
79-20-9	Methyl Acetate	10	J
75-09-2	Methylene Chloride	20	U J
156-60-5	trans-1,2-Dichloroethene	20	U
1634-04-4	Methyl-tert-butyl ether	20	U
75-34-3	1,1-Dichloroethane	20	U
156-59-2	cis-1,2-Dichloroethene	20	U
78-93-3	2-Butanone	13	J
67-66-3	Chloroform	20	U
71-55-6	1,1,1-Trichloroethane	20	U
110-82-7	Cyclohexane	20	U
56-23-5	Carbon Tetrachloride	20	U
71-43-2	Benzene	20	U
107-06-2	1,2-Dichloroethane	20	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 2.88(g/mL) G Lab File ID: BPH60-6A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	20	U
108-87-2	Methylcyclohexane	20	U
78-87-5	1,2-Dichloropropane	20	U
75-27-4	Bromodichloromethane	20	U
10061-01-5	cis-1,3-Dichloropropene	20	U
108-10-1	4-Methyl-2-Pentanone	20	U
108-88-3	Toluene	20	U
10061-02-6	trans-1,3-Dichloropropene	20	U
79-00-5	1,1,2-Trichloroethane	20	U
127-18-4	Tetrachloroethene	20	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	20	U
106-93-4	1,2-Dibromoethane	20	U
108-90-7	Chlorobenzene	20	U
100-41-4	Ethylbenzene	20	U
1330-20-7	Xylene (Total)	20	U
100-42-5	Styrene	20	U
75-25-2	Bromoform	20	U
98-82-8	Isopropylbenzene	20	U
79-34-5	1,1,2,2-Tetrachloroethane	20	U
541-73-1	1,3-Dichlorobenzene	20	U
106-46-7	1,4-Dichlorobenzene	20	U
95-50-1	1,2-Dichlorobenzene	20	U
96-12-8	1,2-Dibromo-3-Chloropropane	20	U
120-82-1	1,2,4-Trichlorobenzene	20	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 2.88 (g/mL) G Lab File ID: BPH60-6A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.17	15	~~JB~~ R
2.	UNKNOWN	4.31	17	~~JB~~ R
3.	UNKNOWN	9.50	14	J
4.	LABORATORY ARTIFACT	10.78	12	~~J~~ R
5.	UNKNOWN	11.22	33	J
6.	LABORATORY ARTIFACT	12.82	11	~~JB~~ R
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 3.65(g/mL) G Lab File ID: BPH60-7A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 8 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	15	U J
74-87-3	Chloromethane	15	U J
75-01-4	Vinyl Chloride	15	U J
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U
75-69-4	Trichlorofluoromethane	15	U
75-35-4	1,1-Dichloroethene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15	U
67-64-1	Acetone	41	~~B~~ U J
75-15-0	Carbon Disulfide	15	U
79-20-9	Methyl Acetate	15	U J
75-09-2	Methylene Chloride	15 ~~3~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	Methyl-tert-butyl ether	15	U
75-34-3	1,1-Dichloroethane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	15	U J
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
110-82-7	Cyclohexane	15	U
56-23-5	Carbon Tetrachloride	15	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 3.65(g/mL) G Lab File ID: BPH60-7A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 8 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
108-87-2	Methylcyclohexane	15	U
78-87-5	1,2-Dichloropropane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-Pentanone	15	UJ
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexamone	15	UJ
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (Total)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U
96-12-8	1,2-Dibromo-3-Chloropropane	15	UJ
120-82-1	1,2,4-Trichlorobenzene	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 3.65 (g/mL) G Lab File ID: BPH60-7A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 8 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.54	8	J
2.	UNKNOWN	11.24	28	J
3.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 3.16(g/mL) G Lab File ID: BPH60-8A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 11 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	18	U
74-87-3	Chloromethane	18	U
75-01-4	Vinyl Chloride	18	U
74-83-9	Bromomethane	18	U
75-00-3	Chloroethane	18	U
75-69-4	Trichlorofluoromethane	18	U
75-35-4	1,1-Dichloroethene	18	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18	U
67-64-1	Acetone	36	~~B~~ U
75-15-0	Carbon Disulfide	18	U
79-20-9	Methyl Acetate	18	U
75-09-2	Methylene Chloride	18 ~~3~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	18	U
1634-04-4	Methyl-tert-butyl ether	18	U
75-34-3	1,1-Dichloroethane	18	U
156-59-2	cis-1,2-Dichloroethene	18	U
78-93-3	2-Butanone	18	U
67-66-3	Chloroform	18	U
71-55-6	1,1,1-Trichloroethane	18	U
110-82-7	Cyclohexane	18	U
56-23-5	Carbon Tetrachloride	18	U
71-43-2	Benzene	18	U
107-06-2	1,2-Dichloroethane	18	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 3.16(g/mL) G Lab File ID: BPH60-8A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 11 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	18	U
108-87-2	Methylcyclohexane	18	U
78-87-5	1,2-Dichloropropane	18	U
75-27-4	Bromodichloromethane	18	U
10061-01-5	cis-1,3-Dichloropropene	18	U
108-10-1	4-Methyl-2-Pentanone	18	U
108-88-3	Toluene	18	U
10061-02-6	trans-1,3-Dichloropropene	18	U
79-00-5	1,1,2-Trichloroethane	18	U
127-18-4	Tetrachloroethene	18	U
591-78-6	2-Hexanone	18	U
124-48-1	Dibromochloromethane	18	U
106-93-4	1,2-Dibromoethane	18	U
108-90-7	Chlorobenzene	18	U
100-41-4	Ethylbenzene	18	U
1330-20-7	Xylene (Total)	18	U
100-42-5	Styrene	18	U
75-25-2	Bromoform	18	U
98-82-8	Isopropylbenzene	18	U
79-34-5	1,1,2,2-Tetrachloroethane	18	U
541-73-1	1,3-Dichlorobenzene	18	U
106-46-7	1,4-Dichlorobenzene	18	U
95-50-1	1,2-Dichlorobenzene	18	U
96-12-8	1,2-Dibromo-3-Chloropropane	18	U
120-82-1	1,2,4-Trichlorobenzene	18	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 3.16 (g/mL) G Lab File ID: BPH60-8A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 11 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.17	26	J
2.	LABORATORY ARTIFACT	10.80	10	~~J~~ R
3.	UNKNOWN	11.25	26	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 2.61(g/mL) G Lab File ID: BPH60-9A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	25	U J
74-87-3	Chloromethane	25	U J
75-01-4	Vinyl Chloride	25	U J
74-83-9	Bromomethane	25	U
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	25	U
67-64-1	Acetone	60	~~B~~ U J
75-15-0	Carbon Disulfide	25	U
79-20-9	Methyl Acetate	25	U J
75-09-2	Methylene Chloride	25	U J
156-60-5	trans-1,2-Dichloroethene	25	U
1634-04-4	Methyl-tert-butyl ether	25	U
75-34-3	1,1-Dichloroethane	25	U
156-59-2	cis-1,2-Dichloroethene	25	U
78-93-3	2-Butanone	25	U J
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	25	U
110-82-7	Cyclohexane	25	U
56-23-5	Carbon Tetrachloride	25	U
71-43-2	Benzene	25	U
107-06-2	1,2-Dichloroethane	25	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 2.61(g/mL) G Lab File ID: BPH60-9A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	25	U
108-87-2	Methylcyclohexane	25	U
78-87-5	1,2-Dichloropropane	25	U
75-27-4	Bromodichloromethane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-Pentanone	25	UJ
108-88-3	Toluene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
79-00-5	1,1,2-Trichloroethane	25	U
127-18-4	Tetrachloroethene	25	U
591-78-6	2-Hexanone	25	UJ
124-48-1	Dibromochloromethane	25	U
106-93-4	1,2-Dibromoethane	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
1330-20-7	Xylene (Total)	25	U
100-42-5	Styrene	25	U
75-25-2	Bromoform	25	U
98-82-8	Isopropylbenzene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
541-73-1	1,3-Dichlorobenzene	25	U
106-46-7	1,4-Dichlorobenzene	25	U
95-50-1	1,2-Dichlorobenzene	25	U
96-12-8	1,2-Dibromo-3-Chloropropane	25	UJ
120-82-1	1,2,4-Trichlorobenzene	25	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 2.61 (g/mL) G Lab File ID: BPH60-9A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.18	18	J
2.	LABORATORY ARTIFACT	10.81	17	~~J~~ R
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 0.82(g/mL) G Lab File ID: BPH60-10A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 85 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	410	U
74-87-3	Chloromethane	410	U
75-01-4	Vinyl Chloride	410	U
74-83-9	Bromomethane	410	U
75-00-3	Chloroethane	410	U
75-69-4	Trichlorofluoromethane	410	U
75-35-4	1,1-Dichloroethene	410	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	410	U
67-64-1	Acetone	1200	~~B~~
75-15-0	Carbon Disulfide	410	U
79-20-9	Methyl Acetate	410	U
75-09-2	Methylene Chloride	410 ~~51~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	410	U
1634-04-4	Methyl-tert-butyl ether	410	U
75-34-3	1,1-Dichloroethane	410	U
156-59-2	cis-1,2-Dichloroethene	410	U
78-93-3	2-Butanone	410	U
67-66-3	Chloroform	410	U
71-55-6	1,1,1-Trichloroethane	410	U
110-82-7	Cyclohexane	410	U
56-23-5	Carbon Tetrachloride	410	U
71-43-2	Benzene	410	U
107-06-2	1,2-Dichloroethane	410	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 0.82(g/mL) G Lab File ID: BPH60-10A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 85 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	410	U
108-87-2	Methylcyclohexane	410	U
78-87-5	1,2-Dichloropropane	410	U
75-27-4	Bromodichloromethane	410	U
10061-01-5	cis-1,3-Dichloropropene	410	U
108-10-1	4-Methyl-2-Pentanone	410	U
108-88-3	Toluene	410	U
10061-02-6	trans-1,3-Dichloropropene	410	U
79-00-5	1,1,2-Trichloroethane	410	U
127-18-4	Tetrachloroethene	410	U
591-78-6	2-Hexanone	410	U
124-48-1	Dibromochloromethane	410	U
106-93-4	1,2-Dibromoethane	410	U
108-90-7	Chlorobenzene	410	U
100-41-4	Ethylbenzene	410	U
1330-20-7	Xylene (Total)	410	U
100-42-5	Styrene	410	U
75-25-2	Bromoform	410	U
98-82-8	Isopropylbenzene	410	U
79-34-5	1,1,2,2-Tetrachloroethane	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
96-12-8	1,2-Dibromo-3-Chloropropane	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 0.82 (g/mL) G Lab File ID: BPH60-10A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 85 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.21	570	J
2.	UNKNOWN	5.65	880	J
3.	UNKNOWN	7.45	670	J
4.	UNKNOWN	9.54	1400	J
5.	LABORATORY ARTIFACT	10.82	330	~~J~~
6. 66-25-1	HEXANAL	11.25	4700	NJ
7.	LABORATORY ARTIFACT	14.28	370	~~JB~~
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FORM I VOA-TIC OLM04.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 2.23(g/mL) G Lab File ID: BPH60-11A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 58 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	53	U
74-87-3	Chloromethane	53	U
75-01-4	Vinyl Chloride	53	U
74-83-9	Bromomethane	53	U
75-00-3	Chloroethane	53	U
75-69-4	Trichlorofluoromethane	53	U
75-35-4	1,1-Dichloroethene	53	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	53	U
67-64-1	Acetone	480	~~B~~
75-15-0	Carbon Disulfide	53	U
79-20-9	Methyl Acetate	18	J
75-09-2	Methylene Chloride	53	U
156-60-5	trans-1,2-Dichloroethene	53	U
1634-04-4	Methyl-tert-butyl ether	53	U
75-34-3	1,1-Dichloroethane	53	U
156-59-2	cis-1,2-Dichloroethene	53	U
78-93-3	2-Butanone	53	U
67-66-3	Chloroform	53	U
71-55-6	1,1,1-Trichloroethane	53	U
110-82-7	Cyclohexane	53	U
56-23-5	Carbon Tetrachloride	53	U
71-43-2	Benzene	53	U
107-06-2	1,2-Dichloroethane	53	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 2.23(g/mL) G Lab File ID: BPH60-11A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 58 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	53	U
108-87-2	Methylcyclohexane	53	U
78-87-5	1,2-Dichloropropane	53	U
75-27-4	Bromodichloromethane	53	U
10061-01-5	cis-1,3-Dichloropropene	53	U
108-10-1	4-Methyl-2-Pentanone	43	J
108-88-3	Toluene	11	J
10061-02-6	trans-1,3-Dichloropropene	53	U
79-00-5	1,1,2-Trichloroethane	53	U
127-18-4	Tetrachloroethene	53	U
591-78-6	2-Hexanone	53	U
124-48-1	Dibromochloromethane	53	U
106-93-4	1,2-Dibromoethane	53	U
108-90-7	Chlorobenzene	53	U
100-41-4	Ethylbenzene	53	U
1330-20-7	Xylene (Total)	53	U
100-42-5	Styrene	53	U
75-25-2	Bromoform	53	U
98-82-8	Isopropylbenzene	53	U
79-34-5	1,1,2,2-Tetrachloroethane	53	U
541-73-1	1,3-Dichlorobenzene	53	U
106-46-7	1,4-Dichlorobenzene	53	U
95-50-1	1,2-Dichlorobenzene	53	U
96-12-8	1,2-Dibromo-3-Chloropropane	53	U
120-82-1	1,2,4-Trichlorobenzene	53	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 2.23 (g/mL) G Lab File ID: BPH60-11A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 58 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 11 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.22	39	J
2.	UNKNOWN	5.65	41	J
3.	UNKNOWN	7.36	27	J
4.	UNKNOWN	7.45	64	J
5.	UNKNOWN	8.73	32	J
6.	UNKNOWN	8.87	41	J
7.	UNKNOWN	9.55	150	J
8.	UNKNOWN	10.83	32	J
9.	UNKNOWN	11.25	570	J
10.	LABORATORY ARTIFACT	12.86	42	~~J~~
11.	LABORATORY ARTIFACT	14.28	41	~~JB~~
12.				
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FORM I VOA-TIC OLM04.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 6.37(g/mL) G Lab File ID: BPH60-12A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 34 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U J
74-87-3	Chloromethane	12	U J
75-01-4	Vinyl Chloride	12	U J
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	150	~~B~~ J
75-15-0	Carbon Disulfide	12 ~~2~~	~~J~~ U
79-20-9	Methyl Acetate	12	U J
75-09-2	Methylene Chloride	12 ~~2~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	13	J
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 6.37(g/mL) G Lab File ID: BPH60-12A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 34 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U J
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U J
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U J
120-82-1	1,2,4-Trichlorobenzene	12	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 6.37 (g/mL) G Lab File ID: BPH60-12A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 34 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.52	78	J
2.	UNKNOWN	4.22	25	J
3.	UNKNOWN	5.18	17	J
4.	UNKNOWN	9.54	8	J
5.	UNKNOWN	11.25	37	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 2.20(g/mL) G Lab File ID: BPH60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	27	U
74-87-3	Chloromethane	27	U
75-01-4	Vinyl Chloride	27	U
74-83-9	Bromomethane	27	U
75-00-3	Chloroethane	27	U
75-69-4	Trichlorofluoromethane	27	U
75-35-4	1,1-Dichloroethene	27	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	27	U
67-64-1	Acetone	140	~~B~~
75-15-0	Carbon Disulfide	27	U
79-20-9	Methyl Acetate	27	U
75-09-2	Methylene Chloride	27	U
156-60-5	trans-1,2-Dichloroethene	27	U
1634-04-4	Methyl-tert-butyl ether	27	U
75-34-3	1,1-Dichloroethane	27	U
156-59-2	cis-1,2-Dichloroethene	27	U
78-93-3	2-Butanone	18	J
67-66-3	Chloroform	27	U
71-55-6	1,1,1-Trichloroethane	27	U
110-82-7	Cyclohexane	27	U
56-23-5	Carbon Tetrachloride	27	U
71-43-2	Benzene	27	U
107-06-2	1,2-Dichloroethane	27	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 2.20(g/mL) G Lab File ID: BPH60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	27	U
108-87-2	Methylcyclohexane	27	U
78-87-5	1,2-Dichloropropane	27	U
75-27-4	Bromodichloromethane	27	U
10061-01-5	cis-1,3-Dichloropropene	27	U
108-10-1	4-Methyl-2-Pentanone	9	J
108-88-3	Toluene	27	U
10061-02-6	trans-1,3-Dichloropropene	27	U
79-00-5	1,1,2-Trichloroethane	27	U
127-18-4	Tetrachloroethene	27	U
591-78-6	2-Hexanone	27	U
124-48-1	Dibromochloromethane	27	U
106-93-4	1,2-Dibromoethane	27	U
108-90-7	Chlorobenzene	27	U
100-41-4	Ethylbenzene	27	U
1330-20-7	Xylene (Total)	27	U
100-42-5	Styrene	27	U
75-25-2	Bromoform	27	U
98-82-8	Isopropylbenzene	27	U
79-34-5	1,1,2,2-Tetrachloroethane	27	U
541-73-1	1,3-Dichlorobenzene	27	U
106-46-7	1,4-Dichlorobenzene	27	U
95-50-1	1,2-Dichlorobenzene	27	U
96-12-8	1,2-Dibromo-3-Chloropropane	27	U
120-82-1	1,2,4-Trichlorobenzene	27	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 2.20 (g/mL) G Lab File ID: BPH60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/30/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.22	36	J
2.	UNKNOWN	5.65	24	J
3.	UNKNOWN	7.45	17	J
4.	UNKNOWN	9.54	33	J
5.	UNKNOWN	11.25	110	J
6.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 3.45(g/mL) G Lab File ID: BPH60-14RB59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 3 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	15	U
74-87-3	Chloromethane	15	U J
75-01-4	Vinyl Chloride	15	U J
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U J
75-69-4	Trichlorofluoromethane	15	U
75-35-4	1,1-Dichloroethene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15	U
67-64-1	Acetone	100	~~B~~
75-15-0	Carbon Disulfide	15	U J
79-20-9	Methyl Acetate	15	U
75-09-2	Methylene Chloride	15 ~~4~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	Methyl-tert-butyl ether	15	U
75-34-3	1,1-Dichloroethane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	19	
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
110-82-7	Cyclohexane	15	U J
56-23-5	Carbon Tetrachloride	15	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 3.45(g/mL) G Lab File ID: BPH60-14RB59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 3 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
108-87-2	Methylcyclohexane	15	U
78-87-5	1,2-Dichloropropane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (Total)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U
96-12-8	1,2-Dibromo-3-Chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 3.45 (g/mL) G Lab File ID: BPH60-14RB59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 3 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 8 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.50	9	J
2.	UNKNOWN	4.19	15	~~JB~~
3.	UNKNOWN	5.62	8	J
4.	UNKNOWN	7.44	14	J
5.	UNKNOWN	9.53	17	J
6.	UNKNOWN	11.23	43	J
7.	UNKNOWN	12.55	14	J
8. 100-52-7	BENZALDEHYDE	13.54	9	NJ
9.				
10.				
11.				
12.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 2.81(g/mL) G Lab File ID: BPH60-15R2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	22	U
74-87-3	Chloromethane	22	U J
75-01-4	Vinyl Chloride	22	U J
74-83-9	Bromomethane	22	U
75-00-3	Chloroethane	22	U J
75-69-4	Trichlorofluoromethane	3	J
75-35-4	1,1-Dichloroethene	22	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22	U
67-64-1	Acetone	33	~~B~~ U
75-15-0	Carbon Disulfide	22	U J
79-20-9	Methyl Acetate	22	U
75-09-2	Methylene Chloride	22	U J
156-60-5	trans-1,2-Dichloroethene	22	U
1634-04-4	Methyl-tert-butyl ether	22	U
75-34-3	1,1-Dichloroethane	22	U
156-59-2	cis-1,2-Dichloroethene	22	U
78-93-3	2-Butanone	22	U
67-66-3	Chloroform	22	U
71-55-6	1,1,1-Trichloroethane	22	U
110-82-7	Cyclohexane	22	U J
56-23-5	Carbon Tetrachloride	22	U
71-43-2	Benzene	22	U
107-06-2	1,2-Dichloroethane	22	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 2.81(g/mL) G Lab File ID: BPH60-15R2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	22	U
108-87-2	Methylcyclohexane	22	U
78-87-5	1,2-Dichloropropane	22	U
75-27-4	Bromodichloromethane	22	U
10061-01-5	cis-1,3-Dichloropropene	22	U
108-10-1	4-Methyl-2-Pentanone	22	U
108-88-3	Toluene	22	U
10061-02-6	trans-1,3-Dichloropropene	22	U
79-00-5	1,1,2-Trichloroethane	22	U
127-18-4	Tetrachloroethene	22	U
591-78-6	2-Hexanone	22	U
124-48-1	Dibromochloromethane	22	U
106-93-4	1,2-Dibromoethane	22	U
108-90-7	Chlorobenzene	22	U
100-41-4	Ethylbenzene	22	U
1330-20-7	Xylene (Total)	22	U
100-42-5	Styrene	22	U
75-25-2	Bromoform	22	U
98-82-8	Isopropylbenzene	22	U
79-34-5	1,1,2,2-Tetrachloroethane	22	U
541-73-1	1,3-Dichlorobenzene	22	U
106-46-7	1,4-Dichlorobenzene	22	U
95-50-1	1,2-Dichlorobenzene	22	U
96-12-8	1,2-Dibromo-3-Chloropropane	22	U
120-82-1	1,2,4-Trichlorobenzene	22	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 2.81 (g/mL) G Lab File ID: BPH60-15R2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/31/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	10.80	47	~~NJ~~ R
2.	UNKNOWN	11.23	13	J
3.	LABORATORY ARTIFACT	14.27	45	~~JB~~ R
4.	LABORATORY ARTIFACT	15.59	28	~~JB~~ R
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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-16A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	440	U
108-95-2	Phenol	440	U
111-44-4	bis(2-Chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2'-oxybis(1-Chloropropane)	440	U
98-86-2	Acetophenone	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
105-60-2	Caprolactam	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	440	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U
208-96-8	Acenaphthylene	440	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	440	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-16A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
86-73-7	Fluorene	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
1912-24-9	Atrazine	440	UJ
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
86-74-8	Carbazole	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	440	U
129-00-0	Pyrene	440	U
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	bis(2-Ethylhexyl)phthalate	440	UJ
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	U
191-24-2	Benzo(g,h,i)perylene	440	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-16A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 25 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.73	520	~~J~~ R
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-17A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
98-86-2	Acetophenone	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
105-60-2	Caprolactam	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-17A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
1912-24-9	Atrazine	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	61	J
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-17A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500 (uL) Date Analyzed: 02/02/01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.72	410	~~J~~ K
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-1A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	UJ
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	UJ
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	940	U
92-52-4	1,1'-Biphenyl	380	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	940	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	U
99-09-2	3-Nitroaniline	940	U
83-32-9	Acenaphthene	380	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-1A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940	U J
100-02-7	4-Nitrophenol	940	U
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
1912-24-9	Atrazine	380	U J
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	
117-84-0	Di-n-octylphthalate	110	J
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U J
191-24-2	Benzo(g,h,i)perylene	380	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-1A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN PHTHALATE	24.74	210	J
2.	UNKNOWN PHTHALATE	24.91	430	J
3.	UNKNOWN PHTHALATE	25.01	180	J
4.	UNKNOWN PHTHALATE	25.13	210	J
5.	UNKNOWN PHTHALATE	25.20	220	J
6.	UNKNOWN PHTHALATE	25.32	210	J
7.	UNKNOWN PHTHALATE	25.40	150	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-2A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	440	U
108-95-2	Phenol	440	U
111-44-4	bis(2-Chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2'-oxybis(1-Chloropropane)	440	U
98-86-2	Acetophenone	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	UJ
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	UJ
105-60-2	Caprolactam	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	440	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	440	U
606-20-2	2,6-Dinitrotoluene	440	U
208-96-8	Acenaphthylene	440	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	440	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-2A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 25 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	UJ
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	440	U
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
86-73-7	Fluorene	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
1912-24-9	Atrazine	440	UJ
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
86-74-8	Carbazole	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	440	U
129-00-0	Pyrene	440	U
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	bis(2-Ethylhexyl)phthalate	440	U
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	UJ
191-24-2	Benzo(g,h,i)perylene	440	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-2A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 25 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-3A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 10 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
92-52-4	1,1'-Biphenyl	370	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
208-96-8	Acenaphthylene	370	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	370	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-3A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 10 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	920	U J
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	N-nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
1912-24-9	Atrazine	370	U J
87-86-5	Pentachlorophenol	920	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U J
191-24-2	Benzo(g,h,i)perylene	370	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-3A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 10 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-18A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-18A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	88	J
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	UJ
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-18A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICs found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.74	430	~~J~~ R
2.	UNKNOWN	7.88	290	J
3.	UNKNOWN	7.96	560	J
4.	UNKNOWN CARBOXYLIC ACID	8.47	550	J
5.	UNKNOWN	8.81	120	J
6.	UNKNOWN CARBOXYLIC ACID	10.37	140	J
7.	UNKNOWN CARBOXYLIC ACID	10.94	1200	J
8.	UNKNOWN CARBOXYLIC ACID	12.07	1400	J
9.	UNKNOWN	13.29	12000	J
10.	UNKNOWN CARBOXYLIC ACID	14.17	2400	J
11.	UNKNOWN CARBOXYLIC ACID	15.12	2500	J
12.	UNKNOWN	15.34	260	J
13. 97-78-9	GLYCINE, N-METHYL-N-(1-OXODO	16.03	240	NJ
14.	UNKNOWN	16.76	120	J
15.	UNKNOWN	17.32	560	J
16.	UNKNOWN CARBOXYLIC ACID	18.27	270	J
17. 97-78-9	GLYCINE, N-METHYL-N-(1-OXODO	18.59	150	NJ
18. 544-63-8	TETRADECANOIC ACID	19.62	960	NJ
19.	UNKNOWN	21.21	86	J
20.	UNKNOWN	21.29	97	J
21.	UNKNOWN	24.02	89	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-4A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	UJ
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	UJ
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-4A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	UJ
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	UJ
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	46	J
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	UJ
191-24-2	Benzo(g,h,i)perylene	410	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-4A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 319-84-6	.ALPHA.-LINDANE	16.93	500	NJ
2. 319-86-8	.DELTA.-LINDANE	17.81	350	NJ
3.	BHC	18.47	290	J
4.	UNKNOWN	30.85	140	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-19A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U J
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	990	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	990	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	390	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	390	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-19A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	990	U
100-02-7	4-Nitrophenol	990	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	990	U
534-52-1	4,6-Dinitro-2-methylphenol	990	U
86-30-6	N-nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	UJ
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	J
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-19A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.72	410	~~J~~ K
2.	UNKNOWN	8.81	84	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-20A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-20A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	UJ
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	260	J
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-20A60

Level: (low/med) LOW Date Received: 01/25/01

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.73	580	~~J~~ K
2.	UNKNOWN	8.80	150	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-5A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U J
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U J
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	940	U
92-52-4	1,1'-Biphenyl	380	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	940	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	U
99-09-2	3-Nitroaniline	940	U
83-32-9	Acenaphthene	380	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-5A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	940	UJ
100-02-7	4-Nitrophenol	940	U
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
100-01-6	4-Nitroaniline	940	U
534-52-1	4,6-Dinitro-2-methylphenol	940	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
1912-24-9	Atrazine	380	UJ
87-86-5	Pentachlorophenol	940	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	170	J
117-84-0	Di-n-octylphthalate	51	J
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	UJ
191-24-2	Benzo(g,h,i)perylene	380	UJ

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-5A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 12 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-6A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U J
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U J
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	950	U
92-52-4	1,1'-Biphenyl	380	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	950	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	380	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-6A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	U J
100-02-7	4-Nitrophenol	950	U
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
100-01-6	4-Nitroaniline	950	U
534-52-1	4,6-Dinitro-2-methylphenol	950	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
1912-24-9	Atrazine	380	U J
87-86-5	Pentachlorophenol	950	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	210	J
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U J
191-24-2	Benzo(g,h,i)perylene	380	U J

(1) - Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-6A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	18.44	90	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-7A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U J
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U J
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-7A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 8 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U J
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
1912-24-9	Atrazine	360	U J
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U J
191-24-2	Benzo(g,h,i)perylene	360	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-7A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 8 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-8A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 11 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	370	U
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
98-86-2	Acetophenone	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-~~di~~-n-propylamine	370	U
67-72-1	Hexachloro~~eth~~ane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
105-60-2	Caprolactam	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	930	U
92-52-4	1,1'-Biphenyl	370	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	930	U
131-11-3	Dimethylphthalate	370	U
606-20-2	2,6-Dinitrotoluene	370	U
208-96-8	Acenaphthylene	370	U
99-09-2	3-Nitroaniline	930	U
83-32-9	Acenaphthene	370	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-8A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 11 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	930	U J
100-02-7	4-Nitrophenol	930	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
86-73-7	Fluorene	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
100-01-6	4-Nitroaniline	930	U
534-52-1	4,6-Dinitro-2-methylphenol	930	U
86-30-6	N-nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
1912-24-9	Atrazine	370	U J
87-86-5	Pentachlorophenol	930	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)phthalate	88	J
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U J
191-24-2	Benzo(g,h,i)perylene	370	U J

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-8A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 11 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-9A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-9A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	190	J
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-9A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICs found: 0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-10A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 57 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	770	U
108-95-2	Phenol	770	U
111-44-4	bis(2-Chloroethyl)ether	770	U
95-57-8	2-Chlorophenol	770	U
95-48-7	2-Methylphenol	770	U
108-60-1	2,2'-oxybis(1-Chloropropane)	770	U
98-86-2	Acetophenone	770	U
106-44-5	4-Methylphenol	770	U
621-64-7	N-Nitroso-di-n-propylamine	770	U
67-72-1	Hexachloroethane	770	U
98-95-3	Nitrobenzene	770	U
78-59-1	Isophorone	770	U
88-75-5	2-Nitrophenol	770	U
105-67-9	2,4-Dimethylphenol	770	U
111-91-1	bis(2-Chloroethoxy)methane	770	U
120-83-2	2,4-Dichlorophenol	770	U
91-20-3	Naphthalene	770	U
106-47-8	4-Chloroaniline	770	U
87-68-3	Hexachlorobutadiene	770	U
105-60-2	Caprolactam	770	U
59-50-7	4-Chloro-3-methylphenol	770	U
91-57-6	2-Methylnaphthalene	770	U
77-47-4	Hexachlorocyclopentadiene	770	U
88-06-2	2,4,6-Trichlorophenol	770	U
95-95-4	2,4,5-Trichlorophenol	1900	U
92-52-4	1,1'-Biphenyl	770	U
91-58-7	2-Chloronaphthalene	770	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	770	U
606-20-2	2,6-Dinitrotoluene	770	U
208-96-8	Acenaphthylene	770	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	770	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-10A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 57 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	770	U
121-14-2	2,4-Dinitrotoluene	770	U
84-66-2	Diethylphthalate	770	U
86-73-7	Fluorene	770	U
7005-72-3	4-Chlorophenyl-phenylether	770	U
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-methylphenol	1900	U
86-30-6	N-nitrosodiphenylamine (1)	770	U
101-55-3	4-Bromophenyl-phenylether	770	U
118-74-1	Hexachlorobenzene	770	U
1912-24-9	Atrazine	770	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	770	U
120-12-7	Anthracene	770	U
86-74-8	Carbazole	770	U
84-74-2	Di-n-butylphthalate	770	U
206-44-0	Fluoranthene	770	U
129-00-0	Pyrene	770	U
85-68-7	Butylbenzylphthalate	770	U
91-94-1	3,3'-Dichlorobenzidine	770	U
56-55-3	Benzo(a)anthracene	770	U
218-01-9	Chrysene	770	U
117-81-7	bis(2-Ethylhexyl)phthalate	170	J
117-84-0	Di-n-octylphthalate	770	U
205-99-2	Benzo(b)fluoranthene	770	U
207-08-9	Benzo(k)fluoranthene	770	U
50-32-8	Benzo(a)pyrene	770	U
193-39-5	Indeno(1,2,3-cd)pyrene	770	U
53-70-3	Dibenzo(a,h)anthracene	770	U
191-24-2	Benzo(g,h,i)perylene	770	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-10A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 57 Decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Extraction: (Type) SONC

Number TICs found: 10

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.86	320	J
2.	UNKNOWN	14.75	200	J
3.	UNKNOWN CARBOXYLIC ACID	19.69	240	J
4.	UNKNOWN ALDEHDYE	25.26	230	J
5. 83-47-6	.GAMMA.-SITOSTEROL	30.84	1700	NJ
6.	UNKNOWN	31.62	890	J
7.	UNKNOWN	32.36	390	J
8.	UNKNOWN	33.21	200	J
9.	UNKNOWN	35.07	480	J
10.	UNKNOWN	35.49	580	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-11A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 61 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	850	U
108-95-2	Phenol	850	U
111-44-4	bis(2-Chloroethyl)ether	850	U
95-57-8	2-Chlorophenol	850	U
95-48-7	2-Methylphenol	850	U
108-60-1	2,2'-oxybis(1-Chloropropane)	850	U
98-86-2	Acetophenone	850	U
106-44-5	4-Methylphenol	850	U
621-64-7	N-Nitroso-di-n-propylamine	850	U
67-72-1	Hexachloroethane	850	U
98-95-3	Nitrobenzene	850	U
78-59-1	Isophorone	850	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	850	U
111-91-1	bis(2-Chloroethoxy)methane	850	U
120-83-2	2,4-Dichlorophenol	850	U
91-20-3	Naphthalene	850	U
106-47-8	4-Chloroaniline	850	U
87-68-3	Hexachlorobutadiene	850	U
105-60-2	Caprolactam	850	U
59-50-7	4-Chloro-3-methylphenol	850	U
91-57-6	2-Methylnaphthalene	850	U
77-47-4	Hexachlorocyclopentadiene	850	U
88-06-2	2,4,6-Trichlorophenol	850	U
95-95-4	2,4,5-Trichlorophenol	2100	U
92-52-4	1,1'-Biphenyl	850	U
91-58-7	2-Chloronaphthalene	850	U
88-74-4	2-Nitroaniline	2100	U
131-11-3	Dimethylphthalate	850	U
606-20-2	2,6-Dinitrotoluene	850	U
208-96-8	Acenaphthylene	850	U
99-09-2	3-Nitroaniline	2100	U
83-32-9	Acenaphthene	850	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-11A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 61 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2100	U
100-02-7	4-Nitrophenol	2100	U
132-64-9	Dibenzofuran	850	U
121-14-2	2,4-Dinitrotoluene	850	U
84-66-2	Diethylphthalate	850	U
86-73-7	Fluorene	850	U
7005-72-3	4-Chlorophenyl-phenylether	850	U
100-01-6	4-Nitroaniline	2100	U
534-52-1	4,6-Dinitro-2-methylphenol	2100	U
86-30-6	N-nitrosodiphenylamine (1)	850	U
101-55-3	4-Bromophenyl-phenylether	850	U
118-74-1	Hexachlorobenzene	850	U
1912-24-9	Atrazine	850	U
87-86-5	Pentachlorophenol	2100	U
85-01-8	Phenanthrene	850	U
120-12-7	Anthracene	850	U
86-74-8	Carbazole	850	U
84-74-2	Di-n-butylphthalate	850	U
206-44-0	Fluoranthene	850	U
129-00-0	Pyrene	850	U
85-68-7	Butylbenzylphthalate	850	U
91-94-1	3,3'-Dichlorobenzidine	850	U
56-55-3	Benzo(a)anthracene	850	U
218-01-9	Chrysene	850	U
117-81-7	bis(2-Ethylhexyl)phthalate	180	J
117-84-0	Di-n-octylphthalate	850	U
205-99-2	Benzo(b)fluoranthene	850	U
207-08-9	Benzo(k)fluoranthene	850	U
50-32-8	Benzo(a)pyrene	850	U
193-39-5	Indeno(1,2,3-cd)pyrene	850	U
53-70-3	Dibenzo(a,h)anthracene	850	U
191-24-2	Benzo(g,h,i)perylene	850	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-11A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 61 Decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	30.60	250	J
2.	UNKNOWN	31.75	1200	J
3.	UNKNOWN	32.31	6500	J
4.	UNKNOWN	32.88	410	J
5.	UNKNOWN	35.13	2400	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-12A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 33 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	490	U
108-95-2	Phenol	490	U
111-44-4	bis(2-Chloroethyl)ether	490	U
95-57-8	2-Chlorophenol	490	U
95-48-7	2-Methylphenol	490	U
108-60-1	2,2'-oxybis(1-Chloropropane)	490	U
98-86-2	Acetophenone	490	U
106-44-5	4-Methylphenol	490	U
621-64-7	N-Nitroso-di-n-propylamine	490	U
67-72-1	Hexachloroethane	490	U
98-95-3	Nitrobenzene	490	U
78-59-1	Isophorone	490	U
88-75-5	2-Nitrophenol	490	U
105-67-9	2,4-Dimethylphenol	490	U
111-91-1	bis(2-Chloroethoxy)methane	490	U
120-83-2	2,4-Dichlorophenol	490	U
91-20-3	Naphthalene	490	U
106-47-8	4-Chloroaniline	490	U
87-68-3	Hexachlorobutadiene	490	U J
105-60-2	Caprolactam	490	U
59-50-7	4-Chloro-3-methylphenol	490	U
91-57-6	2-Methylnaphthalene	490	U
77-47-4	Hexachlorocyclopentadiene	490	U
88-06-2	2,4,6-Trichlorophenol	490	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	490	U
91-58-7	2-Chloronaphthalene	490	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	490	U
606-20-2	2,6-Dinitrotoluene	490	U
208-96-8	Acenaphthylene	490	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	490	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-12A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 33 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	490	U
121-14-2	2,4-Dinitrotoluene	490	U
84-66-2	Diethylphthalate	490	U
86-73-7	Fluorene	490	U
7005-72-3	4-Chlorophenyl-phenylether	490	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	490	U
101-55-3	4-Bromophenyl-phenylether	490	U
118-74-1	Hexachlorobenzene	490	U
1912-24-9	Atrazine	490	UJ
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	490	U
120-12-7	Anthracene	490	U
86-74-8	Carbazole	490	U
84-74-2	Di-n-butylphthalate	490	U
206-44-0	Fluoranthene	490	U
129-00-0	Pyrene	490	U
85-68-7	Butylbenzylphthalate	490	U
91-94-1	3,3'-Dichlorobenzidine	490	U
56-55-3	Benzo(a)anthracene	490	U
218-01-9	Chrysene	490	U
117-81-7	bis(2-Ethylhexyl)phthalate	490	UJ
117-84-0	Di-n-octylphthalate	490	U
205-99-2	Benzo(b)fluoranthene	490	U
207-08-9	Benzo(k)fluoranthene	490	U
50-32-8	Benzo(a)pyrene	490	U
193-39-5	Indeno(1,2,3-cd)pyrene	490	U
53-70-3	Dibenzo(a,h)anthracene	490	U
191-24-2	Benzo(g,h,i)perylene	490	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-12A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 33 Decanted: (Y/N) Y Date Extracted:01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.80	100	J
2.	UNKNOWN	20.55	100	J
3.	UNKNOWN	29.67	120	J
4.	UNKNOWN	32.28	230	J
5.	UNKNOWN	32.90	150	J
6.	UNKNOWN	35.12	450	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-13A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-13A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	J
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-13A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 Decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.72	460	~~J~~ K
2. 638-66-4	OCTADECANAL	26.77	100	NJ
3.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-14A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 3 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	340	U
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340	U
98-86-2	Acetophenone	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
105-60-2	Caprolactam	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	860	U
92-52-4	1,1'-Biphenyl	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
208-96-8	Acenaphthylene	340	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	340	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-14A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 3 decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
1912-24-9	Atrazine	340	UJ
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	UJ
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenzo(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-14A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 3 Decanted: (Y/N) N Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.73	360	~~J~~ R
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-15A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: BPH60-15A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	UJ
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	59	J
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BPH60-15A60

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 Decanted: (Y/N) Y Date Extracted: 01/29/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICs found: 1

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN (BC)	7.72	430	JR
2.					
3.					
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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH56

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 25 Decanted: (Y/N) N Date Received: 01/25/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	2.3 ~~0.44~~	~~JP~~ U
319-85-7	beta-BHC	2.3 ~~1.0~~	~~JP~~ U
319-86-8	delta-BHC	2.3 ~~0.73~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	4.4	U
1031-07-8	Endosulfan sulfate	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH58

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 18 Decanted: (Y/N) N Date Received: 01/25/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	~~0.11~~ 2.1	~~JP~~ U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	0.30	J
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	82	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 12 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9 ~~0.35~~	~~JP~~ U
319-85-7	beta-BHC	1.9 ~~0.46~~	~~JP~~ U
319-86-8	delta-BHC	1.0	J
58-89-9	gamma-BHC (Lindane)	1.9 ~~0.18~~	~~JP~~ U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 25 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	4.4	U
1031-07-8	Endosulfan sulfate	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	89	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	44	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH63

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 10 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9 ~~0.46~~	~~JP~~ U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9 ~~0.092~~	~~JP~~ U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 20 Decanted: (Y/N) N Date Received: 01/25/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1 ~~0.42~~	~~JP~~ U
319-85-7	beta-BHC	0.75	~~JP~~
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.095~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	84	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	10	~~JP~~
11096-82-5	Aroclor-1260	41	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH68

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 19 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1 ~~0.40~~	~~JP~~ U
319-85-7	beta-BHC	1.5	~~JP~~ U
319-86-8	delta-BHC	2.7	
58-89-9	gamma-BHC (Lindane)	2.1 ~~0.43~~	~~JP~~ U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	5.2	~~JP~~ J
11096-82-5	Aroclor-1260	41	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH69

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 16 Decanted: (Y/N) N Date Received: 01/25/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.5	
319-85-7	beta-BHC	3.3	
319-86-8	delta-BHC	11	
58-89-9	gamma-BHC (Lindane)	6.5	
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.9	U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH70

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 20 Decanted: (Y/N) N Date Received: 01/25/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	1.1	~~JP~~ J
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	84	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 12 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.5	~~JP~~ J
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	3.1	
58-89-9	gamma-BHC (Lindane)	1.9 ~~1.3~~	~~JP~~ J
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	76	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH77

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 13 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	77	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 8 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	0.44	J
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 11 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9 ~~0.14~~	~~JP~~ U
319-85-7	beta-BHC	1.9 ~~0.19~~	~~JP~~ U
319-86-8	delta-BHC	1.9 ~~0.46~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	1.9 ~~0.16~~	~~JP~~ U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4'-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4'-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4'-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	0.35	J
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	75	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 22 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH81

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 85 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	11	U
319-85-7	beta-BHC	11	U
319-86-8	delta-BHC	11	U
58-89-9	gamma-BHC (Lindane)	11	U
76-44-8	Heptachlor	11	U
309-00-2	Aldrin	11	U
1024-57-3	Heptachlor epoxide	11	U
959-98-8	Endosulfan I	11	U
60-57-1	Dieldrin	22	U
72-55-9	4,4'-DDE	22	U
72-20-8	Endrin	22	U
33213-65-9	Endosulfan II	22	U
72-54-8	4,4'-DDD	22	U
1031-07-8	Endosulfan sulfate	22	U
50-29-3	4,4'-DDT	22	U
72-43-5	Methoxychlor	110	U
53494-70-5	Endrin ketone	22	U
7421-93-4	Endrin aldehyde	22	U
5103-71-9	alpha-Chlordane	11	U
5103-74-2	gamma-Chlordane	11	U
8001-35-2	Toxaphene	1100	U
12674-11-2	Aroclor-1016	220	U
11104-28-2	Aroclor-1221	450	U
11141-16-5	Aroclor-1232	220	U
53469-21-9	Aroclor-1242	220	U
12672-29-6	Aroclor-1248	220	U
11097-69-1	Aroclor-1254	220	U
11096-82-5	Aroclor-1260	220	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH82

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 58 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	4.0	U
319-85-7	beta-BHC	6.5	
319-86-8	delta-BHC	4.0	U
58-89-9	gamma-BHC (Lindane)	4.0	U
76-44-8	Heptachlor	4.0	U
309-00-2	Aldrin	4.0	U
1024-57-3	Heptachlor epoxide	4.0	U
959-98-8	Endosulfan I	4.0	U
60-57-1	Dieldrin	7.9 ~~7.8~~	U
72-55-9	4,4'-DDE	7.8	U
72-20-8	Endrin	7.8	U
33213-65-9	Endosulfan II	7.8	U
72-54-8	4,4'-DDD	7.8	U
1031-07-8	Endosulfan sulfate	7.8	U
50-29-3	4,4'-DDT	7.9 ~~7.8~~	U
72-43-5	Methoxychlor	40	U
53494-70-5	Endrin ketone	7.9 ~~7.8~~	U
7421-93-4	Endrin aldehyde	7.9 ~~7.8~~	U
5103-71-9	alpha-Chlordane	4.0	U
5103-74-2	gamma-Chlordane	4.0	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	79 ~~78~~	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	79 ~~78~~	U
53469-21-9	Aroclor-1242	78	U
12672-29-6	Aroclor-1248	78	U
11097-69-1	Aroclor-1254	78	U
11096-82-5	Aroclor-1260	79 ~~78~~	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 34 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC (Lindane)	0.33	~~JP~~ J
76-44-8	Heptachlor	2.6 ~~0.41~~	~~JP~~ U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	0.54	J
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0 ~~2.8~~	~~JP~~ U
72-20-8	Endrin	5.0 ~~1.5~~	~~JP~~ U
33213-65-9	Endosulfan II	5.0 ~~0.25~~	~~JP~~ U
72-54-8	4,4'-DDD	5.0 ~~0.31~~	~~JP~~ U
1031-07-8	Endosulfan sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	4.3	~~JP~~ J
53494-70-5	Endrin ketone	5.0	U
7421-93-4	Endrin aldehyde	1.2	J
5103-71-9	alpha-Chlordane	0.88	~~JP~~ J
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	260	U
12674-11-2	Aroclor-1016	50	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	50	U
53469-21-9	Aroclor-1242	50	U
12672-29-6	Aroclor-1248	50	U
11097-69-1	Aroclor-1254	13	J
11096-82-5	Aroclor-1260	50	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH84

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 17 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0 ~~0.67~~	~~JP~~ U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH85

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 3 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.1	~~JP~~ I
319-85-7	beta-BHC	0.97	~~JP~~ I
319-86-8	delta-BHC	1.8 ~~1.2~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	1.8 ~~0.51~~	~~JP~~ U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	3.4	U
72-20-8	Endrin	3.4	U
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	3.4	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.4	U
7421-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	69	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH86

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BPH60

Matrix: (soil/water) SOIL Lab Sample ID: BPH60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 19 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/29/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 02/02/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	0.63	J
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

Melissa Stevens

From: Alice Evans <aevans@compuchemlabs.com>
To: Melissa Stevens <mstevens@compuchemlabs.com>
Sent: Thursday, January 25, 2001 11:55 AM
Subject: Fw: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample

----- Original Message -----
From: Bauer, Heather <Heather.Bauer@dyncorp.com>
To: Alice Evans (E-mail) <aevans@compuchemlabs.com>
Sent: Thursday, January 25, 2001 11:32 AM
Subject: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample

> Alice,
> Per Region 2, the lab should change the sample number of MBQB73 to the
> corresponding organic sample number, note the problem in the case
narrative,
> and proceed with the analysis. The Region is still checking on sample
> BPH65, and I will let you know when I hear something. Please let me know
if
> you have any other questions or problems.
>
> Thanks,
> Heather
> Heather Bauer
> DynCorp
> (703)264-9348
>
> 1/25 9:22 AM
> Jennifer left a voice-mail to report that for the inorganic sample that
the
> lab received, the lab should note the problem in the case narrative,
change
> the sample number to the corresponding organic sample ID, and proceed with
> the analysis.
>
> -----Original Message-----
> From: Bauer, Heather
> Sent: Wednesday, January 24, 2001 2:14 PM
> To: Jennifer Feranda (E-mail)
> Cc: Ray Klimcsak (E-mail)
> Subject: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample
>
>
> Jennifer,
> Following is an e-mail from LIBRTY regarding Case 28924. The lab did
not

> receive sample BPH65 that was listed on TR 388205. Also, for sample BPH81
> (on TR 388206), the lab received the three ENCORE samplers and one 4-oz
jar.
> However, the 8-oz jar had the inorganic sample ID MBQB73 on it. The lab
> would like to know if they can keep the inorganic jar, since it is the
> corresponding sample for the organic jar that they are missing. Please
> advise on how the lab should proceed.
>
> Thanks,
> Heather
>
> Heather Bauer
> DynCorp
> (703)264-9348
>
> -----Original Message-----
> From: Alice Evans [mailto:aevans@compuchemlabs.com]
> Sent: Wednesday, January 24, 2001 1:14 PM
> To: Bauer, Heather
> Subject: Case 28924
>
>
> Received Organic water and soil samples on 01/24/01
>
> Did not receive sample BPH65 (full analysis) listed on Traffic Report
> 388205.
>
> Received sample BPH81 - 3 encores, 1-4oz jar and the 8-oz
> jar has the inorganic matching no MBQB73. May we keep
> this 8 -oz jar since it is the match for BPH81. See Traffic
> Report 388206.
>
> Thanks Alice
>
>
>
>
>
>
>
>
> Alice Evans
> CompuChem/Liberty
> 501 Madison Ave
> Cary, NC 27513
> 919-379-4080
>

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

CASE No.: 28924
LABORATORY: COMPUCHEM

SDG No.: BNR60
SITE: Diamond Aerosol Corp

DATA ASSESSMENT

The current SOP HW-6 (Revision 11) June 1996, USEPA Region II Data Validation SOP for Statement of Work OLMO 4.2. for evaluating organic data have been applied.

All data are valid and acceptable except those analytes rejected "R"(unusable). Due to the detection of QC problems, some analytes may have the "J" (estimated), "N"(presumptive evidence for the presence of the material, "U" (non-detect) or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's Signature: Shobitha Amin

Date: March 14, 2001

Verified By: S Kavras

Date: 03/16/2001

CLP DATA ASSESSMENT

SDG 1 BNR60

1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.
No problems.

2. SURROGATES

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.
No problems.

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.
No qualification based on MS/MSD data.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

DC-31: The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Hits are qualified "U" and non-detects are not flagged.

BNR60, BNR62, BNR78
2-Butanone

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BNR72, BNR79, BNR83, BNR61
Acetone

DC-200: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

BNR60, BNR60MS, BNR60MSD, BNR61, BNR62
Methylene Chloride

BNR65, BNR66
Acetone , Methylene Chloride , 2-Butanone

BNR71, BNR78
Methylene Chloride

BNR72, BNR79, BNR80
Methylene Chloride , 2-Butanone

BNR83
2-Butanone

BNR91, BNR95, BNR97, BNS00, BNS01, BPH52, BPH53, BPH59
Methylene Chloride

B) Field or rinse blank contamination:
Qualification not performed using field blank contamination.

C) Trip blank contamination for VOA aqueous samples:
Not applicable.
Qualification not performed using trip blank contamination.

D) Storage Blank associated with VOA samples only
Not applicable.
Qualification not performed using storage blank contamination.

E) Tics "R" rejected
VOA:
Laboratory artifact in the following samples: BNR62, BNR78, BNR80, BNR91
Siloxanes in the following samples: BNR62, BNR78, BNR91, BNS00
The concentration of the TIC's < 5 times the associated blank concentration in the following samples:
BNR71, BNR91, BNR95, BNR96, BNR97, BNS00, BNS01, BPH52, BPH53, BPH59

BNA:
The concentration of the TIC's < 5 times the associated blank concentration in the following samples:

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BNR60, BNR61, BNR62, BNR65, BNR66, BNR71, BNR72, BNR78, BNR79, BNR80, BNR83, BNR91, BNR95, BNR96, BNR97, BNS01, BPH52, BPH53, BPH59, BNS00

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenyl-phosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".
No problems.

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be ≥ 0.05 in both initial and continuing calibrations. A value < 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes except for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D:
DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria. Hits are

qualified "J" and non-detects are not flagged.

BNR60, BNR60MS, BNR60MSD, BNR61, BNR62, BNR65, BNR66, BNR71, BNR72, BNR78, BNR79, BNR80, BNR91, BNR95, BNR97, BNS00, BNS01, BPH52, BPH53, BPH59, VBLKKD, VBLKLN, VBLKL0, VHBLKLK
Methylene Chloride

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

BNR96
Acetone , Methylene Chloride , 2-Butanone

BNR60, BNR61, BNR62, BNR65, BNR66, BNR72, BNR78, BNR79, BNR80, BNR83, VBLKKD
Acetone , Methyl Acetate, 2-Butanone, 4-Methyl-2-pentanone, 2-Hexanone, 1,2-Dibromo-3 -chloropropane

BNR60MS, BNR60MSD, BNR71, BNR91, BNR95, BNR97, BNS00, BNS01, BPH52, BPH53, BPH59, VBLKLN
Acetone , 2-Butanone

VBLKLO, VHBLKLK
Dichlorodifluoromethane , Chloromethane, Vinyl Chloride, Acetone, Methyl Acetate, 2-Butanone 4-Methyl-2-pentanone, 2-Hexanone, 1,2-Dibromo-3-chloropropane

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

BNR60, BNR60MS, BNR60MSD, BNR61, BNR62, BNR65, BNR66, BNR71, BNR72, BNR78, BNR79, BNR80, SBLKMD
2,4-Dimethylphenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4-Nitroaniline, Atrazine

BNR83, BNR91, BNR95, BNR96, BNR97, BNS00, BNS01, BOH52, BPH53, BPH59, 2,4-Dinitrophenol, 4-Nitrophenol, Atrazine

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample

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fraction.
No problems.

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

DC-422: The following pesticide samples have analytes for which the percent difference between column results exceeds primary criteria. Hits > CRQL are flagged "J". Or: if %D is > 50% and value is < CRQL, sample result is elevated to the CRQL and qualified "U".

QUALIFIED "U":
BNR65, BNR95
alpha-Chlordane

BNR83
Endrin aldehyde

BNR60MSD
Endrin ketone

QUALIFIED "J":
BNR79
4,4'-DDT

BNR95
gamma-Chlordane

BNR60MS, BNR60MSD
Dieldrin

DC-423: The following pesticide samples have analytes for which the percent difference between column results exceeds expanded criteria. Hits > CRQL are flagged "NJ"; or "R" when %D >100; or "NJ"

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when %D is between 100-200 (interference detected). Hits < CRQL are elevated to the CRQL and qualified "U".

QUALIFIED "U":
BNR65
Heptachlor, Endrin ketone

BNR78
delta-BHC, 4,4'-DDE

BNR79
Endosulfan I, Endrin aldehyde

BNR80
Aldrin, Endrin aldehyde, gamma-Chlordane

BNR83
gamma-Chlordane

BNR95
Endrin aldehyde

BNS01
beta-BHC

BNR60MS
Endrin ketone

QUALIFIED "JN":
BNR79
gamma-Chlordane

BNR80
Aroclor-1260

QUALIFIED "J":
BNR60MS, BNR60MSD
gamma-BHC (Lindane)

10. CONTRACT PROBLEMS NON-COMPLIANCE:

11. FIELD DOCUMENTATION:

12. OTHER PROBLEMS
See attached Percent Moisture Report for list of soil samples that were qualified for percent moisture greater than 50%.

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13. This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.

	YES	NO	N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 28924 LABORATORY: COMPUCHEM

SITE NAME: DIAMOND AEROSOL CORP. SDG Number(s): BNR60

1.0 Chain of Custody and Sampling Trip Reports

1.1 Are the Traffic Reports/Chain-of-Custody Records present for all samples? ✓ ___ ___

ACTION: If no, contact RSCC, or contact the WAM to obtain replacement of missing or illegible copies from the lab.

1.2 Is the Sampling Trip Report present for all samples and all fractions? ✓ ___ ___

ACTION: If no, contact either RSCC or ask the WAM to obtain this information from the prime contractor.

2.0 Data Completeness and Deliverables

2.1 Have any missing deliverables been received and added to the data package? ___ ✓

NOTE: The lab is required to submit data for only two analyses, for each fraction. (i.e., the original sample and one dilution, or the most concentrated dilution analyzed and one further dilution.)

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the lab. If lab cannot provide them, note the effect on the review of the package in the Contract Problems/Non-compliance section of the Data Assessment and the Organic Regional Data Assessment Summary form.

2.2 Was CLASS CCS checklist included with package? ✓ ___ ___

2.3 Are there any discrepancies between the Traffic Reports/Chain-of-Custody Records, Sampling Report and Sample Tags? ___ ✓ ___

	YES	NO	N/A

ACTION: If yes, contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory.

3.0 Cover Letter SDG Narrative

3.1	Is the Narrative or Cover Letter Present?	✓		
3.2	Are case number, SDG number and contract number contained in the SDG Narrative or cover letter (see SOW, Exhibit B, section 2.6.1)?	✓		
3.3	Does the narrative contain the following information:			
	VOA: description of trap and columns used during sample analyses?	✓		
	BNA: description of columns used during sample analyses?	✓		
	Pest: description of columns used during sample analyses?	✓		

NOTE: As per section 6.23.3.1 SOW/p. D-11/Pest, Packed columns are not permitted.

3.4	Does the narrative, VOA and BNA sections, contain a list of all TICs identified as alkanes and their estimated concentrations?	✓		
3.5	Does the narrative contain a record of all cooler temperatures? If the temperature of a cooler was exceeded, > 10° C, the lab must list by fraction and sample number, all affected samples.	✓		
3.6	Does the narrative contain a list of the pH values determined for each water sample submitted for volatile analysis (SOW Exhibit B, section 2.6.1.2)?			✓
3.7	Does the Case Narrative contain the statement, "verbatim", as required in Section B of the SOW?	✓		

ACTION: If "No", to any question in this section, contact the WAM to obtain all necessary resubmittals. If information is not available, document in the Data Assessment under Contract Problems/Non-Compliance section.

	YES	NO	N/A

4.0 Data Validation Checklist

4.1 Check the package for the following discrepancies:

	YES	NO	N/A
a. Is the package paginated in ascending order starting from the SDG narrative?	✓		
b. Are all forms and copies legible?	✓		
c. Is each fraction assembled in the order set forth in the SOW?	✓		
d. Is a Sample Data Summary Package submitted immediately preceding the Sample Data Package?	✓		

The following checklist is divided into three parts. Part A is for any VOA analyses, Part B is for BNAs and Part C is Pesticide/PCBs.

Does this package contain:

VOA Data?	✓	
BNA Data?	✓	
Pesticide/PCB data?	✓	

ACTION: Complete corresponding parts of checklist.

YES NO N/A

PART A: VOA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records, Sampling Report or Lab Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data? ✓ See SDG Narrative

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated (J). If a soil sample other than TCLP contains more than 90% water, all data should be qualified as unusable (R).

ACTION: If samples were not iced or the ice was melted upon arrival at the laboratory and the cooler temperature was elevated (> 10° C), then flag all positive results with a "J" and all non-detects "UJ".

ACTION: If both VOA vials for a sample have air bubbles or the VOA vial analyzed had air bubbles, flag all positive results "J" and all non-detects "R".

ACTION: The smallest soil size permitted is 0.5g. If any soil sample is smaller than 0.5g, document in the Data Assessment under Contract Problems/Non-Compliance.

2.0 Holding Times

2.1 Have any VOA technical holding times, determined from date of collection to date of analysis, been exceeded? ✓

Technical Holding Times: If unpreserved, aqueous samples, maintained at 4° C for aromatic hydrocarbons analysis must be analyzed within 7 days of collection. If preserved with HCl (pH < 2) and stored at 4° C, then aqueous samples must be analyzed within 14 days of collection. If uncertain about preservation, contact sampler to determine whether or not samples were preserved. The holding time for soils is 10 days from date of collection.

YES NO N/A

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample ID	Sample Matrix	Was Sample Preserved?	Date Sampled	Date Lab Received	Date Analyzed

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits as estimated "UJ", and document in the Data Assessment that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all results must be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times are exceeded by more than 28 days, all non detect data are unusable "R".

NOTE: Contractual Holding Times: Analysis of water and soil/sediment samples must be completed within 10 days of Validated Time of Sample Receipt (VTSR). This requirement does not apply to Performance Evaluation (PE) samples.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and on the Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

	YES	NO	N/A
3.0 System Monitoring Compound (SMC) Recovery (Form II)			
3.1 Are the VOA SMC Recovery Summaries (Form II) present for each of the following matrices:			
a. Low Water?	[ ]	___	___
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	___
3.2 Are all the VOA samples listed on the appropriate System Monitoring Compound Recovery Summary for each of the following matrices:			
a. Low Water?	[ ]	___	___
b. Low Soil?	[✓]	___	___
c. Med Soil?	[ ]	___	___

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[ ]	___	✓

ACTION: Circle all outliers with red pencil.

3.4 Was one or more VOA system monitoring compound recovery outside of contract specifications for any sample or method blank?	___	[ ]	✓
If yes, were samples re-analyzed?	[ ]	___	✓
Were method blanks re-analyzed?	[ ]	___	✓

ACTION: If recoveries are ≥ 10%, but 1 or more compounds fail to meet SOW specifications:

1. All positive results are qualified as estimated "J".

2. Flag all non-detects as estimated detection limits "UJ" where recovery is less than the lower acceptance limit.

YES NO N/A

3. If SMC recoveries are above allowable levels, do not qualify non-detects.

If any system monitoring compound recovery is < 10%:

1. Flag all positive results as estimated "J".

2. Flag all non-detects as unusable "R".

Professional judgement should be used to qualify data that only have method blank SMC recoveries out of specification in both original and re-analyses. Check the internal standard areas.

NOTE: Contractual requirements state that if any SMC fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance and in the Organic Regional Data Assessment Summary.

NOTE: The laboratory must submit the following data:

1. If SMC recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If an SMC recovery and/or internal standard response fails to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

(Refer to section 11.4.3.2, page D-46/7CA of the SOW for more information.)

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ ✓ ___

ACTION: If large errors exist, contact the WAM to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and note the effect in the Data Assessment.

	YES	NO	N/A

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? ✓

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? ✓

b. Low Soil? ✓

c. Med Soil? ✓

ACTION: If any matrix spike data are missing, take the action specified in section 3.2 above.

4.3 How many VOA spike recoveries are outside QC limits?

Water	Soils
_____ out of 10	0 out of 10

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water	Soils
_____ out of 5	0 out of 5

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the MS/MSD results may be used in conjunction with other QC criteria to determine the need for qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? ✓

5.2 Frequency of Analysis: for the analysis of VOA TCL compounds, has a reagent/method blank been analyzed for each SDG or every 20 samples of similar matrix (low water, low soil or medium soil), whichever is more frequent? ✓

	YES	NO	N/A
5.3 Has a VOA method blank been analyzed at least once every twelve hours for each concentration level and GC/MS system used?	✓		
5.4 Was a VOA instrument blank analyzed after each sample/dilution which contained a target compound that exceeded the initial calibration range?			✓
5.5 Was a VOA storage blank analyzed at the end of all samples for each SDG in a case?	✓		

ACTION: If any method/instrument blank data are missing, contact the WAM to obtain any missing deliverables from the laboratory. If method blank data are not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank or trip blank data for missing method blank data.

If any instrument blank analyzed after a sample with high concentration is missing, contact the WAM to obtain any missing deliverables from the laboratory. If the instrument blank was not analyzed or not available, inspect the chromatogram of the sample analyzed immediately after this analysis for possible carryover. Use professional judgement to determine if any contamination occurred and qualify analyte(s) accordingly.

If storage blank data is missing, contact the WAM to obtain any missing deliverables from the laboratory. If unavailable, note in the Contract Problems/Non-Compliance section of the Data Assessment.

5.6 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-33, section 3.3.7.3 of the SOW for further information.

	YES	NO	N/A
Was the correct identification scheme used for all VOA blanks?	✓		

ACTION: Contact the WAM to obtain missing deliverables from the lab, or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-compliance if corrections were made by the validator.

	YES	NO	N/A
5.7 Chromatography: review the blank raw data-chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) for each instrument acceptable for VOAs?	✓		

ACTION: Use professional judgement to determine the effect on the data.

5.8 Are all detected hits for target compounds in method, instrument and storage blanks less than the CRQL for that analyte?	✓		

Exception: Acetone and 2-butanone must be less than 5 times the CRQL, and methylene chloride must be less than 2.5 times its CRQL.

ACTION: If no, an explanation and laboratory's corrective actions must be addressed in the case narrative. If the narrative contains no explanation, then make a note in the Contract Problems/Non-Compliance section of the Data Assessment.

6.0 Contamination

NOTE: "Water blanks", "drill blanks", and "distilled water blanks" are validated like any other sample, and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/instrument/reagent/storage blanks have positive results (TCL and/or TIC) for VOAs?		✓	

NOTE: When applied as directed in the table below, the contaminant concentration in these blanks are multiplied by the sample dilution factor and corrected for %moisture when necessary.

NOTE: A contaminated instrument blank is not allowable under this SOW. See page D-48/VOA, section 12.1.2.4 for additional information. Document in the Data Assessment under Contract Problems/Non-Compliance if contaminated instrument blank was submitted.

6.2 Do any field/trip/rinse blanks have positive VOA results (TCL and/or TIC)?		✓	

YES NO N/A

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated with a particular group of samples (may exceed one per case) must be used to qualify data. Trip blanks are used to qualify only those samples with which they were shipped and are not required for non-aqueous matrices. Blanks may not be qualified because of contamination in another blank. Field Blanks & Trip Blanks must be qualified for system monitoring compound, instrument performance criteria, spectral or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If any blanks are grossly contaminated, all associated data should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Methylene Chloride Acetone Toluene 2-Butanone	Sample conc. is > CRQL, but ≤ 10x blank value.	Sample conc. is < CRQL and ≤ 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Other Contaminants	Sample conc. is > CRQL, but ≤ 5x blank value.	Sample conc. is < CRQL and ≤ 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

NOTE: Analytes qualified "U" for blank contamination are still considered as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R".

	YES	NO	N/A
6.3 Are there field/rinse/equipment blanks associated with every sample?	[✓]		

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For samples with high concentrations of suspected blank contaminants, use professional judgement to qualify these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

7.0 GC/MS Instrument Performance Check (Form V)

7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Bromofluorobenzene (BFB)?	[✓]		
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the BFB provided for each twelve hour shift?	[✓]		
7.3 Has an instrument performance check been analyzed for every analytical sequence on each instrument?	[✓]		

ACTION: List date, time, instrument ID, and sample numbers for which associated GC/MS tuning data are unavailable.

DATE	TIME	INSTRUMENT	SAMPLE NUMBERS

ACTION: Notify the WAM to obtain missing data, if possible. If the lab cannot provide the missing data, reject, "R", all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 95 as specified in Exhibit D, page D-56/VOA?	[✓]		

NOTE: All ion abundance ratios must be normalized to m/z 95, the nominal base peak, even though the

	YES	NO	N/A
ion abundance of m/z 174 may be up to 120% that of m/z 95.			
ACTION: If mass assignment is in error, qualify all associated data as unusable "R".			
7.5 Have the ion abundance criteria been met for each instrument used?	✓		
ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).			
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.			
7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)		✓	
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	✓		
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.8 Are the spectra of the mass calibration compound acceptable?	✓		
ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.			

8.0 Target Compound List (TCL) Analytes (FORM I VOA)

	YES	NO	N/A
8.1 Are the Organic Analysis Data Sheets (Form I VOA) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
8.2 Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the			

	YES	NO	N/A
following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	✓		
c. Blanks?	✓		
ACTION: If any data are missing, take action specified in 3.2 above.			
8.3 Are the response factors shown in the quant. report?	✓		
8.4 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	[ ]		
b. Resolution?	[ ]		
c. Peak shape?	[ ]		
d. Full-scale graph (attenuation)?	[ ]		
e. Other: _____?	[ ]		
ACTION: Use professional judgement to determine the acceptability of the data.			
8.5 Are the lab-generated standard mass spectra of the identified VOA compounds present for each sample?	✓		
ACTION: If any mass spectra are missing, take action as specified in 3.2 above. If the lab does not generate its own standard spectra, document in the Contract Problems/Non-compliance section of the Data Assessment and the Organic Regional Data Assessment Summary.			
8.6 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	✓		
8.7 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	✓		

	YES	NO	N/A
8.8 Do sample and standard relative ion intensities agree within ±20%?	[✓]	___	___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.6, 8.7, and 8.8.

ACTION: When sample carry-over is suspected, use professional judgement determine if instrument cross-contamination has affected positive compound identifications.

9.0 Tentatively Identified Compounds (TIC)

	YES	NO	N/A
9.1 Are all Tentatively Identified Compound Forms (Form I Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	[ ]	___	___
9.2 Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	[ ]	___	___
b. Blanks?	[ ]	___	___
c. Alkanes listed for each sample?	[✓]	___	___

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "JN" qualifier to all chemically named TICs, if missing.

	YES	NO	N/A
9.3 Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,2- dimethylbenzene is xylene, a VOA TCL analyte, and should not be reported as a TIC.)	___	[ ]	___

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4 Are all ions present in the reference mass

	YES	NO	N/A
spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	___	___	___
9.5 Do TIC and "best match" standard relative ion intensities agree within ±20%?	[ ]	___	___

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined an incorrect identification was made, change the identification to "unknown," or to some less specific identification as appropriate. (Example: "C3 substituted benzene.")

Also, when a compound is not found in any blank, but is detected in a sample and is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable "R". (E.g., Common Lab Contaminants: CO_2 (M/E 44), siloxanes (M/E 73) hexane, aldol condensation products, solvent preservatives, and related by-products - see the National Functional Guidelines for further guidance.)

9.6 Are TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported?	___	[ ]	___

ACTION: If yes, cross out questionable TIC(s).

10.0 <u>Compound Quantitation and Reported Detection Limits</u>

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standards, quantitation ions, and RRF were used to calculate Form I results.)	___	[✓]	___
10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture?	[✓]	___	___

ACTION: If errors are large, take action as specified in section 3.5 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample). Replace concentrations that exceeded the calibration

YES NO N/

range in the original analysis by crossing out the "E" and its corresponding value on the original Form I and substituting the data from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is not to be used, including any in the data summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for each initial and continuing calibration? ✓ ___ ___

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete at concentrations of 10, 20, 50, 100, 200ng for separate calibrations of low water/med soils (unheated purge) and low soils (heated purge)? ✓ ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Were all low level soil standards, blanks and samples analyzed by heated purge? ✓ ___ ___

ACTION: If low level soil samples were not heated during purge, qualify positive hits "J" (estimated) and non-detects "R".

12.3 Are the % relative standard deviation (%RSD) values for VOAs ≤ 30% over the concentration range of the calibration? ___ ✓ ___

NOTE: Although 11 VOA compounds have a contractual minimum RRF and no maximum %RSD, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: If %RSD is > 30.0%, qualify associated positive results for that analyte "J" (estimated) and non-detects using professional judgement. When %RSD is > 90%, flag all non-detects for that

YES NO N/A

analyte "R" (unusable) and positive hits "J".

NOTE: Analytes previously qualified "U" for blank contamination are still considered as "hits" when qualifying for initial calibration criteria.

12.4 Are any average RRFs < 0.05? ___ ✓ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05, then qualify associated non-detects with an "R" and flag associated positive data as estimated "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %RSD or RRF criteria, provided the %RSD is ≤ 40% and RRF is ≥ 0.010. (See Table 5, page D-59/VOA and analytes marked with a "." on Form VI for required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than two analytes failed %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and the Organic Regional Data Assessment Summary.

12.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %RSD? (Check at least 2 values, but if errors are found, check more.) ___ ✓ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the WAM to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance and in the Organic Regional Data Assessment Summary.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for separate calibration of low water/med soil and low soil samples? ✓ ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? ✓ ___ ___

YES NO N

ACTION: If any forms are missing or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the WAM to request an explanation/resubmittal from the lab. If continuing calibration data are not available, flag all associated sample data as unusable "R".

ACTION: List below all sample(s) that were not analyzed within twelve hours of the previous continuing calibration.

_____

_____

_____

13.3 Do any volatile compounds have a percent difference (%D) between the initial and continuing RRF which exceeds the ±25% criteria? ✓ [ ]

NOTE: Although 11 VOA compounds have a contractual minimum RRF and no maximum %D, the technical acceptance criteria are the same for all analytes.

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated. When %D is > 90%, qualify all non-detects for that analyte unusable (R) and positive results estimated (J).

13.4 Are any continuing calibration RRFs < 0.05? [✓]

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify the associated non-detects as unusable "R" and the associated positive values "J".

NOTE: Contract Requirement: The SOW allows up to two of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 pg. D-59/VOA or analytes marked with a "*" on Form VI for required analytes.) Technical criteria, however, are the same for all analytes.

YES NO N/A

are the same for all analytes.

ACTION: If more than two analytes failed %D and RRF, criteria document in the Data Assessment under contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

13.5 Are there any transcription/calculation errors in the reporting of RRF or %D between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ ___ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, contact the WAM to obtain an explanation/resubmittal from the lab, document in the Data Assessment under Contract Problems/Non-Compliance.

14.0 Internal Standard (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to +100%) for each continuing calibration? ✓ ___ ___

If no, was the sample re-analyzed? ___ ✓

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/
			/

(Attach additional sheets if necessary, or attach copies of Form VIIIs.)

ACTION: If any sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

ACTION: 1. If the internal standard area count is

YES NO N/A

outside the upper or lower limit, flag with "J" all positive results quantitated with this internal standard.

2. Do not qualify non-detects when associated IS area counts are > 100%.

3. If the IS area in the sample is below the "lower limit," < 50%, qualify all analytes associated with that IS estimated, "J". If the area counts are extremely low, < 25% of the area in the 12 hour standard, or if performance exhibits a major abrupt drop- off, flag all associated non-detects as unusable, "R", and positive hits estimated, "J".

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? [✓] ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: See Notes in section 3.4, page 7 for a description of sample data the laboratory must submit.

15.0 <u>Field Duplicates</u>

15.1 Were any field duplicates submitted for VOA analysis? [ ] ___ ___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART B: BNA ANALYSES

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody records or laboratory SDG Narrative indicate any problems with sample receipt, condition of samples, analytical problems or special notations affecting the quality of the data? ✓ See Narrative

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be flagged as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, all data should be qualified as unusable "R".

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any BNA technical holding times, determined from date of collection to date of extraction, been exceeded? ✓

Technical Holding Time: Continuous extraction of water samples for BNA analysis must be started within seven days of the date of collection. Soil/sediment samples must be extracted within 7 days of collection. Extracts must be analyzed within 40 days of the date of extraction.

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed

YES NO N/A

ACTION: If technical holding times were exceeded, flag all positive results as estimated (J) and sample quantitation limits as estimated (UJ), and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon reanalysis, the reviewer must use professional judgement to determine the reliability of the data and the effects of additional storage on sample results. At a minimum, all results should be qualified "J", but the reviewer may determine that non-detect data are unusable "R". If holding times were exceeded by more than 28 days, all non-detect data must be qualified "R", unusable.

NOTE: Contractual Holding Times: Extraction of water samples must be started within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Water and soil/sediment extracts must be analyzed within 40 days following extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and on the Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are BNA Surrogate Recovery Summaries (Form II) present for each of the following matrices:

a. Low Water? [ ] ___ ___

b. Low Soil? [✓] ___ ___

c. Med Soil? [ ] ___ ___

3.2 Are all the BNA samples listed on the appropriate Surrogate Recovery Summaries for each of the following matrices:

a. Low Water? [ ] ___ ___

b. Low Soil? [✓] ___ ___

	YES	NO	N/A
c. Med Soil?	[ ]		✓

ACTION: Contact the WAM to request an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?	[✓]		

ACTION: Circle all outliers with red pencil.

3.4 Were two or more base-neutral OR acid surrogate recoveries out of specification for any sample or method blank?		✓	
If yes, were samples reanalyzed?	[ ]		✓
Were method blanks reanalyzed?	[ ]		✓

ACTION: If all BNA surrogate recoveries are ≥ 10%, but two within the base-neutral or acid fraction do not meet SOW specifications, for the affected fraction only (i.e. acid or base-neutral compounds):

1. Flag all positive results as estimated (J).

2. Flag all non-detects as estimated detection limits ("UJ") when recoveries are less than the lower acceptance limit.

3. Do not qualify non-detects if recoveries are greater than the upper acceptance limit.

If any base-neutral or acid surrogate has a recovery of < 10%:

1. Qualify positive results for that fraction as estimated (J).

2. Qualify non-detects for that fraction as unusable (R).

Professional judgement should be used to qualify data that have method blank surrogate recoveries out of specification in both original and reanalyses. Check the internal standard areas.

YES NO N/A

NOTE: Contractual requirements state that if any surrogate fails acceptance criteria, the sample must be re-analyzed. If sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

NOTE: The laboratory must submit the following data:

1. If surrogate recoveries and internal standard responses meet the acceptance criteria in the re-analyzed sample, then the laboratory must submit only the re-analysis.

2. If surrogate recoveries and/or internal standard responses fail to meet the acceptance criteria upon re-analysis, then submit data from both analyses.

3.5 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the WAM to request an explanation or resubmittal of corrected deliverables from the laboratory. Make necessary corrections and note errors in the Data Assessment.

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form 4 (Form III) present? [✓] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices:

a. Low Water? [ ] ___ ___

b. Low Soil? [✓] ___ ___

c. Med Soil? [ ] ___ ___

ACTION: If any matrix spike data are missing, take the action specified in 3.2 above.

4.3 How many BNA spike recoveries are outside QC limits?

Water	Soils
____ out of 22	0 out of ~~22~~ 16

	YES	NO	N/A

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water	Soils
_____ out of 11	0 out of ~~11~~ 9

ACTION: No action is taken based upon MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

ACTION: Circle all outliers with red pencil.

5.0 Blanks (Form IV)

5.1 Is the Method Blank Summary (Form IV) present? ✓ ___ ___

5.2 Frequency of Analysis: Has a reagent/method blank analysis been reported per 20 samples of similar matrix, or concentration level, and for each extraction batch? ✓ ___ ___

5.3 Has a BNA method blank been analyzed for each GC/MS system used? (See SOW pg. D-54/SVOA, Section 12.1.2.) ✓ ___ ✓

ACTION: If any method blank data are missing, contact the WAM to obtain an explanation/resubmittal from the lab. If resubmittals are unavailable, use professional judgement to determine if the associated sample data should be qualified.

5.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-33, sec. 3.3.7.3 of the SOW for further information.

Was the correct identification scheme used for all BNA blanks? ✓ ___ ___

ACTION: Contact the WAM to obtain resubmittals from the lab or make the required corrections on the forms. Document all corrections made by the validator in the Data Assessment under Contract Problems/Non-Compliance.

	YES	NO	N/
5.5 Chromatography: review the blank raw data - chromatograms (RICs), quant. reports or data system printouts and spectra. Is the chromatographic performance (baseline stability) acceptable for each instrument?	[✓]	___	___

ACTION: Use professional judgement to determine the effect on the data.

5.6 Are all detected hits for target compounds less than the CRQL for that analyte in all method blanks?	[✓]	___	___

Exception: Phthalate esters must be less than five times (5x) the CRQL.

6.0 Contamination

NOTE: "Water blanks", "drill blanks" and "distilled water blanks" are validated like any other sample and are not used to qualify data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent blanks have positive results (TCL and/or TIC)?	___	[✓]	___

NOTE: Water: When applied as directed in the table below (page 29), the contaminant concentration in method/instrument/reagent blanks is multiplied by the sample dilution factor, where necessary.

Soil: If the lab has not already done so, the contaminant concentration in soil blanks is multiplied by 33 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate (1 gram for medium level soils) are used to prepare the soil reagent/method blank as instructed on page D-54/SVOA, section 12.1.3. Contact the WAM to obtain resubmittals if the soil blanks are not reported in soil units (µg/kg).

6.2 Do any field/rinse blanks have positive BNA results (TCL and/or TIC)?	___	[ ]	___

ACTION: Prepare a list of samples associated with each contaminated blank. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case) must be

YES NO N/A

used to qualify sample data. Do not convert field blank results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, spectral, instrument performance or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks. If gross contamination exists, all data in the associated samples should be qualified as unusable "R".

For:	Flag sample result with a "U" when:	Report CRQL & qualify "U" when:	No qualification is needed when:
Common Phthalate-Esters	Sample conc. is > CRQL, but ≤ 10x blank value.	Sample conc. is < CRQL and ≤ 10x blank value.	Sample conc. is > CRQL and > 10x blank value.
Other Contaminants	Sample conc. is > CRQL, but ≤ 5x blank value.	Sample conc. is < CRQL and ≤ 5x blank value.	Sample conc. is > CRQL and > 5x blank value.

NOTE: Analytes qualified "U" for blank contamination are still treated as "hits" when qualifying for calibration criteria.

ACTION: For TIC compounds, if the concentration in the sample is less than five times the concentration in the most contaminated associated blank, flag the sample data "R" (unusable).

6.3 Are there field/rinse equipment blanks associated with every sample? ✓ ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentration, use professional judgement on qualification of these values and make a note in the Data Assessment.

Exception: samples taken from a drinking water tap do not have associated field blanks.

	YES	NO	N/A
7.0 GC/MS Instrument Performance Check			
7.1 Are the GC/MS Instrument Performance Check Forms (Form V) present for Decafluorotriphenylphosphine (DFTPP)?	✓		
7.2 Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the DFTPP provided for each twelve hour shift?	✓		
7.3 Has an instrument performance check solution been analyzed for every twelve hours of sample analysis per instrument?	✓		

ACTION: List date, time, instrument ID, and sample number for which no associated GC/MS tuning data are valid.

SAMPLE NUMBERS	DATE	TIME	INSTRUMENT ID

ACTION: If the WAM cannot obtain missing data from the lab, reject "R" all data generated outside an acceptable twelve hour calibration interval.

7.4 Have the ion abundances been normalized to m/z 198 (see SOW, page D-61/SVOA)?	✓		

NOTE: All ion abundance ratios must be normalized to m/z 198, the nominal base peak, even though the ion abundance of m/z 442 may up to 110% that of m/z 198.

ACTION: If mass assignment is in error, flag all associated sample data as unusable "R".

7.5 Have the ion abundance criteria been met for each instrument used?	✓		

ACTION: List all data which do not meet ion abundance criteria (attach a separate sheet).

	YES	NO	N/A
ACTION: If ion abundance criteria are not met, the Region II TPO must be notified.			
7.6 Are there any transcription/calculation errors between mass lists and Form Vs? (Check at least two values, but if errors are found check more.)		✓	
7.7 Is the number of significant figures for the reported relative abundances consistent with the number given for each ion in the ion abundance criteria column?	✓		
ACTION: If large errors exist, take action as specified in section 3.5 above.			
7.8 Are the spectra of the mass calibration compound acceptable?	✓		
ACTION: Use professional judgement to determine whether associated data should be accepted, qualified, or rejected.			
8.0 Target Compound List (TCL) Analytes (FORM I SV)			
8.1 Are the Organic Analysis Data Sheets (Form I SV) present with required header information on each page, for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
8.2 Has GPC cleanup been performed on all soil/sediment sample extracts?	✓		
ACTION: If data suggests that GPC was not performed, use professional judgement. Make note in Contract Problems/Non-Compliance section of the Data Assessment and the Organic Regional Data Assessment Summary.			
8.3 Are the BNA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant. reports) included in the sample package for each of the following:			
a. Samples and/or fractions as appropriate?	✓		

	YES	NO	N/A
b. Matrix spikes and matrix spike duplicates (mass spectra not required)?	[✓]	___	___
c. Blanks?	[✓]	___	___

ACTION: If any data are missing, take action specified in 3.2 above.

8.4 Are the response factors shown in the quant. report?	[✓]	___	___
8.5 Is chromatographic performance acceptable with respect to:			
Baseline stability?	[✓]	___	___
Resolution?	[ ]	___	___
Peak shape?	[ ]	___	___
Full-scale graph (attenuation)?	[ ]	___	___
Other: _____?	[ ]	___	___

ACTION: Use professional judgement to determine the acceptability of the data.

8.6 Are lab-generated standard mass spectra of identified BNA compounds present for each sample?	[✓]	___	___

ACTION: If any mass spectra are missing, take action specified in 3.2 above. Note under Contract Non-compliance if lab does not generate their own standard spectra. If spectra are missing, reject all positive data.

8.7 Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	[ ]	___	___
8.8 Are all ions present in the standard mass spectrum at a relative intensity greater than 10% also present in the sample mass spectrum?	[ ]	___	___
8.9 Do sample and standard relative ion intensities agree within ±20%?	[ ]	___	___

ACTION: Use professional judgement to determine acceptability of data. If it is determined that incorrect identifications were made, all

	YES	NO	N/A

such data should be rejected "R", flagged "N" (presumptive evidence of the presence of the compound) or changed to not detected "U" at the calculated detection limit. In order to be positively identified, the data must comply with the criteria listed in 8.7, 8.8, and 8.9.

ACTION: When sample carry-over is a possibility, professional judgement should be used to determine if instrument cross-contamination has affected any positive compound identification.

9.0 Tentatively Identified Compounds (TIC)

9.1	Are all Tentatively Identified Compound Forms (Form I, Part B) present; and do listed TICs include scan number or retention time, estimated concentration and "JN" qualifier?	✓		
9.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	✓		
	b. Blanks?	✓		
	c. Alkanes listed for each sample?	✓		

ACTION: If any TIC data are missing, take action specified in 3.2 above.

ACTION: Add "N" qualifier to all chemically named TICs, if missing.

9.3	Are any TCL compounds (from any fraction) listed as TIC compounds? (Example: 1,3-dimethylbenzene is xylene - a VOA TCL - and should not be reported as a TIC.)		✓	

ACTION: Flag with "R" any TCL compound listed as a TIC.

9.4	Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum?	✓		
9.5	Do TIC and "best match" standard relative ion intensities agree within ±20%?	✓		

YES NO N/

ACTION: Use professional judgement to determine the acceptability of TIC identifications. If it is determined that an incorrect identification was made, change the identification to "unknown," or to some less specific identification (example: "C3 substituted benzene") as appropriate. Also, when a compound is not found in any blank, but is a suspected artifact of a common laboratory contaminant, the result should be qualified as unusable, "R".

9.6 Are any TICs with responses < 10% of the internal standard (as determined by inspection of the peak areas or height) reported? ___ [ ] ___

ACTION: If yes, cross out questionable TIC(s).

10.0 Compound Quantitation and Reported Detection Limits

10.1 Are there any transcription/calculation errors in Form I results? (Check at least two positive values. Verify that the correct internal standard, quantitation ion, and RRF were used to calculate Form I result.) ___ [✓] ___

10.2 Are the CRQLs adjusted to reflect sample dilutions and, for soils, sample moisture? [✓] ___ ___

ACTION: If errors are large, take action as specified in section 3.5 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the "E" and its associated value on the original Form I and substituting the data from the analysis of the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form Is that should not be used, including any in the summary package.

11.0 Standards Data (GC/MS)

11.1 Are the Reconstructed Ion Chromatograms, and data system printouts (quant. reports) present for initial and continuing calibration? [✓] ___ ___

	YES	NO	N/A

ACTION: If any calibration standard data are missing, take action specified in 3.2 above.

12.0 GC/MS Initial Calibration (Form VI)

12.1 Are the Initial Calibration Forms (Form VI) present and complete for the BNA fraction? ✓ ___ ___

ACTION: If any calibration standard forms are missing, take action specified in 3.2 above.

12.2 Are the % relative standard deviation (%RSD) values for BNAs ≤ 30% over the concentration range of the calibration? ✓ ___ ___

ACTION: Circle all outliers with red pencil.

NOTE: Although 21 BNA compounds have a contractual minimum RRF and no maximum %RSD, the technical criteria are the same for all analytes.

NOTE: Eight BNA compounds do not require a 20ng standard. Refer to SOW section 7.2.4.5.1, page D-15/SVOA for a list of required compounds and contractual criteria.

ACTION: If the %RSD is > 30.0%, qualify positive results for that analyte "J" and non-detects using professional judgement. When %RSD is > 90%, flag all non-detect results for that analyte "R" (unusable) and all positive results "J" (estimated).

NOTE: Analytes previously qualified "U" due to blank contamination are still considered as "hits" when qualifying for calibration criteria.

12.3 Are any average RRFs < 0.05? ___ ✓ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the average RRF is < 0.05 then:

1. "R" all non-detects.

2. "J" all positive results.

12.4 Are there any transcription/calculation errors in the reporting of RRFs and/or %RSDs? (Check at least two values; if errors are found check more.) ___ ✓ ___

YES NO N/

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %RSD or RRF criteria provided the %RSD is ≤ 40% or RRF is ≥ 0.010. (See Table 5, page D-66/SVOA and analytes marked with a "." on Form VI for a list of required analytes and contractual criteria.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes fail %RSD or RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

13.0 GC/MS Continuing Calibration (Form VII)

13.1 Are the Continuing Calibration Forms (Form VII) present and complete for the BNA fraction? ✓ ___ ___

13.2 Has a continuing calibration standard been analyzed for every twelve hours of sample analysis per instrument? ✓ ___ ___

ACTION: List below all sample analyses that were not analyzed within twelve hours of a continuing calibration standard for each instrument used.

_____

_____

_____

ACTION: If any forms are missing, or no continuing calibration standard has been analyzed within twelve hours of every sample analysis, contact the WAM to obtain an explanation/resubmittal from the lab. If continuing calibration data are unavailable, flag all associated sample data as unusable "R".

13.3 Does any BNA compound have a percent difference (%D) between the initial and continuing calibration RRFs which exceeds the ±25.0% criteria? ✓ ___ ___

	YES	NO	N/A

ACTION: Circle all outliers with red pencil.

ACTION: Qualify both positive results and non-detects for the outlier compound(s) as estimated "J". When %D is > 90%, reject all non-detects for that analyte, "R", and qualify positive results "J" (estimated).

13.4 Are any continuing RRFs < 0.05? ___ ✓ ___

ACTION: Circle all outliers with red pencil.

ACTION: If the RRF is < 0.05, qualify as unusable R associated non-detects and "J" associated positive values.

NOTE: Contract Requirement: The SOW allows up to four of the required analytes to fail contractual %D and RRF criteria, provided that the %D is ≤ 40% and the RRF is ≥ 0.010. (See Table 5 page D-66/SVOA or analytes marked with a "." on Form VI for a list of the required analytes.) Technical criteria, however, are the same for all analytes.

ACTION: If more than four analytes failed %D and RRF criteria, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Summary Form.

13.5 Are there any transcription/calculation errors in the reporting of average relative response factors (RRF) or %difference (%D) between initial and continuing RRFs? (Check at least two values, but if errors are found, check more.) ___ ✓ ___

ACTION: Circle errors with red pencil.

ACTION: If errors are large, take action as specified in section 3.5 above.

14.0 Internal Standards (Form VIII)

14.1 Are the internal standard areas (Form VIII) of every sample and blank within the upper and lower limits (-50% to -100%) for each continuing calibration? [✓] ___ ___

If no, was sample re-analyzed? [ ] ___ ✓

YES NO N/A

ACTION: 1. Circle all outliers with red pencil.

2. List all the outliers below.

ACTION: If sample was not reanalyzed, document in Data Assessment in Contract Problems/Non-Compliance.

Sample #	Internal Std.	Area	Lower/Upper Limit
			/
			/
			/
			/

(Attach additional sheets if necessary.)
(or attach copies of Form VIIIs)

ACTION: 1. If the internal standard area count is outside the "upper" or "lower" limit, flag with "J" all positive results and non-detects quantitated with this internal standard.

2. Do not qualify non-detects associated with IS area > 100%.

3. If the IS area in the sample is < 50%, qualify all analytes associated with that IS estimated (J). If area counts are extremely low (< 25% of the area in the 12 hour standard), or if performance exhibits a major abrupt drop-off, flag all associated non-detects as unusable (R) and positive hits estimated (J).

14.2 Are the retention times of the internal standards within 30 seconds of the associated calibration standard? ✓ ___ ___

ACTION: Professional judgement should be used to qualify data if the retention times differ by more than 30 seconds.

NOTE: Contractual requirements state that if any internal standard fails the acceptance criteria, the sample must be re-analyzed. If the affected sample was not re-analyzed, document in the Data Assessment under Contract Problems/Non-Compliance.

	YES	NO	N/A

NOTE: See Notes in section 3.4, page 24 for a description of sample data the laboratory must submit.

15.0 Field Duplicates

15.1 Were any field duplicates submitted for EMA analysis?

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

YES NO N/A

PART C: PESTICIDE/PCB ANALYSIS

1.0 Sample Conditions/Problems

1.1 Do the Traffic Reports/Chain-of-Custody Records or SDG Narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ✓ See case narrative

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50% - 90% water, all data should be qualified as estimated "J". If a soil sample, other than TCLP, contains more than 90% water, all data should be qualified as unusable "R".

ACTION: If samples were not iced, or if the ice was melted upon arrival at the laboratory, and the temperature of the cooler was elevated > 10° C, flag all positive results "J" and all non-detects "UJ".

ACTION: Check aqueous extraction log for sample pH, if adjustment was needed, it should have been noted in the SDG Narrative. If more information is needed, notify the WAM to contact the lab.

2.0 Holding Times

2.1 Have any PEST/PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ✓

NOTE: Technical Holding Times: Water and soil samples for PEST/PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date extraction.

ACTION: If technical holding times are exceeded, flag all positive results as estimated "J" and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use professional judgement to determine the

reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable "R".

Table of Holding Time Violations
(See Chain-of-Custody Records)

Sample Analyzed	Sample Matrix	Date Sampled	Date Lab Received	Date Extracted	Date Analyzed

NOTE: Contractual Holding Times: Extraction of water samples must be completed within 5 days VTSR. Soil/sediment samples must be extracted within 10 days of VTSR. This requirement does not apply to Performance Evaluation (PE) samples. Extracts of water and soil/sediment samples must be analyzed within 40 days following start of extraction.

ACTION: If contractual holding times are exceeded, document in the Data Assessment and Organic Regional Data Assessment Summary form.

NOTE: The data reviewer must note in the Data Assessment whether or not technical and contractual holding times were met.

3.0 Surrogate Recovery (Form II)

3.1 Are the PEST/PCB Surrogate Recovery Summaries (Form II) present for each of the following matrices:

a. Low Water? [ ] ___ ___

b. Soil? [✓] ___ ___

3.2 Are all the PEST/PCB samples listed on the appropriate Surrogate Recovery Summary for each of the following matrices:

	YES	NO	N/A
a. Low Water?			
b. Soil?	✓		

ACTION: Contact the WAM to obtain an explanation or resubmittal of any missing deliverables from the laboratory. If missing deliverables are unavailable, document the effect in the Data Assessment.

3.3 Were outliers marked correctly with an asterisk?			✓

ACTION: Circle all outliers with red pencil.

3.4 Were surrogate recoveries of TCX or DCB outside of the contract specification for any sample, method blank or sulfur clean-up blank (30-150%)?		✓	✓

ACTION: In the absence of matrix interference, qualification of the data is not required in the following three situations:

1. When surrogates on both columns are diluted out.

2. When one surrogate on one column was outside (either above or below) the contract limits but above 10%.

3. When the same surrogate on both columns is above the contract limit.

If the same surrogate on both columns is below the contract limit but above 10%, check chromatograms for interference. The reviewer may use professional judgement, and qualify only those analytes which elute in the region of the GC chromatogram where interference was observed.

If the same surrogate on both columns is below the contract limit but above 10% (with no interference), qualify non-detects and positive hits "J" (estimated .

If recoveries for both surrogates on both columns are below the contract limit but above 10%, flag positive results and non-detects for that sample "J".

YES NO N/

If recoveries are above the contract limit for both surrogates on both columns, then qualify positive values "J".

If both surrogates on one column are below the contract limit but above 10%, then use the data from the other column, providing both surrogates on that column are within contract limits. The validator must check from which column the concentration is reported for each analyte. If the value is reported from the failed column, then cross it out and use the value from the other column. Document this change in the Data Assessment.

If recovery is below 10% for either surrogate on any column, qualify positive results "J" and flag non-detects "R".

3.5 Were surrogate retention times (RT) within the windows established during the initial 3-point analysis of Individual Standard Mixture A (see Form VI Pest-1)? [✓] ___ ___

ACTION: If the RT limits are not met, positive results and non-detects for that sample may be qualified unusable, "R", based on professional judgement.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [✓] ___

ACTION: If large errors exist, contact the WAM to obtain an explanation or resubmittal of corrected deliverables from the laboratory. Make any necessary corrections and document the effect in the Data Assessment.

4.0 Matrix Spikes (Form III)

4.1 Is the Matrix Spike/Matrix Spike Duplicate Recovery Form (Form III) present? [✓] ___ ___

4.2 Were matrix spikes analyzed at the required frequency for each of the following matrices (one MS/MSD must be performed for every 20 samples of similar matrix or concentration level):

a. Low Water? [ ] ___ ___

	YES	NO	N/A
b. Soil?	✓		

ACTION: If any matrix spike data are missing, take the action specified in 1.1 above.

ACTION: Circle all outliers with red pencil.

4.3 How many PEST/PCB spike recoveries are outside QC limits?

Water	Soil
_____ out of 12	2 out of 12

4.4 How many RPDs for matrix spike and matrix spike duplicate recoveries are outside QC limits?

Water	Soil
_____ out of 6	0 out of 6

ACTION: No action is taken on MS/MSD data alone. However, using informed professional judgement, the data reviewer may use the matrix spike and matrix spike duplicate results in conjunction with other QC criteria and determine the need for some qualification of the data.

5.0 Blanks (Form IV)

	YES	NO	N/A
5.1 Is the Method Blank Summary (Form IV) present?	✓		
5.2 Frequency of Analysis: Has a reagent/method blank been analyzed for each SOC, every 20 samples of similar matrix and concentration level or each extraction batch, whichever is more frequent?	✓		

ACTION: If any blank data are missing, take action as specified above in section 1.2. If blank data is not available, reject "R" all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

5.3 A separate Form IV should be present if part of an extraction batch required sulfur removal. In such cases some samples will be listed on two blank summary forms - once under the method

	YES	NO	N/A
blank, and once under the sulfur clean-up blank (PCBLK). Was this additional blank raw data and Form IV submitted when required?			✓

ACTION: If sulfur clean-up blank data and Form IV are missing, take action as specified in 3.2 above.

5.4 Has a PEST/PCB instrument blank been analyzed at the beginning of every 12 hr. period following the initial calibration sequence (minimum contract requirement)?	✓		

ACTION: If any blank data are missing, take action as specified in section 3.2 above.

5.5 Was the correct identification scheme used for all Pest/PCB blanks? (See page 3-33, sec. 3.3.7.3 of the SOW for further information.)	✓		

ACTION: Contact the WAM to obtain resubmittals or make the required corrections on the forms. Document in the Data Assessment under Contract Problems/Non-Compliance all corrections made by the validator.

5.6 <u>Chromatography</u>: review the blank raw data - chromatograms, quant. reports and data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable?	✓		

ACTION: Use professional judgement to determine the effect on the data.

6.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are <u>not</u> used to qualify the data. Do not confuse them with the other QC blanks discussed below.

6.1 Do any method/reagent, instrument, or cleanup blanks show positive hits for pest/PCBs?		✓	

6.2 If any method blanks and/or sulfur clean-up blanks contain "hits" for target compounds, are these hits greater than the CRQL for that

	YES	NO	N/A
analyte?			
6.3 In any instrument blanks, is the concentration of any target hit > 0.5 times CRQL for that analyte (see SOW, section 11.1.4.4.2, page D-77/PEST)?		✓	

NOTE: Most labs will report 0.5 times CRQLs on the instrument blank Form I instead of the actual method CRQLs. If the lab reported the actual CRQLs, then check if any detected hits are above 0.5 times the CRQLs reported on the Form I.

ACTION: If yes to any of the above questions: note in the Data Assessment under Contract Problems/Non-Compliance if any method or clean-up blanks contain hits > the CRQL, or of instrument blank contained hits > 0.5 times CRQL for that analyte.

6.4 Do any field/rinse blanks have positive pest/PCB results?		✓	

ACTION: Prepare a list of the samples associated with each contaminated blank. (Attach a separate sheet)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data. Do not convert <u>field blank</u> results to account for the difference in soil CRQLs. Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, and/or calibration QC problems.

ACTION: Follow the directions in the table below to qualify TCL results due to contamination. Use the largest value from all the associated blanks.

NOTE: When applied as directed in the table below, the contaminant concentration in method/instrument/reagent/cleanup blanks is multiplied by the sample dilution factor, where necessary.

If the laboratory has not already done so, the contaminant concentration in <u>soil</u> blanks is multiplied by 30 times the sample dilution factor and corrected for %moisture (fraction of solid) where necessary. 30 grams of sodium sulfate are used to prepare each soil reagent method blank as instructed on page D-72/PEST, section 12.1.2.3.1. Ask the WAM

YES NO N/

to contact the laboratory if the soil blanks are not reported in soil units (µg/kg).

Flag sample result with a "U":	Report CRQL & qualify "U":	No qualification is needed:
Sample conc. > CRQL, but ≤ 5x blank.	Sample conc. < CRQL & is ≤ 5x blank value.	Sample conc. > CRQL & > 5x blank value.

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as "R", unusable.

6.5 Are there field/rinse/equipment blanks associated with every sample? ✓ ___ ___

ACTION: For low level samples, note in the Data Assessment that there is no associated field/rinse/equipment blank. For analytes with high concentrations, use professional judgement to qualify these values and document in the Data Assessment.

<u>Exception</u>: samples taken from a drinking water tap do not have associated field blanks.

7.0 Calibration and GC Performance

7.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks and MS/MSD:

a. Peak resolution check? ✓ ___ ___

b. Performance evaluation mixtures? ✓ ___ ___

c. Aroclor 1016/1260? ✓ ___ ___

d. Aroclors 1221, 1232, 1242, 1248, 1254? ✓ ___ ___

e. Toxaphene? ✓ ___ ___

f. Low points individual mixtures A & B? ✓ ___ ___

g. Med points individual mixtures A & B? ✓ ___ ___

h. High points individual mixtures A & B? ✓ ___ ___

		YES	NO	N/A
	i. Instrument blanks?	✓		
	j. Were the appropriate GC columns used as specified on pg. D-11/PEST, sections 6.23.3.1 to 6.23.3.7, in the SOW?	✓		
7.2	Do the chromatograms for all Individual Standard Mixtures and PEM analyses display single component analytes at > 10% but < 100% of full scale (see sections 9.3.5.3.1 thru 9.3.5.3.4, pages D-32 & 33/PEST)?			
	Have chromatograms for Individual Standard Mixtures and PEM analyses been replotted, showing scaling factor(s), to meet the above requirements when necessary?			

NOTE: All standard chromatograms must clearly display all peaks at > 10% but < 100% of full scale, and replotted if necessary to accommodate peaks not properly scaled in the initial chromatogram(s). Both the initial and replotted chromatograms must be submitted with the data package.

ACTION: If all single component peaks are not clearly displayed on chromatograms for all Individual Standard Mixtures and PEM analyses, notify the WAM to obtain resubmittal of the necessary data.

7.3	Are Forms VI PEST 1-7 present and complete for each column and each analytical sequence?	✓		

ACTION: If no, take action as specified in 3.2 above.

7.4	Are there any transcription/ calculation errors between raw data and Forms VI?		✓	

ACTION: If large errors exist, take action as specified in section 3.6 above.

7.5	Do all standard retention times, including each pesticide in each level of Individual Mixtures A & B, fall within the windows established during the Initial Calibration (see Form VI PEST-1)?	✓		

ACTION: If no, all samples in the entire analytical sequence are potentially affected. Check to see if the chromatograms contain peaks within an expanded window surrounding the expected

YES NO N/A

retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised RT window, qualify all positive results "JN" and non-detects as unusable (R). For aroclors, the RT may be outside the window, but the aroclor may still be identified from its distinctive pattern.

7.6 Are the linearity criteria for the initial analyses of Individual Standards A & B within limits for both columns? (%RSD must be ≤ 25.0 for alpha and delta BHC, ≤ 30.0 for the two surrogates and ≤ 20% for all other analytes.) [✓] ___ ___

NOTE: Contractual requirements allow up to two single component TCL compounds, but not surrogates, on each column to exceed the criteria provided the %RSD is ≤ 30%. (See page D-28/Pest, sec. 9.2.5.7 in the SOW.) Technical criteria, however, are the same for all analytes.

ACTION: If technical criteria were not met, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When %RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

ACTION: If more than two analytes failed %RSD, document in the Data Assessment Contract Problems/Non-Compliance section and Organic Regional Data Assessment Summary form.

7.7 Is the resolution between each pair of adjacent peaks in the Resolution Check Mixture ≥ 60.0% for both columns? (See Form VI PEST-4.) [✓] ___ ___

ACTION: If no, qualify positive results for compounds that were not adequately resolved "J". Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable (R).

7.8 Is Form VI PEST-5 present and complete for each Performance Evaluation Mixture (PEM) standard used for <u>both initial and continuing</u> calibrations (see SOW section 3.12.4.4, page B-52)? [✓] ___ ___

	YES	NO	N/A
ACTION: If no, take action as specified in section 3.2 above.			
7.9 For each PEM standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	✓		
ACTION: Qualify positive results for compounds not adequately resolved estimated (J). Qualify non-detects based on professional judgement.			
7.10 Have Forms VI PEST-6 & PEST-7 been completed for all midpoint Individual Standards A and B used for initial calibration?	✓		
For each standard, was the resolution between each pair of adjacent peaks ≥ 90.0% on both columns?	✓		
ACTION: If no, qualify positive results for compounds that were not adequately resolved estimated (J). Use professional judgement to determine if non-detects which elute in areas affected by co-eluting peaks should be qualified "N" as presumptive evidence of presence or unusable "R".			
7.11 Is Form VII Pest-1 present and complete for each PEM standard analyzed during the analytical sequence for both columns?	✓		
Was the %Breakdown of DDT and Endrin calculated using the equations given on page D-16 PEST, sec. 9.2.4.8 in the SOW?	✓		
Were all pesticides and surrogates in each PEM standard within the RT windows established during the Initial Calibration?			
ACTION: If no, take action as specified in 3.2 above.			
7.12 Has the individual percent breakdown for DDT/Endrin exceeded 20.0% in any PEM on either column? (See Form VII PEST-1.)			
- for 4,4'-DDT?		✓	
- for Endrin?		✓	
Has the combined percent breakdown for DDT/Endrin			

exceeded 30.0% in any PEM on either column (required for all PEM analyses)? ___ ✓ ___

ACTION: 1. If any percent breakdown has failed the QC criteria in either PEM in steps 2 and 17 in the initial calibration sequence (page D-28/Pest, sec. 9.2.5.6 in the SOW), qualify all samples in the entire analytical sequence as described in sections 2.a, b and c below.

2. If any percent breakdown failed the QC criteria in a PEM calibration verification analysis, review data beginning with the samples which followed the last in-control standard until the next acceptable PEM and qualify the data as described below.

a. 4,4'-DDT Breakdown: If DDT breakdown was > 20.0%:

i. Qualify all positive results for DDT with "J". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT unusable, "R".

ii. Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".

b. Endrin Breakdown: If endrin breakdown was > 20.0%:

i. Qualify all positive results for endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for Endrin as unusable "R".

ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN".

c. Combined Breakdown: If the combined 4,4'-DDT and endrin breakdown is greater than 30.0%:

i. Qualify all positive results for DDT and Endrin with "J". If endrin was not detected, but endrin aldehyde and endrin ketone are positive, then qualify the quantitation limit for endrin as unusable

	YES	NO	N/A
"R". If DDT was not detected, but DDD and DDE are positive, then qualify the quantitation limit for DDT as unusable "R".			
ii. Qualify positive results for endrin ketone and endrin aldehyde as presumptively present at an approximated quantity "JN". Qualify positive results for DDD and/or DDE as presumptively present at an approximated quantity "JN".			
7.13 Are all percent difference (%D) values for PEM analytes and surrogates on both columns ≥ -25% and ≤ -25.0%? (See Form VII PEST-1.)	✓		
ACTION: If no, qualify all associated positive results generated during the analytical sequence "J" and sample quantitation limits "UJ".			
NOTE: If the failing PEM is part of the initial calibration, all samples are potentially affected. If the offending standard is a calibration verification, the associated samples are those which followed the last in-control standard until the next passing standard.			
7.14 Is Form VII Pest-2 present and complete for each INDA and INDB calibration verification analyzed?	✓		
ACTION: If no, take action specified in 3.2 above.			
7.15 Are there any transcription/calculation errors between raw data and Form VII Pest-2?		✓	
ACTION: If large errors exists, take action as specified in section 3.6 above.			
7.16 Do all standard retention times for each INDA and INDB calibration verification fall within the RT windows established during the initial calibration sequence? (See Form VII PEST-2.)	✓		
ACTION: If no, beginning with the samples which followed the <u>last in-control standard</u>, check to see if the chromatograms contain peaks within an expanded window surrounding the expected retention times. If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present and cannot be identified through pattern recognition or using a revised			

YES NO N/A

RT window, qualify all positive results and non-detects as unusable (R).

7.17 Are all %D values for INDA and INDB calibration verification compounds ≥ -25.0% and ≤ +25.0%? ✓ ___ ___

ACTION: If the %D is outside the ±25.0% range for any compound(s), qualify associated positive results for that compound "J" and non-detects "UJ". The "associated samples" are those which followed the last in-control standard up to the next passing standard containing the analyte(s) in question. If the %D is > 90%, flag all non-detects for that analyte "R" (unusable).

8.0 Analytical Sequence Check (Form VIII-PEST)

8.1 Is Form VIII present and complete for each column and each period of analyses? ✓ ___ ___

ACTION: If no, take action specified in 3.2 above.

8.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses, and all standards analyzed at the required frequency for each GC/EC instrument used.? (See SOW pages D-23 & D-58/PEST.) ✓ ___ ___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Generally, the effect is negligible unless the sequence was grossly altered and/or the calibration was out of QC limits.

8.3 Were all samples analyzed within a 12 hour time period beginning with the injection of an instrument blank and bracketed by acceptable analyses of the proper standards? ✓ ___ ___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify accordingly. Document in the Data Assessment under Contract Problems/Non-Compliance and Organic Regional Data Assessment Summary.

8.4 If a multi-component analyte was detected in a sample, was a matching multi-component standard analyzed within 72 hours of the injection of the

	YES	NO	N/A
sample and within a valid 12 hour sequence?	✓		

NOTE: This additional standard is for identification purposes only. Positive results for Aroclors and Toxaphene are quantitated from the initial calibration.

ACTION: If no, document in the Data Assessment under Contract Problems/Non-Compliance and on the Organic Regional Data Assessment Summary form.

9.0 Cleanup Efficiency Verification (Form IX)

	YES	NO	N/A
9.1 Is Form IX PEST-1 present and complete for each lot of Florisil Cartridges used? (Florisil Cleanup is required for all Pest/PCB extracts.)	✓		
Are all samples listed on the Pesticide Florisil Cartridge Check Form?	✓		

ACTION: If no, take action specified in 3.2 above. If data suggests florisil clean-up was not performed, document in the Data Assessment under the Contract Non-compliance section.

	YES	NO	N/A
9.2 Are percent recoveries (%REC) of the pesticide and surrogate compounds used to check the efficiency of the florisil clean-up procedure within QC limits of 80 - 120%?	✓		

ACTION: Qualify only the analyte(s) which failed the recovery criteria as follows:

If %REC is < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 120%.

NOTE: Sample data should be evaluated for potential interferences if recovery of 2,4,5-trichlorophenol was > 5% in the Florisil Cartridge Performance Check analysis. Document any problems found in the Data Assessment under the Contract Problems/Non-Compliance section.

	YES	NO	N/A
9.3 If GPC Cleanup was performed (mandatory for all soil sample extracts), is Form IX Pest-2 present?	✓		
Are all soil samples listed on Form IX Pest-2?	✓		

ACTION: If no, take action specified in 3.2 above. If data suggests GPC clean-up was not performed when required, document in the Data Assessment under the Contract Problems/Non-Compliance section and Organic Regional Data Assessment Summary.

Are the %REC values for all pesticides in the GPC calibration solution between 80 - 110%?	✓		

ACTION: Qualify only those analytes which failed the recovery criteria as follows:

If %REC are < 80%, qualify positive results "J" and non-detects "UJ".

If any pesticide %REC was zero, flag non-detects "R" for that compound.

Use professional judgement to qualify positive results if any recoveries are > 110%.

NOTE: An Aroclor mixture containing Aroclors 1016 and 1260 is also analyzed during GPC calibration; however, Aroclor data is not listed on Form IX PEST-2. The raw GPC data for Aroclors 1016/1260 must be evaluated for pattern similarity with previously analyzed Aroclor standards.

9.4 The validator should verify that the correct identification scheme for the EPA Blank samples were used. See page B-35, sec. 3.3.7.8 and 3.3.7.9 of the SOW for further information.			
Was the correct identification scheme used for GPC and Florisil blanks?			

10.0 Pesticide/PCB Identification

10.1 Is Form X complete for every sample in which a pesticide or PCB was detected?	✓		

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
10.2 Are all sample chromatograms properly scaled, attenuated, etc. as required for proper identification of single and multi-component analytes? (Refer to SOW sections 11.3.7.1 thru 11.3.7.8, page D-70, Pest for specific details.)	[ ]		

NOTE: Proper verification of Pest/PCB results depends on clear, legible presentation of the raw data. Single component pesticides and all peaks chosen for quantitation of multi-component analytes must appear at less than full scale. Toxaphene and PCB patterns must be clearly visible to enable comparison with standard chromatograms.

ACTION: If retention times or apex of peaks cannot be verified, or if multi-component peak patterns cannot be discerned, contact the WAM to obtain rescaled chromatograms from the lab.

10.3 Are there any transcription/calculation errors between raw data and Forms 10A and 10B?		[✓]	

ACTION: If large errors exist, take action as specified in section 3.6 above.

10.4 Are RTs of sample compounds within the established RT windows for analyses on both columns?	[ ]		
Was GC/MS confirmation provided when required (when compound concentration is > 10 ug/mℓ in the final extract)?	[ ]		

ACTION: Use professional judgement to qualify positive results which were not confirmed by GC/MS analysis. Qualify as unusable (R) all positive results which were not confirmed on a second GC column. Also qualify as unusable (R) all positive results which do not meet RT window criteria, unless associated standard compounds are similarly biased. Use professional judgement to assign an appropriate quantitation limit.

10.5 Is the percent difference (%D) calculated for the positive sample results on both columns > 25.0%?	✓	[ ]	

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be flagged as follows:

YES NO N/

% Difference	Qualifier
0 - 25%	None
25 - 70%	"J"
70 - 100%	"JN"
> 100%	"R"
100 - 200% (Interference detected)*	"JN"
> 50% (Pesticide value is < CRQL)**	"U"

* When the reported %D is 100 - 200%, but interference is detected on either column, qualify the data with "J".

** When the reported pesticide value is lower than the CRQL, and the %D is > 50%, raise the value to the CRQL and qualify "U", undetected.

NOTE: For Aroclors, if the %D is > 50%, but the pattern of GC peaks on both columns indicates a specific Aroclor is present, qualify that Aroclor "J".

NOTE: The lower of the two values is reported on Form I. If using professional judgement, the reviewer determines that the higher result was more acceptable, the reviewer should replace the value and indicate the reason for the change in the Data Assessment.

10.6 Check chromatograms for false negatives, especially the multiple-peak compounds (Toxaphene and the PCBs). Were there any false negatives? ___ ✓ ___

ACTION: Use professional judgement to decide if the compound should be reported. If the appropriate PCB standards were not analyzed within 72 hrs. of the sample(s) in question, qualify the data unusable "R".

Also note in Data Assessment under Contract Problems/Non-Compliance if the lab failed to analyze Aroclor standards when required.

11.0 Target Compound List (TCL) Analytes

11.1 Are the Organic Analysis Data Sheets (Form I Pest) present with required header information on each page, for each of the following:

a. Samples and/or fractions as appropriate? ✓ ___ ___

b. Matrix spikes and matrix spike duplicates? ✓ ___ ___

	YES	NO	N/A
c. Blanks?	✓		
d. Instrument Blanks (per column & analysis)?	✓		
11.2 Are the Pest chromatograms and quant. reports included in the sample data package for each of the following:			
a. Samples and/or fractions as appropriate?	✓		
b. Matrix spikes and matrix spike duplicates?	✓		
c. Blanks?	✓		
d. Instrument Blanks (per column & analysis)?	✓		

ACTION: If any data are missing, take action specified in 3.2 above.

11.3 Are the calibration factors shown in the quant. reports?			
11.4 Is chromatographic performance acceptable with respect to:			
a. Baseline stability?	✓		
b. Resolution?			
c. Peak shape?			
d. Full-scale graph attenuation?			
e. Other: _____?			
11.5 Were any electropositive displacement (negative peaks) or unusual peaks seen?			

ACTION: Use professional judgement to determine the acceptability of the data. Address comments under System Performance section of the Data Assessment.

12.0 Compound Quantitation and Reported Detection Limits

12.1 Are there any transcription/calculation errors in Form I results? Check at least two positive results. Were any errors found?		✓	

YES NO N/A

NOTE: Single-peak pesticide results can be checked for rough agreement between quantitative results obtained on the two GC columns. Use professional judgement to decide whether a large discrepancy indicates the presence of an interfering compound. If an interfering compound is visible on the chromatogram, the lower of the two values should be reported and qualified as presumptively present at an approximated quantity "JN". This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has interfered with the evaluation of the second column confirmation.

12.2 Are the CRQLs adjusted to reflect sample dilutions? ✓ ___ ___

ACTION: If large errors exist, take action as specified in section 3.6 above.

ACTION: When a sample is analyzed at more than one dilution, the lowest CRQLs are used (unless a QC exceedance dictates the use of the higher CRQLs from the diluted sample). Replace concentrations which exceed the calibration range in the original analysis by crossing out the "E" value on the original Form I and substituting it with the result from the diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including those in the data summary package.

ACTION: Quantitation limits affected by large, off-scale peaks should be qualified as unusable (R). If the interference is on-scale, the reviewer may offer an approximated quantitation limit (UJ) for each affected compound.

NOTE: If a sample required greater than a 10 times dilution, then a 10 times more concentrated analysis must also be performed and submitted (see SOW, page D-60/PEST, section 10.2.3.5).

ACTION: If a more concentrated analysis is unavailable, document in the Contract Problems/Non-Compliance section of the Data Assessment. Use professional judgement to qualify non-detects and positive hits below the CRQL.

	YES	NO	N/A
13.0 Field Duplicates			
13.1 Were any field duplicates submitted?		✓	

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, identification of field duplicates should be confirmed by contacting the sampler.

SAMPLENUM	CLIENTID	CASE	SDG	MATRIX	ACCTNUM	PROJECTNUM	RECEIVEDATE
BNR60-1	BNR60	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-2	BNR61	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-3	BNR62	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-4	BNR65	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-5	BNR66	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-6	BNR71	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-7	BNR72	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-8	BNR78	28924	BNR60	SO	EPA	68W99070-1A	1/24/01
BNR60-9	BNR79	28924	BNR60	SO	EPA	68W99070-1A	1/24/01

FEB 06 2001

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
CASE #28924
SDG #BNR60
CONTRACT # 68W99070

SAMPLE IDENTIFICATIONS: BNR60 BNR61 BNR62 BNR65 BNR66 BNR71 BNR72 BNR78 BNR79 BNR80 BNR83 BNR91 BNR95 BNR96 BNR97 BNS00 BNS01 BPH52 BPH53 BPH59

The twenty soil samples listed above were received intact in Encore samplers, at 4 degrees C, with documentation, in sealed shipping containers, on January 24, 2001. All samples were scheduled for volatile, semivolatile, and pesticide-PCB analysis.

The samples were prepared and analyzed following Contract Laboratory Protocol(CLP) Statement of Work(SOW), document OLM04.2. This portion of the SDG narrative deals with the volatile fractions only. All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices for Case # 28924, SDG # BNR60 are included in the sample data sections.

The laboratory reported to SMO on 01/22/01 that sample BPH65 as listed on the traffic report 388205 was not received. We did however receive a sample BNR83 that was not listed on the traffic report and inspection of the label revealed that the sample was mismatched on the traffic report for BPH65(01/22/01-1525)(station location–4042-SS24) We are reporting the sample as BNR83, and a copy of the e-mail accompanies this narrative.

Analysis holding time requirements were met for all of these samples, and the sample dry weight values ranged from 9 to 30 percent. The Target Compound List(TCL) analytes acetone, methylene chloride, and 2-butanone, were the most frequently identified with acetone and 2-butanone the most prevalent above the Contract Required Quantitation Limit(CRQL).

Other than laboratory artifact and laboratory siloxane peaks, Tentatively Identified Compounds(TICs) were present in the majority of samples, and the majority of TICs were of unknown characterization.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The system monitoring compounds (SMCs) met recovery criteria in the analyses of these samples, and all of the internal standards met retention time and response criteria in the analyses of these samples.

The associated storage blank met all quality control criteria, and did not contain any target analytes above the CRQL.

The asssociated method blanks met all QC criteria, and did not contain any TCL analytes above the CRQL with the exception of methylene chloride in VBLKKD. Levels of methylene chloride were however less than 2.5X the CRQL as allowed for this common laboratory solvent.

The alkane pentane was present in both method blank VBLKKD, storage blank, and the majority of samples at reportable levels as a TIC. This was traced to our use of sodium bisulfate pre-preserved vials, which were not used in all sample and blank preparations, which were instead prepped by the lab using an in-house solution of sodium bisulfate. Pentane was assessed as present in this lot of pre-preserved vials at levels that were acceptable(ie below a reportable level), however a different box of vials from this same lot did have high levels of pentane. The supplier will be contacted in efforts to correct this anomaly.

Duplicate matrix spikes were generated from BNR60 as requested, and all QC precision and accuracy criteria were met without exception.

Manual quantitations were performed on the process files in some of the the associated initial, and continuing calibration(s) and in samples BNR66, BNR72, BNR80, BNR83, BNR60MS, BNR60MSD, BNR91, BNR95, BNR71, BNR96, and BPH52. The reasons have been coded with explanations provided in the notice included in the narrative section of this SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Roy Sutton
Case Reviewer
January 31, 2001

Melissa Stevens

From: Alice Evans <aevans@compuchemlabs.com>
To: Bauer, Heather <Heather.Bauer@dyncorp.com>
Cc: Melissa Stevens <mstevens@compuchemlabs.com>
Sent: Wednesday, January 31, 2001 11:28 AM
Attach: Alice Evans.vcf
Subject: Case 28924 Missing sample

We reported on 01/2201 that sample BPH65 as listed on the Traffic Report 388205 but the sample was not received.
We did receive a sample labeled |BNR83 that was not listed on the Traffic Report. Upon further inspection of the label we found that it matched the information on the traffic report for BPH65 (01/22/01-1525) (station location-4042-SS24). We are reporting this sample as BNR83. Please inform Region II of the error on the Traffic Report and request that we use the sample no listed on the jar.

Thanks Alice

Alice Evans
CompuChem/Liberty
501 Madison Ave
Cary, NC 27513
919-379-4080

ALKANE NARRATIVE REPORT
Report date : 01/31/2001
SDG: BNR60

Client Sample ID: VBLKKD Lab Sample ID: WG8181-1 File ID: WG8181-1B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.14	255.9	J

Client Sample ID: BNR60 Lab Sample ID: BNR60-1 File ID: BNR60-1B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	6.82	205.5	J

Client Sample ID: BNR61 Lab Sample ID: BNR60-2 File ID: BNR60-2B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	17.00	JB

Client Sample ID: BNR65 Lab Sample ID: BNR60-4 File ID: BNR60-4B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.12	81.09	JB

Client Sample ID: BNR66 Lab Sample ID: BNR60-5 File ID: BNR60-5B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.12	55.40	JB

Client Sample ID: BNR72 Lab Sample ID: BNR60-7 File ID: BNR60-7B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.12	34.96	JB
Straight-Chain Alkane	6.82	77.11	J

Client Sample ID: BNR78 Lab Sample ID: BNR60-8 File ID: BNR60-8B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	83.67	JB

Client Sample ID: BNR79 Lab Sample ID: BNR60-9 File ID: BNR60-9B59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.12	28.49	JB

Client Sample ID: BNR80 Lab Sample ID: BNR60-10 File ID: BNR60-10B59

Compound	RT	Est. Conc.	Q

Unknown Alkane	5.12	12.89	J
Straight-Chain Alkane	6.81	45.71	J

Client Sample ID: BNR83 Lab Sample ID: BNR60-11 File ID: BNR60-11B

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.12	71.07	JB

Client Sample ID: BNR91 Lab Sample ID: BNR60-12 File ID: BNR60-12RA59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.14	44.40	J

Client Sample ID: BNR95 Lab Sample ID: BNR60-13 File ID: BNR60-13A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	59.90	J
Straight-Chain Alkane	6.84	18.28	J

Client Sample ID: BNR71 Lab Sample ID: BNR60-6 File ID: BNR60-6RA59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	31.14	J

Client Sample ID: BNR96 Lab Sample ID: BNR60-14 File ID: BNR60-14A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	26.02	J

Client Sample ID: BNR97 Lab Sample ID: BNR60-15 File ID: BNR60-15A59

Compound	RT	Est. Conc.	Q
Unknown Alkane	5.13	9.04	J

Client Sample ID: BNS00 Lab Sample ID: BNR60-16 File ID: BNR60-16A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.14	61.96	J

Client Sample ID: BNS01 Lab Sample ID: BNR60-17 File ID: BNR60-17A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.14	30.24	J

Client Sample ID: BPH53 Lab Sample ID: BNR60-19 File ID: BNR60-19A59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.14	35.49	J

Client Sample ID: BPH59 Lab Sample ID: BNR60-20 File ID: BNR60-20RA59

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.13	20.80	J

Client Sample ID: VHBLKLK Lab Sample ID: WG8231-6 File ID: WG8231-6RA5

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	5.17	137.6	J

COMPUCHEM
A division of Liberty Analytical Corporation
501 Madison Ave.
Cary, NC 27513

SDG NARRATIVE

CASE #28924
SDG #BNR60
CONTRACT #68W99070

SAMPLE IDENTIFICATIONS:

BNR60 BNR61 BNR62 BNR65 BNR66 BNR71 BNR72 BNR78 BNR79 BNR80
BNR83 BNR91 BNR95 BNR96 BNR97 BNS00 BNS01 BPH52 BPH53 BPH59

This portion of the SDG narrative deals with the semivolatile fractions for the twenty samples above only. For the receiving information associated with these samples, please refer to the volatile SDG narrative.

All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for Case #28924, SDG #BNR60 are included in the sample data sections.

SEMIVOLATILE
The semivolatile fractions were extracted and analyzed within the required holding time. The percent moisture values for the samples ranged from 9% to 30% and the pH values ranged from 5.3 to 7.8.

No Target Compound List (TCL) analytes were detected with concentrations above the Contract Required Quantitation Limit (CRQL) in the samples.

Two to eleven Tentatively Identified Compounds (TIC) were detected in the samples. These TICs were assessed as unknowns, substituted naphthalene and carboxylic. Other TICs were detected and assessed as unknown alkanes in some of the samples. The TICs that were characterized as alkanes have been summarized on the Alkane Narrative Report that is located in the narrative section of the data package. The TIC spectra for the alkanes are located in the data section for the individual samples.

QC SUMMARY
All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria for the semivolatile fractions, with some exceptions. The recovery of 1,2-dichlorobenzene-d4 was flagged as an outlier in BNR61 and the recoveries of 1,2-dichlorobenzene and 2-fluorobiphenyl was flagged as outliers in BNR95.

The internal standards met area response and retention time criteria.

BNR60 was used as the original to prepare the duplicate matrix spikes as requested. The duplicate matrix spikes met accuracy and precison criteria, with one exception. The relative percent difference value of acenaphthene was flagged as an outlier in the comparison of the duplicate matrix spikes.

The associated blanks met Quality Control criteria.

In the analyses of the Initial and Continuing Calibration standards and all of the samples, manual quantitations were performed. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his/her designee, as verified by the following signature:

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
31 January 2001

Note: This report is paginated for reference and accountability in numerical sequence.

ALKANE NARRATIVE REPORT
Report date : 01/31/2001
SDG: BNR60

Client Sample ID: BNR65 Lab Sample ID: BNR60-4 File ID: BNR60-4A66

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	26.67	102.8	J
Straight-Chain Alkane	27.99	80.86	J

Client Sample ID: BNR78 Lab Sample ID: BNR60-8 File ID: BNR60-8A66

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	26.67	179.6	J
Straight-Chain Alkane	27.99	298.0	J
Straight-Chain Alkane	29.77	113.1	J

Client Sample ID: BNR79 Lab Sample ID: BNR60-9 File ID: BNR60-9A66

Compound	RT	Est. Conc.	Q
Straight-Chain Alkane	26.68	91.64	J
Straight-Chain Alkane	27.99	89.76	J

CompuChem
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, North Carolina 27513

SDG NARRATIVE

CASE: 28924
SDG: BNR60
CONTRACT: 68W99070

SAMPLE IDENTIFICATION: BNR60, BNR61, BNR62, BNR65, BNR66, BNR71, BNR72, BNR78, BNR79, BNR80, BNR83, BNR91, BNR95, BNR96, BNR97, BNS00, BNS01, BPH52, BPH53, BPH59

This portion of the SDG narrative covers only the pesticide fractions of the twenty (20) samples listed above. For receiving information pertaining to these samples, please refer to the portion of the SDG narrative that covers the volatile fractions.

PESTICIDES

Extraction and analysis holding time requirements were met for all of these samples. The pesticide Target Compound List (TCL) analytes 4,4'-DDE, 4,4'-DDT, and gamma-chlordane were confirmed by dual column analysis at a concentration above the Contract Required Quantitation Limit (CRQL) in BNR79. The PCB TCL analytes Aroclor 1248 and 1254 were confirmed by dual column analysis at a concentration above the CRQL in BNR79 and BNR80.

Manual quantitations were performed on several of the process files associated with this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All of the surrogates met recovery and retention time criteria in the analyses of these samples. The associated method blank met all quality control criteria. No pesticide or PCB TCL analytes were confirmed by dual column analysis in the method blank.

BNR60 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met all advisory accuracy and precision criteria with two exceptions. The recovery of the spike compound gamma-BHC was flagged as an outlier in both the matrix spike and matrix spike duplicate.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions listed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Stephanie W. Winfield 1-31-01
Stephanie W. Winfield
Technical Reviewer
January 31, 2001

LIBERTY ANALYTICAL
501 Madison Avenue
Cary, NC 27513

ORIGINAL

SAMPLE DELIVERY GROUP(SDG) TRAFFIC REPORT(TR) COVER SHEET

SDG Number BNR60

Laboratory Name COMPUCHEM

Laboratory Code LIBRTY

Contract No. 68W99070

Case No. 28924

Analysis Price

SDG turnaround 21 DAY

EPA Sample Numbers in SDG (Listed in Numerical order):

1)	BNR60	7)	BNR72	13)	BNR95	19)	BPH53
2)	BNR61	8)	BNR78	14)	BNR96	20)	BPH59
3)	BNR62	9)	BNR79	15)	BNR97	~~21)~~	
4)	BNR65	10)	BNR80	16)	BNS00	22)	MS 1/24/01
5)	BNR66	11)	BNR83	17)	BNS01	~~23)~~	
6)	BNR71	12)	BNR91	18)	BPH52	~~24)~~	

BNR60
First Sample in SDG

BPH59
Last Sample in SDG

01/24/01
First Sample Receipt Date

01/24/01
Last Sample Receipt Date

Note: There are a maximum of 20 **field** samples (excluding PE samples) in an SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Signature: Melissa Steen Date: 01/24/01

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 6.11(g/mL) G Lab File ID: BNR60-1B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	63	~~B~~ J
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U J
75-09-2	Methylene Chloride	10 ~~1~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	11	~~B~~ UJ
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 6.11(g/mL) G Lab File ID: BNR60-1B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U J
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U J
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U J
120-82-1	1,2,4-Trichlorobenzene	10	U

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 6.11 (g/mL) G Lab File ID: BNR60-1B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.47	19	J
2. 75-07-0	ACETALDEHYDE	4.16	32	NJ
3.	UNKNOWN	5.16	81	J
4.	UNKNOWN	11.21	18	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 5.94(g/mL) G Lab File ID: BNR60-2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	30	~~B~~ UJ
75-15-0	Carbon Disulfide	1	J
79-20-9	Methyl Acetate	10	U J
75-09-2	Methylene Chloride	10 ~~4~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U J
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 5.94(g/mL) G Lab File ID: BNR60-2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U J
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U J
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U J
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 5.94 (g/mL) G Lab File ID: BNR60-2B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.46	17	J
2.	UNKNOWN	4.16	5	J
3.	UNKNOWN	11.20	5	J
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 5.30(g/mL) G Lab File ID: BNR60-3B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 18 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl Chloride	12	U
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,~~2-~~Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	180	~~B~~ J
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl Acetate	12	U J
75-09-2	Methylene Chloride	12.4	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	21	~~B~~ UJ
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 5.30(g/mL) G Lab File ID: BNR60-3B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 18 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U J
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U J
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U J
120-82-1	1,2,4-Trichlorobenzene	12	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 5.30 (g/mL) G Lab File ID: BNR60-3B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 18 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 13 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.46	12	J
2.	UNKNOWN	4.16	47	J
3.	UNKNOWN	5.16	200	J
4. 110-00-9	FURAN	5.42	11	NJ
5.	UNKNOWN	5.59	6	J
6.	UNKNOWN	5.78	15	J
7.	UNKNOWN	6.72	6	J
8.	UNKNOWN	7.41	13	J
9.	UNKNOWN	8.82	9	J
10.	UNKNOWN	9.50	8	J
11. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	10.77	12	~~NJ~~ R
12.	UNKNOWN	11.20	49	J
13.	LABORATORY ARTIFACT	14.24	8	~~JB~~ R
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 3.22(g/mL) G Lab File ID: BNR60-4B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	18	U
74-87-3	Chloromethane	18	U
75-01-4	Vinyl Chloride	18	U
74-83-9	Bromomethane	18	U
75-00-3	Chloroethane	18	U
75-69-4	Trichlorofluoromethane	18	U
75-35-4	1,1-Dichloroethene	18	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18	U
67-64-1	Acetone	18 ~~16~~	~~JB~~ UJ
75-15-0	Carbon Disulfide	18	U
79-20-9	Methyl Acetate	18	U J
75-09-2	Methylene Chloride	18 ~~5~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	18	U
1634-04-4	Methyl-tert-butyl ether	18	U
75-34-3	1,1-Dichloroethane	18	U
156-59-2	cis-1,2-Dichloroethene	18	U
78-93-3	2-Butanone	18 ~~8~~	~~JB~~ UJ
67-66-3	Chloroform	18	U
71-55-6	1,1,1-Trichloroethane	18	U
110-82-7	Cyclohexane	18	U
56-23-5	Carbon Tetrachloride	18	U
71-43-2	Benzene	18	U
107-06-2	1,2-Dichloroethane	18	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 3.22(g/mL) G Lab File ID: BNR60-4B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	18	U
108-87-2	Methylcyclohexane	18	U
78-87-5	1,2-Dichloropropane	18	U
75-27-4	Bromodichloromethane	18	U
10061-01-5	cis-1,3-Dichloropropene	18	U
108-10-1	4-Methyl-2-Pentanone	18	UJ
108-88-3	Toluene	18	U
10061-02-6	trans-1,3-Dichloropropene	18	U
79-00-5	1,1,2-Trichloroethane	18	U
127-18-4	Tetrachloroethene	18	U
591-78-6	2-Hexanone	18	UJ
124-48-1	Dibromochloromethane	18	U
106-93-4	1,2-Dibromoethane	18	U
108-90-7	Chlorobenzene	18	U
100-41-4	Ethylbenzene	18	U
1330-20-7	Xylene (Total)	18	U
100-42-5	Styrene	18	U
75-25-2	Bromoform	18	U
98-82-8	Isopropylbenzene	18	U
79-34-5	1,1,2,2-Tetrachloroethane	18	U
541-73-1	1,3-Dichlorobenzene	18	U
106-46-7	1,4-Dichlorobenzene	18	U
95-50-1	1,2-Dichlorobenzene	18	U
96-12-8	1,2-Dibromo-3-Chloropropane	18	UJ
120-82-1	1,2,4-Trichlorobenzene	18	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 3.22 (g/mL) G Lab File ID: BNR60-4B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 16 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.20	19	J
2.				
3.				
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 5.80(g/mL) G Lab File ID: BNR60-5B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	11	~~JB~~ UJ
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U J
75-09-2	Methylene Chloride	11 ~~4~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	11 ~~4~~	~~JB~~ UJ
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 5.80(g/mL) G Lab File ID: BNR60-5B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U J
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U J
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U J
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 5.80 (g/mL) G Lab File ID: BNR60-5B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 115-07-1	PROPENE	3.43	8	NJ
2.	UNKNOWN	3.47	10	J
3.	UNKNOWN	4.17	6	J
4.				
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1A
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EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 4.07(g/mL) G Lab File ID: BNR60-6RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 15 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	✓14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	61	J
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	6	J
75-09-2	Methylene Chloride	14 ~~11~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl-tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	10	~~J~~ J
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 4.07(g/mL) G Lab File ID: BNR60-6RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 15 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 4.07 (g/mL) G Lab File ID: BNR60-6RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 15 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.18	16	~~JB~~
2.	UNKNOWN	4.31	8	~~JB~~ R
3.	UNKNOWN	7.41	15	J
4.	UNKNOWN	9.50	20	J
5.	UNKNOWN	11.22	43	J
6.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 5.24 (g/mL) G Lab File ID: BNR60-7B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 9 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	23	~~B~~ UJ
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U J
75-09-2	Methylene Chloride	10 ~~6~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10 ~~5~~	~~JB~~ UJ
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 5.24(g/mL) G Lab File ID: BNR60-7B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 9 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	UJ
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	UJ
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	UJ
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 5.24 (g/mL) G Lab File ID: BNR60-7B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 9 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.16	6	J
2.	UNKNOWN	11.20	6	J
3.				
4.				
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1A
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EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 5.52(g/mL) G Lab File ID: BNR60-8B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 24 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl Chloride	12	U
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	67	~~B~~ J
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl Acetate	12	U J
75-09-2	Methylene Chloride	~~12.6~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	15	~~B~~ UJ
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 5.52(g/mL) G Lab File ID: BNR60-8B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 24 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U J
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U J
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U J
120-82-1	1,2,4-Trichlorobenzene	12	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 5.52 (g/mL) G Lab File ID: BNR60-8B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 24 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.48	16	J
2.	UNKNOWN	4.16	22	J
3.	UNKNOWN	8.82	12	J
4.	UNKNOWN	9.49	8	J
5. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	10.77	11	~~NJ~~ K
6.	UNKNOWN	11.20	22	J
7.	LABORATORY ARTIFACT	14.25	7	~~JB~~ K
8.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 5.10(g/mL) G Lab File ID: BNR60-9B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 20 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl Chloride	12	U
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	41	~~B~~ UJ
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl Acetate	12	U J
75-09-2	Methylene Chloride	~~12.5~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	~~12.8~~	~~JB~~ UJ
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	3	J
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 5.10(g/mL) G Lab File ID: BNR60-9B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 20 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U J
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U J
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U J
120-82-1	1,2,4-Trichlorobenzene	12	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 5.10 (g/mL) G Lab File ID: BNR60-9B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 20 Date Analyzed: 01/25/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.46	18	J
2.	UNKNOWN	4.16	12	J
3.	UNKNOWN	6.82	6	J
4.	UNKNOWN	9.49	6	J
5.	UNKNOWN	11.20	27	J
6.				
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FORM I VOA-TIC OLM04.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 5.89(g/mL) G Lab File ID: BNR60-10B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	57	~~B~~ J
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U J
75-09-2	Methylene Chloride	10 ~~5~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10 ~~8~~	~~JB~~ U J
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 5.89(g/mL) G Lab File ID: BNR60-10B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U J
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U J
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U J
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 5.89 (g/mL) G Lab File ID: BNR60-10B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 13 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.46	7	J
2.	UNKNOWN	4.16	7	J
3.	UNKNOWN	11.20	12	J
4.	LABORATORY ARTIFACT	15.57	5	~~J~~ K
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FORM I VOA-TIC OLM04.2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 2.12(g/mL) G Lab File ID: BNR60-11B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	28	U
74-87-3	Chloromethane	28	U
75-01-4	Vinyl Chloride	28	U
74-83-9	Bromomethane	28	U
75-00-3	Chloroethane	28	U
75-69-4	Trichlorofluoromethane	28	U
75-35-4	1,1-Dichloroethene	28	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	28	U
67-64-1	Acetone	81	~~B~~ J
75-15-0	Carbon Disulfide	28	U
79-20-9	Methyl Acetate	28	U J
75-09-2	Methylene Chloride	28	U
156-60-5	trans-1,2-Dichloroethene	28	U
1634-04-4	Methyl-tert-butyl ether	28	U
75-34-3	1,1-Dichloroethane	28	U
156-59-2	cis-1,2-Dichloroethene	28	U
78-93-3	2-Butanone	28 ~~12~~	~~JB~~ UJ
67-66-3	Chloroform	28	U
71-55-6	1,1,1-Trichloroethane	28	U
110-82-7	Cyclohexane	28	U
56-23-5	Carbon Tetrachloride	28	U
71-43-2	Benzene	28	U
107-06-2	1,2-Dichloroethane	28	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 2.12(g/mL) G Lab File ID: BNR60-11B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	28	U
108-87-2	Methylcyclohexane	28	U
78-87-5	1,2-Dichloropropane	28	U
75-27-4	Bromodichloromethane	28	U
10061-01-5	cis-1,3-Dichloropropene	28	U
108-10-1	4-Methyl-2-Pentanone	28	U J
108-88-3	Toluene	28	U
10061-02-6	trans-1,3-Dichloropropene	28	U
79-00-5	1,1,2-Trichloroethane	28	U
127-18-4	Tetrachloroethene	28	U
591-78-6	2-Hexanone	28	U J
124-48-1	Dibromochloromethane	28	U
106-93-4	1,2-Dibromoethane	28	U
108-90-7	Chlorobenzene	28	U
100-41-4	Ethylbenzene	28	U
1330-20-7	Xylene (Total)	28	U
100-42-5	Styrene	28	U
75-25-2	Bromoform	28	U
98-82-8	Isopropylbenzene	28	U
79-34-5	1,1,2,2-Tetrachloroethane	28	U
541-73-1	1,3-Dichlorobenzene	28	U
106-46-7	1,4-Dichlorobenzene	28	U
95-50-1	1,2-Dichlorobenzene	28	U
96-12-8	1,2-Dibromo-3-Chloropropane	28	U J
120-82-1	1,2,4-Trichlorobenzene	28	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 2.12 (g/mL) G Lab File ID: BNR60-11B59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/26/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.16	17	J
2.	UNKNOWN	9.49	19	J
3. 66-25-1	HEXANAL	11.21	85	NJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 5.54(g/mL) G Lab File ID: BNR60-12RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	12	U
74-87-3	Chloromethane	12	U
75-01-4	Vinyl Chloride	12	U
74-83-9	Bromomethane	12	U
75-00-3	Chloroethane	12	U
75-69-4	Trichlorofluoromethane	12	U
75-35-4	1,1-Dichloroethene	12	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	12	U
67-64-1	Acetone	53	J
75-15-0	Carbon Disulfide	12	U
79-20-9	Methyl Acetate	5	J
75-09-2	Methylene Chloride	~~8~~ 12	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	12	U
1634-04-4	Methyl-tert-butyl ether	12	U
75-34-3	1,1-Dichloroethane	12	U
156-59-2	cis-1,2-Dichloroethene	12	U
78-93-3	2-Butanone	7	~~J~~ J
67-66-3	Chloroform	12	U
71-55-6	1,1,1-Trichloroethane	12	U
110-82-7	Cyclohexane	12	U
56-23-5	Carbon Tetrachloride	12	U
71-43-2	Benzene	12	U
107-06-2	1,2-Dichloroethane	12	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 5.54(g/mL) G Lab File ID: BNR60-12RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	12	U
108-87-2	Methylcyclohexane	12	U
78-87-5	1,2-Dichloropropane	12	U
75-27-4	Bromodichloromethane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
108-88-3	Toluene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
79-00-5	1,1,2-Trichloroethane	12	U
127-18-4	Tetrachloroethene	12	U
591-78-6	2-Hexanone	12	U
124-48-1	Dibromochloromethane	12	U
106-93-4	1,2-Dibromoethane	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
1330-20-7	Xylene (Total)	12	U
100-42-5	Styrene	12	U
75-25-2	Bromoform	12	U
98-82-8	Isopropylbenzene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
541-73-1	1,3-Dichlorobenzene	12	U
106-46-7	1,4-Dichlorobenzene	12	U
95-50-1	1,2-Dichlorobenzene	12	U
96-12-8	1,2-Dibromo-3-Chloropropane	12	U
120-82-1	1,2,4-Trichlorobenzene	12	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 5.54 (g/mL) G Lab File ID: BNR60-12RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.30	7	J
2.	UNKNOWN	4.32	7	~~JB~~ R
3. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	10.79	17	~~NJ~~ R
4.	UNKNOWN	11.21	12	J
5.	LABORATORY ARTIFACT	14.26	7	~~JB~~ R
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 4.93(g/mL) G Lab File ID: BNR60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 26 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	14	U
74-87-3	Chloromethane	14	U
75-01-4	Vinyl Chloride	14	U
74-83-9	Bromomethane	14	U
75-00-3	Chloroethane	14	U
75-69-4	Trichlorofluoromethane	14	U
75-35-4	1,1-Dichloroethene	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	14	U
67-64-1	Acetone	14	J
75-15-0	Carbon Disulfide	14	U
79-20-9	Methyl Acetate	14	U
75-09-2	Methylene Chloride	14 ~~6~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	14	U
1634-04-4	Methyl-tert-butyl ether	14	U
75-34-3	1,1-Dichloroethane	14	U
156-59-2	cis-1,2-Dichloroethene	14	U
78-93-3	2-Butanone	4	~~J~~ J
67-66-3	Chloroform	14	U
71-55-6	1,1,1-Trichloroethane	14	U
110-82-7	Cyclohexane	14	U
56-23-5	Carbon Tetrachloride	14	U
71-43-2	Benzene	14	U
107-06-2	1,2-Dichloroethane	14	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 4.93(g/mL) G Lab File ID: BNR60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 26 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	14	U
108-87-2	Methylcyclohexane	14	U
78-87-5	1,2-Dichloropropane	14	U
75-27-4	Bromodichloromethane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
108-88-3	Toluene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
79-00-5	1,1,2-Trichloroethane	14	U
127-18-4	Tetrachloroethene	14	U
591-78-6	2-Hexanone	14	U
124-48-1	Dibromochloromethane	14	U
106-93-4	1,2-Dibromoethane	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	14	U
1330-20-7	Xylene (Total)	14	U
100-42-5	Styrene	14	U
75-25-2	Bromoform	14	U
98-82-8	Isopropylbenzene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
541-73-1	1,3-Dichlorobenzene	14	U
106-46-7	1,4-Dichlorobenzene	14	U
95-50-1	1,2-Dichlorobenzene	14	U
96-12-8	1,2-Dibromo-3-Chloropropane	14	U
120-82-1	1,2,4-Trichlorobenzene	14	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 4.93 (g/mL) G Lab File ID: BNR60-13A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 26 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.48	13	J
2.	UNKNOWN	4.18	10	~~JB~~
3.	UNKNOWN	4.33	18	~~JB~~ R
4.	UNKNOWN	11.22	10	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 5.63(g/mL) G Lab File ID: BNR60-14A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 30 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	14	J
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	13	U J
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	Methyl-tert-butyl ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	6	J
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 5.63(g/mL) G Lab File ID: BNR60-14A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 30 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-Chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 5.63 (g/mL) G Lab File ID: BNR60-14A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 30 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.48	38	J
2.	UNKNOWN	4.31	10	~~JB~~ R
3.	UNKNOWN	11.22	8	J
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 4.62(g/mL) G Lab File ID: BNR60-15A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	13	U
74-87-3	Chloromethane	13	U
75-01-4	Vinyl Chloride	13	U
74-83-9	Bromomethane	13	U
75-00-3	Chloroethane	13	U
75-69-4	Trichlorofluoromethane	13	U
75-35-4	1,1-Dichloroethene	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13	U
67-64-1	Acetone	12	~~J~~ J
75-15-0	Carbon Disulfide	13	U
79-20-9	Methyl Acetate	13	U
75-09-2	Methylene Chloride	13 ~~1~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	13	U
1634-04-4	Methyl-tert-butyl ether	13	U
75-34-3	1,1-Dichloroethane	13	U
156-59-2	cis-1,2-Dichloroethene	13	U
78-93-3	2-Butanone	13	UJ
67-66-3	Chloroform	13	U
71-55-6	1,1,1-Trichloroethane	13	U
110-82-7	Cyclohexane	13	U
56-23-5	Carbon Tetrachloride	13	U
71-43-2	Benzene	13	U
107-06-2	1,2-Dichloroethane	13	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 4.62(g/mL) G Lab File ID: BNR60-15A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	13	U
108-87-2	Methylcyclohexane	13	U
78-87-5	1,2-Dichloropropane	13	U
75-27-4	Bromodichloromethane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
108-88-3	Toluene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
79-00-5	1,1,2-Trichloroethane	13	U
127-18-4	Tetrachloroethene	13	U
591-78-6	2-Hexanone	13	U
124-48-1	Dibromochloromethane	13	U
106-93-4	1,2-Dibromoethane	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
1330-20-7	Xylene (Total)	13	U
100-42-5	Styrene	13	U
75-25-2	Bromoform	13	U
98-82-8	Isopropylbenzene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
541-73-1	1,3-Dichlorobenzene	13	U
106-46-7	1,4-Dichlorobenzene	13	U
95-50-1	1,2-Dichlorobenzene	13	U
96-12-8	1,2-Dibromo-3-Chloropropane	13	U
120-82-1	1,2,4-Trichlorobenzene	13	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 4.62 (g/mL) G Lab File ID: BNR60-15A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 17 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.30	12	~~JB~~ R
2.				
3.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 4.12(g/mL) G Lab File ID: BNR60-16A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	16	U
74-87-3	Chloromethane	16	U
75-01-4	Vinyl Chloride	16	U
74-83-9	Bromomethane	16	U
75-00-3	Chloroethane	16	U
75-69-4	Trichlorofluoromethane	16	U
75-35-4	1,1-Dichloroethene	16	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	16	U
67-64-1	Acetone	8	~~J~~ J
75-15-0	Carbon Disulfide	16	U
79-20-9	Methyl Acetate	16	U
75-09-2	Methylene Chloride	16 ~~8~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	16	U
1634-04-4	Methyl-tert-butyl ether	16	U
75-34-3	1,1-Dichloroethane	16	U
156-59-2	cis-1,2-Dichloroethene	16	U
78-93-3	2-Butanone	16	U J
67-66-3	Chloroform	16	U
71-55-6	1,1,1-Trichloroethane	16	U
110-82-7	Cyclohexane	16	U
56-23-5	Carbon Tetrachloride	16	U
71-43-2	Benzene	16	U
107-06-2	1,2-Dichloroethane	16	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 4.12(g/mL) G Lab File ID: BNR60-16A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	16	U
108-87-2	Methylcyclohexane	16	U
78-87-5	1,2-Dichloropropane	16	U
75-27-4	Bromodichloromethane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
108-88-3	Toluene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
79-00-5	1,1,2-Trichloroethane	16	U
127-18-4	Tetrachloroethene	16	U
591-78-6	2-Hexanone	16	U
124-48-1	Dibromochloromethane	16	U
106-93-4	1,2-Dibromoethane	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	16	U
1330-20-7	Xylene (Total)	16	U
100-42-5	Styrene	16	U
75-25-2	Bromoform	16	U
98-82-8	Isopropylbenzene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
541-73-1	1,3-Dichlorobenzene	16	U
106-46-7	1,4-Dichlorobenzene	16	U
95-50-1	1,2-Dichlorobenzene	16	U
96-12-8	1,2-Dibromo-3-Chloropropane	16	U
120-82-1	1,2,4-Trichlorobenzene	16	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 4.12 (g/mL) G Lab File ID: BNR60-16A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	19	~~JB~~ R
2. 541-05-9	CYCLOTRISILOXANE, HEXAMETHYL	10.78	17	NJ R
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 6.11(g/mL) G Lab File ID: BNR60-17A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 14 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	6	~~J~~ J
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10 ~~5~~	~~JB~~ U J
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U J
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 6.11(g/mL) G Lab File ID: BNR60-17A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 14 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 6.11 (g/mL) G Lab File ID: BNR60-17A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 14 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.48	9	J
2.	UNKNOWN	4.31	10	~~JB~~
3.				
4.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 5.57(g/mL) G Lab File ID: BNR60-18A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	11	U
74-87-3	Chloromethane	11	U
75-01-4	Vinyl Chloride	11	U
74-83-9	Bromomethane	11	U
75-00-3	Chloroethane	11	U
75-69-4	Trichlorofluoromethane	11	U
75-35-4	1,1-Dichloroethene	11	U
76-13-1	1,1,~~2~~-Trichloro-1,2,2-trifluoroethane	11	U
67-64-1	Acetone	40	J
75-15-0	Carbon Disulfide	11	U
79-20-9	Methyl Acetate	11	U
75-09-2	Methylene Chloride	11 ~~7~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	11	U
1634-04-4	Methyl-tert-butyl ether	11	U
75-34-3	1,1-Dichloroethane	11	U
156-59-2	cis-1,2-Dichloroethene	11	U
78-93-3	2-Butanone	7	~~J~~ J
67-66-3	Chloroform	11	U
71-55-6	1,1,1-Trichloroethane	11	U
110-82-7	Cyclohexane	11	U
56-23-5	Carbon Tetrachloride	11	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	11	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 5.57(g/mL) G Lab File ID: BNR60-18A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	11	U
108-87-2	Methylcyclohexane	11	U
78-87-5	1,2-Dichloropropane	11	U
75-27-4	Bromodichloromethane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
108-88-3	Toluene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
79-00-5	1,1,2-Trichloroethane	11	U
127-18-4	Tetrachloroethene	11	U
591-78-6	2-Hexanone	11	U
124-48-1	Dibromochloromethane	11	U
106-93-4	1,2-Dibromoethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
1330-20-7	Xylene (Total)	11	U
100-42-5	Styrene	11	U
75-25-2	Bromoform	11	U
98-82-8	Isopropylbenzene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
96-12-8	1,2-Dibromo-3-Chloropropane	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 5.57 (g/mL) G Lab File ID: BNR60-18A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 19 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.18	11	JB
2.	UNKNOWN	4.32	16	~~JB~~ R
3.	UNKNOWN	5.13	25	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 4.15(g/mL) G Lab File ID: BNR60-19A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	7	J
74-87-3	Chloromethane	15	U
75-01-4	Vinyl Chloride	15	U
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U
75-69-4	Trichlorofluoromethane	29	
75-35-4	1,1-Dichloroethene	15	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	15	U
67-64-1	Acetone	21	J
75-15-0	Carbon Disulfide	15	U
79-20-9	Methyl Acetate	15	U
75-09-2	Methylene Chloride	15 ~~8~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	15	U
1634-04-4	Methyl-tert-butyl ether	15	U
75-34-3	1,1-Dichloroethane	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	15	U J
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
110-82-7	Cyclohexane	15	U
56-23-5	Carbon Tetrachloride	15	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 4.15(g/mL) G Lab File ID: BNR60-19A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
108-87-2	Methylcyclohexane	15	U
78-87-5	1,2-Dichloropropane	15	U
75-27-4	Bromodichloromethane	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-Pentanone	15	U
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (Total)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U
96-12-8	1,2-Dibromo-3-Chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 4.15 (g/mL) G Lab File ID: BNR60-19A59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 22 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.32	21	~~JB~~ R
2. 75-43-4	METHANE, DICHLOROFLUORO-	4.92	23	NJ
3.	UNKNOWN	6.84	16	J
4. 624-92-0	DISULFIDE, DIMETHYL	10.37	75	NJ
5.	UNKNOWN	13.50	19	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 6.45(g/mL) G Lab File ID: BNR60-20RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 21 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl Chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U
67-64-1	Acetone	8	~~J~~ J
75-15-0	Carbon Disulfide	10	U
79-20-9	Methyl Acetate	10	U
75-09-2	Methylene Chloride	10 ~~5~~	~~JB~~ UJ
156-60-5	trans-1,2-Dichloroethene	10	U
1634-04-4	Methyl-tert-butyl ether	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
78-93-3	2-Butanone	10	U J
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
110-82-7	Cyclohexane	10	U
56-23-5	Carbon Tetrachloride	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 6.45(g/mL) G Lab File ID: BNR60-20RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 21 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	10	U
108-87-2	Methylcyclohexane	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromoethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	Xylene (Total)	10	U
100-42-5	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
96-12-8	1,2-Dibromo-3-Chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 6.45 (g/mL) G Lab File ID: BNR60-20RA59

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: not dec. 21 Date Analyzed: 01/29/01

GC Column: J&W DB-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(ul) Soil Aliquot Volume: _____(uL)

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.48	6	J
2.	UNKNOWN	4.34	12	~~JB~~ R
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4.				
5.				
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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-1A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
98-86-2	Acetophenone	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U J
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
105-60-2	Caprolactam	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-1A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U J
100-02-7	4-Nitrophenol	1000	U J
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
100-01-6	4-Nitroaniline	1000	U J
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
1912-24-9	Atrazine	400	U J
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-1A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	970	~~JB~~ R
2.	UNKNOWN (BC)	8.35	210	~~JB~~ R
3.	UNKNOWN	9.82	120	J
4. 57-10-3	HEXADECANOIC ACID	20.68	95	NJ
5.	UNKNOWN	34.02	89	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-2A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U J
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	990	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	990	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	390	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	390	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-2A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	990	U J
100-02-7	4-Nitrophenol	990	U J
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	990	U J
534-52-1	4,6-Dinitro-2-methylphenol	990	U
86-30-6	N-nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	U J
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-2A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1300	~~JB~~ R
2.	UNKNOWN (BC)	8.35	320	~~JB~~ R
3.	UNKNOWN	9.82	120	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-3A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
98-86-2	Acetophenone	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U J
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
105-60-2	Caprolactam	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

952

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-3A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 18 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U J
100-02-7	4-Nitrophenol	1000	U J
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
100-01-6	4-Nitroaniline	1000	U J
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
1912-24-9	Atrazine	400	U J
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-3A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.07	1500	~~JB~~ R
2.	UNKNOWN (BC)	9.35	86	~~JB~~ R
3.	UNKNOWN	9.82	170	J
4.	UNKNOWN	17.29	320	J
5. 57-10-3	HEXADECANOIC ACID	20.68	150	NJ
6.	UNKNOWN	22.42	200	J
7.	UNKNOWN	25.09	250	J
8.	UNKNOWN	34.03	290	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-4A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U J
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	990	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	990	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	390	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	390	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-4A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	990	UJ
100-02-7	4-Nitrophenol	990	UJ
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	990	UJ
534-52-1	4,6-Dinitro-2-methylphenol	990	U
86-30-6	N-nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	UJ
87-86-5	Pentachlorophenol	990	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-4A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1300	~~JB~~ R
2.	UNKNOWN (BC)	8.37	400	~~JB~~ R
3.	UNKNOWN	9.84	150	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-5A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-5A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	UJ
100-02-7	4-Nitrophenol	1100	UJ
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	UJ
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	UJ
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	70	J
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-5A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.07	1500	~~JB~~ R
2.	UNKNOWN (BC)	8.35	440	~~JB~~ R
3.	UNKNOWN	9.83	140	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-6A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 15 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	390	U
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
98-86-2	Acetophenone	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
105-60-2	Caprolactam	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	980	U
92-52-4	1,1'-Biphenyl	390	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	980	U
131-11-3	Dimethylphthalate	390	U
606-20-2	2,6-Dinitrotoluene	390	U
208-96-8	Acenaphthylene	390	U
99-09-2	3-Nitroaniline	980	U
83-32-9	Acenaphthene	390	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-6A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 15 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	980	U J
100-02-7	4-Nitrophenol	980	U J
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
86-73-7	Fluorene	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
100-01-6	4-Nitroaniline	980	U J
534-52-1	4,6-Dinitro-2-methylphenol	980	U
86-30-6	N-nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
1912-24-9	Atrazine	390	U J
87-86-5	Pentachlorophenol	980	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-6A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 15 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1100	~~JB~~ R
2.	UNKNOWN (BC)	8.36	360	JB R
3.	UNKNOWN	9.83	130	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-7A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 9 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	360	U
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
98-86-2	Acetophenone	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U J
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
105-60-2	Caprolactam	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	910	U
92-52-4	1,1'-Biphenyl	360	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
606-20-2	2,6-Dinitrotoluene	360	U
208-96-8	Acenaphthylene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-7A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 9 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U J
100-02-7	4-Nitrophenol	910	U J
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
86-73-7	Fluorene	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
100-01-6	4-Nitroaniline	910	U J
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
1912-24-9	Atrazine	360	U J
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 OLM04.2

95

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-7A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 9 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Extraction: (Type) SONC

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1200	~~JB~~ R
2.	UNKNOWN (BC)	8.35	370	~~JB~~ R
3.	UNKNOWN	9.82	120	J
4.	UNKNOWN	19.48	84	J
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FORM I SV-TIC OLM04.2

915

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-8A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	53	J
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
98-86-2	Acetophenone	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	UJ
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
105-60-2	Caprolactam	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	430	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
606-20-2	2,6-Dinitrotoluene	430	U
208-96-8	Acenaphthylene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-8A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 24 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U J
100-02-7	4-Nitrophenol	1100	U J
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
86-73-7	Fluorene	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
100-01-6	4-Nitroaniline	1100	U J
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
1912-24-9	Atrazine	430	U J
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	430	U
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

9/8

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-8A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 24 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1500	~~JB~~ R
2.	UNKNOWN (BC)	8.35	420	~~JB~~ R
3.	UNKNOWN	9.84	170	J
4. 57-10-3	HEXADECANOIC ACID	20.68	310	NJ
5. 112-80-1	OLEIC ACID	22.13	220	NJ
6.	UNKNOWN	29.93	150	J
7.	UNKNOWN	30.74	150	J
8.	UNKNOWN	30.83	150	J
9.	UNKNOWN	31.59	95	J
10. 604-39-7	ANDROST-4-EN-3-ONE, 17-HYDRO	32.55	190	NJ
11.	UNKNOWN	34.02	150	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-9A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-9A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 20 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U J
100-02-7	4-Nitrophenol	1000	U J
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U J
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	U J
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	410	U
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-9A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.07	1500	~~JB~~ R
2.	UNKNOWN (BC)	8.35	340	~~JB~~ R
3.	UNKNOWN	9.84	120	J
4. 13214-70-5	2,3-DIBROMONAPHTHALENE	18.89	390	NJ
5. 13214-70-5	2,3-DIBROMONAPHTHALENE	18.97	110	NJ
6. 57-10-3	HEXADECANOIC ACID	20.68	120	NJ
7.	UNKNOWN	30.83	86	J
8.	UNKNOWN	34.02	230	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-10A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U J
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	950	U
92-52-4	1,1'-Biphenyl	380	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	950	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	380	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-10A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	U J
100-02-7	4-Nitrophenol	950	U J
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
100-01-6	4-Nitroaniline	950	U J
534-52-1	4,6-Dinitro-2-methylphenol	950	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
1912-24-9	Atrazine	380	U J
87-86-5	Pentachlorophenol	950	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	380	U
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U
191-24-2	Benzo(g,h,i)perylene	380	U

(1) - Cannot be separated from Diphenylamine

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-10A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 13 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/28/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

Number TICs found: 5

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1300	~~JB~~ R
2.	UNKNOWN (BC)	8.35	320	~~JB~~ R
3.	UNKNOWN	9.83	120	J
4. 83-53-4	NAPHTHALENE, 1,4-DIBROMO-	18.90	130	NJ
5.	UNKNOWN	34.02	110	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-11A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
98-86-2	Acetophenone	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
105-60-2	Caprolactam	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-11A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U J
100-02-7	4-Nitrophenol	1000	U J
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
1912-24-9	Atrazine	400	U J
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-11A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.03	830	~~JB~~ R
2.	UNKNOWN (BC)	8.42	130	~~JB~~ R
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-12A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-12A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U J
100-02-7	4-Nitrophenol	1100	U J
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U J
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

935

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-12A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

Number TICs found: 4

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1100	~~JB~~ R
2.	UNKNOWN (BC)	8.38	150	~~JB~~ R
3.	UNKNOWN	9.83	110	J
4. 120-58-1	1,3-BENZODIOXOLE, 5-(1-PROPE	12.32	250	NJ
5.				
6.				
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-13A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	450	U
108-95-2	Phenol	450	U
111-44-4	bis(2-Chloroethyl)ether	450	U
95-57-8	2-Chlorophenol	450	U
95-48-7	2-Methylphenol	450	U
108-60-1	2,2'-oxybis(1-Chloropropane)	450	U
98-86-2	Acetophenone	450	U
106-44-5	4-Methylphenol	450	U
621-64-7	N-Nitroso-di-n-propylamine	450	U
67-72-1	Hexachloroethane	450	U
98-95-3	Nitrobenzene	450	U
78-59-1	Isophorone	450	U
88-75-5	2-Nitrophenol	450	U
105-67-9	2,4-Dimethylphenol	450	U
111-91-1	bis(2-Chloroethoxy)methane	450	U
120-83-2	2,4-Dichlorophenol	450	U
91-20-3	Naphthalene	450	U
106-47-8	4-Chloroaniline	450	U
87-68-3	Hexachlorobutadiene	450	U
105-60-2	Caprolactam	450	U
59-50-7	4-Chloro-3-methylphenol	450	U
91-57-6	2-Methylnaphthalene	450	U
77-47-4	Hexachlorocyclopentadiene	450	U
88-06-2	2,4,6-Trichlorophenol	450	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	450	U
91-58-7	2-Chloronaphthalene	450	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	450	U
606-20-2	2,6-Dinitrotoluene	450	U
208-96-8	Acenaphthylene	450	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	450	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-13A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 26 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	UJ
100-02-7	4-Nitrophenol	1100	UJ
132-64-9	Dibenzofuran	450	U
121-14-2	2,4-Dinitrotoluene	450	U
84-66-2	Diethylphthalate	450	U
86-73-7	Fluorene	450	U
7005-72-3	4-Chlorophenyl-phenylether	450	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	450	U
101-55-3	4-Bromophenyl-phenylether	450	U
118-74-1	Hexachlorobenzene	450	U
1912-24-9	Atrazine	450	UJ
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	450	U
120-12-7	Anthracene	450	U
86-74-8	Carbazole	450	U
84-74-2	Di-n-butylphthalate	450	U
206-44-0	Fluoranthene	450	U
129-00-0	Pyrene	450	U
85-68-7	Butylbenzylphthalate	450	U
91-94-1	3,3'-Dichlorobenzidine	450	U
56-55-3	Benzo(a)anthracene	450	U
218-01-9	Chrysene	450	U
117-81-7	bis(2-Ethylhexyl)phthalate	450	U
117-84-0	Di-n-octylphthalate	450	U
205-99-2	Benzo(b)fluoranthene	450	U
207-08-9	Benzo(k)fluoranthene	450	U
50-32-8	Benzo(a)pyrene	450	U
193-39-5	Indeno(1,2,3-cd)pyrene	450	U
53-70-3	Dibenzo(a,h)anthracene	450	U
191-24-2	Benzo(g,h,i)perylene	450	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-13A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 26 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1000	~~JB~~ R
2.	UNKNOWN (BC)	8.38	170	~~JB~~ R
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-14A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	470	U
108-95-2	Phenol	470	U
111-44-4	bis(2-Chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2'-oxybis(1-Chloropropane)	470	U
98-86-2	Acetophenone	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
111-91-1	bis(2-Chloroethoxy)methane	470	U
120-83-2	2,4-Dichlorophenol	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
87-68-3	Hexachlorobutadiene	470	U
105-60-2	Caprolactam	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	1200	U
92-52-4	1,1'-Biphenyl	470	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	470	U
606-20-2	2,6-Dinitrotoluene	470	U
208-96-8	Acenaphthylene	470	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	470	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-14A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 30 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200	UJ
100-02-7	4-Nitrophenol	1200	UJ
132-64-9	Dibenzofuran	470	U
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
86-73-7	Fluorene	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	470	U
1912-24-9	Atrazine	470	UJ
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	470	U
120-12-7	Anthracene	470	U
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	470	U
129-00-0	Pyrene	470	U
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3'-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	470	U
218-01-9	Chrysene	470	U
117-81-7	bis(2-Ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	470	U
207-08-9	Benzo(k)fluoranthene	470	U
50-32-8	Benzo(a)pyrene	470	U
193-39-5	Indeno(1,2,3-cd)pyrene	470	U
53-70-3	Dibenzo(a,h)anthracene	470	U
191-24-2	Benzo(g,h,i)perylene	470	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-14A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 30 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.06	1300	~~JB~~ R
2.	UNKNOWN (BC)	8.36	360	~~JB~~ R
3.	UNKNOWN	9.83	120	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-15A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
98-86-2	Acetophenone	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
105-60-2	Caprolactam	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
606-20-2	2,6-Dinitrotoluene	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-15A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	UJ
100-02-7	4-Nitrophenol	1000	UJ
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
86-73-7	Fluorene	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
1912-24-9	Atrazine	400	UJ
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-15A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.06	1200	~~JB~~ R
2.	UNKNOWN (BC)	8.36	300	~~JB~~ R
3.	UNKNOWN	9.83	110	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-16A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-16A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U J
100-02-7	4-Nitrophenol	1100	U J
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U J
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	400	J
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

OLM04.2

912

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-16A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	1100	~~JB~~ R
2.	UNKNOWN (BC)	8.40	190	~~JB~~ R
3.	UNKNOWN	9.85	92	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-17A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 14 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	380	U
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
98-86-2	Acetophenone	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
105-60-2	Caprolactam	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	970	U
92-52-4	1,1'-Biphenyl	380	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	970	U
131-11-3	Dimethylphthalate	380	U
606-20-2	2,6-Dinitrotoluene	380	U
208-96-8	Acenaphthylene	380	U
99-09-2	3-Nitroaniline	970	U
83-32-9	Acenaphthene	380	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-17A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 14 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	970	UJ
100-02-7	4-Nitrophenol	970	UJ
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
86-73-7	Fluorene	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
100-01-6	4-Nitroaniline	970	U
534-52-1	4,6-Dinitro-2-methylphenol	970	U
86-30-6	N-nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
1912-24-9	Atrazine	380	UJ
87-86-5	Pentachlorophenol	970	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	380	U
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	380	U
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	380	U
193-39-5	Indeno(1,2,3-cd)pyrene	380	U
53-70-3	Dibenzo(a,h)anthracene	380	U
191-24-2	Benzo(g,h,i)perylene	380	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-17A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 14 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.08	1100	~~JB~~ R
2.	UNKNOWN (BC)	8.36	350	~~JB~~ R
3.	UNKNOWN	9.85	120	J
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FORM I SV-TIC OLM04.2

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-18A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	410	U
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)ether	410	U
95-57-8	2-Chlorophenol	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
98-86-2	Acetophenone	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
105-60-2	Caprolactam	410	U
59-50-7	4-Chloro-3-methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
92-52-4	1,1'-Biphenyl	410	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
606-20-2	2,6-Dinitrotoluene	410	U
208-96-8	Acenaphthylene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-18A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U J
100-02-7	4-Nitrophenol	1000	U J
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
86-73-7	Fluorene	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
1912-24-9	Atrazine	410	U J
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	410	U
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-butylphthalate	410	U
206-44-0	Fluoranthene	410	U
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	bis(2-Ethylhexyl)phthalate	410	U
117-84-0	Di-n-octylphthalate	410	U
205-99-2	Benzo(b)fluoranthene	410	U
207-08-9	Benzo(k)fluoranthene	410	U
50-32-8	Benzo(a)pyrene	410	U
193-39-5	Indeno(1,2,3-cd)pyrene	410	U
53-70-3	Dibenzo(a,h)anthracene	410	U
191-24-2	Benzo(g,h,i)perylene	410	U

(1) - Cannot be separated from Diphenylamine

9/18

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-18A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 19 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.05	810	~~JB~~ R
2.	UNKNOWN	8.20	140	J
3.	UNKNOWN (BC)	8.37	500	~~JB~~ R
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FORM I SV-TIC OLM04.2

9/19

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-19A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-19A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U J
100-02-7	4-Nitrophenol	1100	U J
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U J
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1G
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-19A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.08	1000	~~JB~~ R
2.	UNKNOWN	9.83	150	J
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FORM I SV-TIC OLM04.2

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-20A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	420	U
108-95-2	Phenol	420	U
111-44-4	bis(2-Chloroethyl)ether	420	U
95-57-8	2-Chlorophenol	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
98-86-2	Acetophenone	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
111-91-1	bis(2-Chloroethoxy)methane	420	U
120-83-2	2,4-Dichlorophenol	420	U
91-20-3	Naphthalene	420	U
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
105-60-2	Caprolactam	420	U
59-50-7	4-Chloro-3-methylphenol	420	U
91-57-6	2-Methylnaphthalene	420	U
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1100	U
92-52-4	1,1'-Biphenyl	420	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	420	U
606-20-2	2,6-Dinitrotoluene	420	U
208-96-8	Acenaphthylene	420	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	420	U

1D
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: BNR60-20A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 21 decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
51-28-5	2,4-Dinitrophenol	1100	U J
100-02-7	4-Nitrophenol	1100	U J
132-64-9	Dibenzofuran	420	U
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
86-73-7	Fluorene	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
1912-24-9	Atrazine	420	U J
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	420	U
120-12-7	Anthracene	420	U
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	420	U
206-44-0	Fluoranthene	420	U
129-00-0	Pyrene	420	U
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	420	U
218-01-9	Chrysene	420	U
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	420	U
207-08-9	Benzo(k)fluoranthene	420	U
50-32-8	Benzo(a)pyrene	420	U
193-39-5	Indeno(1,2,3-cd)pyrene	420	U
53-70-3	Dibenzo(a,h)anthracene	420	U
191-24-2	Benzo(g,h,i)perylene	420	U

(1) - Cannot be separated from Diphenylamine

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BNR60-20A66

Level: (low/med) LOW Date Received: 01/24/01

% Moisture: 21 Decanted: (Y/N) N Date Extracted: 01/26/01

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/01

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Extraction: (Type) SONC

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN (BC)	7.09	930	~~JB~~ R
2.	UNKNOWN	9.84	130	J
3.				
4.				
5.				
6.				
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8.				
9.				
10.				
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FORM I SV-TIC OLM04.2

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR60

Lab Name: COMPUCHEM ___ Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-1

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 17 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

95x

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR61

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-2

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 16 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.9	U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR62

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-3

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 18 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	82	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR65

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-4

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 16 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	0.82	J
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0 ~~0.32~~	~~JP~~ U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	2.4	J
53494-70-5	Endrin ketone	3.9 ~~0.21~~	~~JP~~ U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0 ~~0.24~~	~~JP~~ U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR66

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-5

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 22 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR71

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-6

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 15 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4'-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.9	U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	39	U
11104-28-2	Aroclor-1221	79	U
11141-16-5	Aroclor-1232	39	U
53469-21-9	Aroclor-1242	39	U
12672-29-6	Aroclor-1248	39	U
11097-69-1	Aroclor-1254	39	U
11096-82-5	Aroclor-1260	39	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR72

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-7

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 9 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	74	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U

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1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR78

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-8

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 24 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2 ~~0.16~~	~~JP~~ U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3 ~~0.71~~	~~JP~~ U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	88	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR79

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-9

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 20 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1 ~~0.91~~	~~JP~~ V
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	5.9	
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.2	~~P~~ J
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1 ~~1.2~~	~~JP~~ U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.8	~~P~~ JN
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	84	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	270	
11097-69-1	Aroclor-1254	190	
11096-82-5	Aroclor-1260	41	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR80

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-10

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 13 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0 ~~0.89~~	~~JP~~ U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.3	J
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8 ~~0.77~~	~~JP~~ U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0 ~~1.1~~	~~JP~~ U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	77	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	120	
11097-69-1	Aroclor-1254	91	
11096-82-5	Aroclor-1260	11	~~JP~~ JN

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR83

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-11

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 17 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	1.2	J
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0 ~~0.52~~	~~JP~~ U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0 ~~0.32~~	~~JP~~ U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	26	J
11096-82-5	Aroclor-1260	40	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR91

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-12

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 22 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR95

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-13

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 26 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4'-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4'-DDD	4.4	U
1031-07-8	Endosulfan sulfate	4.4	U
50-29-3	4,4'-DDT	4.4	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4 ~~0.31~~	~~JP~~ U
5103-71-9	alpha-Chlordane	2.3 ~~1.3~~	~~JP~~ U
5103-74-2	gamma-Chlordane	0.57	~~JP~~ J
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	44	U
11104-28-2	Aroclor-1221	90	U
11141-16-5	Aroclor-1232	44	U
53469-21-9	Aroclor-1242	44	U
12672-29-6	Aroclor-1248	44	U
11097-69-1	Aroclor-1254	44	U
11096-82-5	Aroclor-1260	10	J

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR96

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-14

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 30 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.7	U
72-55-9	4,4'-DDE	4.7	U
72-20-8	Endrin	4.7	U
33213-65-9	Endosulfan II	4.7	U
72-54-8	4,4'-DDD	4.7	U
1031-07-8	Endosulfan sulfate	4.7	U
50-29-3	4,4'-DDT	4.7	U
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.7	U
7421-93-4	Endrin aldehyde	4.7	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	47	U
11104-28-2	Aroclor-1221	96	U
11141-16-5	Aroclor-1232	47	U
53469-21-9	Aroclor-1242	47	U
12672-29-6	Aroclor-1248	47	U
11097-69-1	Aroclor-1254	47	U
11096-82-5	Aroclor-1260	47	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNR97

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-15

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 17 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan sulfate	4.0	U
50-29-3	4,4'-DDT	4.0	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	4.0	U
7421-93-4	Endrin aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	40	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	40	U
53469-21-9	Aroclor-1242	40	U
12672-29-6	Aroclor-1248	40	U
11097-69-1	Aroclor-1254	40	U
11096-82-5	Aroclor-1260	40	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS00

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-16

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 22 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BNS01

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-17

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 14 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0 ~~0.86~~	~~JP~~ U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4'-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4'-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4'-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	78	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH52

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-18

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 19 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH53

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-19

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 22 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1E

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BPH59

Lab Name: COMPUCHEM Contract: 68W99070

Lab Code: LIBRTY Case No.: 28924 SAS No.: SDG No.: BNR60

Matrix: (soil/water) SOIL Lab Sample ID: BNR60-20

Sample wt/vol: 30.0(g/mL) G Lab File ID: _____

% Moisture: 21 Decanted: (Y/N) N Date Received: 01/24/01

Extraction: (Type) SONC Date Extracted: 01/26/01

Concentrated Extract Volume: 5000(uL) Date Analyzed: 01/31/01

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	85	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

Melissa Stevens

From: Alice Evans <aevans@compuchemlabs.com>
To: Bauer, Heather <Heather.Bauer@dyncorp.com>
Cc: Melissa Stevens <mstevens@compuchemlabs.com>
Sent: Wednesday, January 31, 2001 11:28 AM
Attach: Alice Evans.vcf
Subject: Case 28924 Missing sample

We reported on 01/2201 that sample BPH65 as listed on the Traffic Report 388205 but the sample was not received.
We did receive a sample labeled |BNR83 that was not listed on the Traffic Report. Upon further inspection of the label we found that it matched the information on the traffic report for BPH65 (01/22/01-1525) (station location-4042-SS24). We are reporting this sample as BNR83. Please inform Region II of the error on the Traffic Report and request that we use the sample no listed on the jar.

Thanks Alice

Alice Evans
CompuChem/Liberty
501 Madison Ave
Cary, NC 27513
919-379-4080

1539
01/31/01

Melissa Stevens

From: Alice Evans <aevans@compuchemlabs.com>
To: Melissa Stevens <mstevens@compuchemlabs.com>
Sent: Thursday, January 25, 2001 11:55 AM
Subject: Fw: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample

----- Original Message -----
From: Bauer, Heather <Heather.Bauer@dyncorp.com>
To: Alice Evans (E-mail) <aevans@compuchemlabs.com>
Sent: Thursday, January 25, 2001 11:32 AM
Subject: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample

> Alice,
> Per Region 2, the lab should change the sample number of MBQB73 to the
> corresponding organic sample number, note the problem in the case
narrative,
> and proceed with the analysis. The Region is still checking on sample
> BPH65, and I will let you know when I hear something. Please let me know
if
> you have any other questions or problems.
>
> Thanks,
> Heather
> Heather Bauer
> DynCorp
> (703)264-9348
>
> 1/25 9:22 AM
> Jennifer left a voice-mail to report that for the inorganic sample that
the
> lab received, the lab should note the problem in the case narrative,
change
> the sample number to the corresponding organic sample ID, and proceed with
> the analysis.
>
> -----Original Message-----
> From: Bauer, Heather
> Sent: Wednesday, January 24, 2001 2:14 PM
> To: Jennifer Feranda (E-mail)
> Cc: Ray Klimcsak (E-mail)
> Subject: Region 02 | Case 28924 | Lab LIBRTY | Issue Missing sample
>
>
> Jennifer,
> Following is an e-mail from LIBRTY regarding Case 28924. The lab did
not

1540
01/25/01

REFERENCE NO. 32

ATTACHMENT G

RECORD OF COMMUNICATION

TO: Yunru Yang

FROM: *JANET TROTTER*
Region 2, ESAT/RSCC

DATE: March 30, 2001

SUBJECT: QUALITY ASSURED DATA

MESSAGE:
PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE FOLLOWING AND RETURN **ONE** COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC - REGION II.

(1) Diamond Aerosol Corp 28924 Inorg Sentin 64 S/62 W

REPLY BY:

SIGNATURE: [signature] DATE: 4/2/01

DATE RECEIVED BY RSCC:

REV: 1/5/00

RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

DATE: FEB. 20, 2001
SUBJECT: CLP Data Package for Quality Assurance Review
FROM: RSCC / ESAT
TO: Hanif Sheikh, Hazardous Waste Support Section

MAR 28 2001

Attached is the following INORGANIC Data Package to be reviewed for Quality Assurance

SITE	DIAMOND AEROSOL CORP.	CASE#	28924
SAMPLER	WESTON (SAT)	#SAMPLES	MATRIX
PHASE	ESI	64	SOIL
LAB	SENTIN	62	WATER
TURN-AROUND-TIME	21 DAYS	FRACTION	TAL & CN
CERCLIS ID #	NJD049644438	SITE SPILL #	~~22~~ JB QP

REGION II RSCC DATA TRANSFER LOG

Relinquished By		Received By	
Signature	Date/Time	Signature	Date/Time
		John Bulich	2-14-01
John Bulich	2-20-01	CD	3/2/01
CD	3/26/01	Andy Panayiotu	3/26/01
Andy Panayiotu	3/26/01	Jennifer Deranda	3/26/01
Hanif Shiekh	3/28/01	J. Tuttle	3/28/01

(over for instructions) revised 7/00

CASE: 28924	SITE: DIAMOND AEROSOL	SOIL: 64
SDG: MBQX03, MBNM36, MBQA99, MBNM24, MBQB12, MBQB43, MBQB55, MBQX17	LAB: SENTINEL	WATER: 62
CONTRACTOR: WESTON	REVIEWER: C. STANCA, C. ALAIMO/ESAT	OTHER:

A.VALIDATION flags -The following flags have been applied in red by the data validator and must be considered by the data user.

J -This flag indicates the result qualified as **estimated.**

Red-Line - A red-line drawn through a sample result indicates **unusable** value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data -The results that do not carry "J" or "red-line" are fully usable.

Contractual Qualifiers -The legend of contractual qualifiers applied by the lab on Form I's is found on page B-20 of SOW ILM01.0

A.2.2. The data assessment is given below and on the attached sheets.

This case consists of sixty-two (62) aqueous and sixty-four (64) soil samples collected at the Diamond Aerosol site on 01/22 - 01/25/01 for TAL Metals and cyanide analysis according to the USEPA CLP SOW No. ILM04.1. The following samples were identified as field blanks: MBNM40, MBNM41, MBNM36, MBNM37, MBNM38, MBNM39. Samples MBQX11/MBQX12, MBQW88/MBQW89, MBQW98/MBQW99, MBQB06/MBQB07, MBQB20/MBQB21 & MBQB70/MBQB71 are the field duplicate pairs for this sampling event. Matrix spike, laboratory duplicate and serial dilution analyses were performed on samples MBQX03, MBQW87, MBQA99, MBNM24, MBQB12, MBQB69, MBQX17 & MBQB43.

All QC parameters, other than those discussed here, have been met.

CSF

SDG MBNM36: Pages 243A & 279A were inserted.

A.2.2. (continuation)

SDG MBQX03 (AQUEOUS)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Se, run of 02/03/01 ($\%R_{initial}$ = 125.7) and Se, run of 02/05/01($\%R_{final}$ = 131.3). (Only out of control recoveries that affected samples in this SDG were mentioned.) All associated positive results within the affected range of True Value ± 2CRDL have been considered estimated and flagged "J".

"J": Se in MBQX19

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for CN (%R = 71.8). All associated CN results have been considered estimated and flagged "J".

"J": CN in MBNM40, -41, MBQX03 -->05, -08 -->16, -18 -->21, -24, -25

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for K (%D = 32.3) and Na (%D = 54.7). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J".

"J": Na in MBQX05, -08 -->15, -18 -->21, -24, -25

SDG MBNM36 (AQUEOUS)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Pb ($\%R_3$ = 73.3). (Only out of control recoveries that affected samples in this SDG were mentioned.) All associated Pb results within the affected range of True Value ± 2CRDL have been considered estimated and flagged "J".

"J": Pb in MBQX02, -06, MBNM39, MBQW97, -98, -99

A.2.2. (continuation)

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for CN (%R = 67.8). All associated CN results have been considered estimated and flagged "J".

"J": CN in MBNM36 -->39, MBQW87 -->99, MBQX00, -02, -06

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Ba (%D = 18.9) and K (%D =48.7). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J".

"J": Ba in MBQW91, -92
K in MBQW91, -92, MBQX06

SDG MBQA99 (SOIL)

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for Sb (%R = 38.2). All associated Sb results have been considered estimated and flagged "J".

"J": Sb in MBQA99, MBQB00, -01, -04, -05, -10, -11, -17-->19, -22, -30, -34 -->36, -39, -40, -44, -45, -51

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 for Cd (%D = 25.0), Ca (%D = 57.3), Pb (%D = 14.1), Mg (%D = 18.2), Ni (%D = 42.0), K (%D = 11.9) and greater than 100 for Cu (%D = 120.1) when the initial concentration was equal to or greater than 10 X IDL . All associated Cd, Ca, Pb, Mg, Ni, and K results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J". All associated Cu results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered rejected and flagged "R".

A.2.2. (continuation)

"J": Mg, Ni in MBQA99, MBQB00, -01, -04, -05, -10, -11, -17-->19, -22, -30, -34-->36, -39, -40, -44, -45, -51

Cd in MBQA99
Ca in MBQB04, -05, -10, -11, -17, -34, -35, -39, -40, -45, -51
Pb in MBQA99, MBQB00, -01, -11, -17, -18, -19, -22, -44
K in MBQB04, -05, -10, -11, -17, -30, -34, -35, -39, -40, -45, -51

"R": Cu in MBQA99, MBQB00, -01, -04, -05, -10, -11, 17-->19, -22, -30, 34-->36, -39, -40, -44, -45, -51

SDG MBNM24 (AQUEOUS)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Pb ($\%R_{initial}$ = 131.0; $\%R_{final}$ = 5.0). (Only out of control recoveries that affected samples in this SDG were mentioned.) All associated positive results within the affected range of True Value ± 2CRDL have been considered estimated and flagged "J".

"J": Pb in MBNM29, -30, -31.

MATRIX SPIKE

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for CN (%R = 72.1). All associated CN results have been considered estimated and flagged "J".

"J": CN in MBNM24-->32.

ICP SERIAL DILUTION

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Ba (%D = 23.6), K (%D = 38.4), and Na (%D = 29.7). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, have been considered estimated and flagged "J".

Na in MBNM24-->29, -31, -32

A.2.2. (continuation)

SDG MBQB12 (SOIL)

MATRIX SPIKE RECOVERY

For Sb (41.2%) & As (71.9%), matrix % recovery fell between 10-74% requiring estimation of all associated data.

J--->Sb & As in MBQB06-->09, MBQB12, MBQB20, MBQB21, MBQB29, MBQB41, MBQB42, MBQB46-->48, MBQB50, MBQB52, MBQB53, MBQB58, MBQB61, MBQB62, MBQW82.

ICP SERIAL DILUTION

For Al, Ba, Ca, Cr, Co, Cu, Fe, Mg, Mn, K, V & Zn, the %D were greater than 10% when the initial sample values were greater than 10xIDL, therefore all associated data greater than or equal to the CRDL (or ≥ 10xIDL when 10xIDL > CRDL).

J--->Al, Cr, Fe, Mn, V & Zn in MBQB06-->09, MBQB12, MBQB20, MBQB21, MBQB29, MBQB41, MBQB42, MBQB46-->48, MBQB50, MBQB52, MBQB53, MBQB58, MBQB61, MBQB62, MBQW82.
J--->Cu in MBQB06-->09, MBQB12, MBQB20, MBQB21, MBQB29, MBQB41, MBQB42, MBQB46-->48, MBQB50, MBQB52, MBQB53, MBQB58, MBQB61, MBQB62.
J--->Ba & Mg in MBQB06, MBQB07, MBQB09, MBQB12, MBQB20, MBQB21, MBQB29, MBQB41, MBQB42, MBQB46-->48, MBQB50, MBQB52, MBQB53, MBQB58, MBQB61, MBQB62
J--->Ca in MBQB06-->09, MBQB12, MBQB20, MBQB21, MBQB29, MBQB41, MBQB42, MBQB46-->48, MBQB50, MBQB58, MBQB61, MBQB62, MBQW82.
J--->Co in MBQB06, MBQB07, MBQB09, MBQB12, MBQB20, MBQB21, MBQB41, MBQB42, MBQB47, MBQB48, MBQB50, MBQB52, MBQB53, MBQB58, MBQB61, MBQB62.
J--->K in MBQB06, MQBQ07, MBQB09, MBQB12, MBQB20, MBQB21, MBQB41, MBQB46-->48, MBQB50, MBQB53, MBQB58, MBQB61, MBQB62

% TOTAL SOLIDS

For sample MBQW82 (36.6%) the % total solid was less than 50% but greater than 10%, therefore all associated values not previously qualified were estimated.

J--->ALL METALS NOT PREVIOUSLY QUALIFIED in MBQW82

A.2.2. (continuation)

SDG MBQB43 (SOIL)

MATRIX SPIKE RECOVERY

For Sb (44.1%), matrix % recovery fell between 10-74% requiring estimation of all associated data.

J--->Sb in MBQB43, MBQB54, MBQB63, MBQB73*

*rejected under another criterion

ICP SERIAL DILUTION

For Be, Ca, Cu, Mg & K, the %D were greater than 10% when the initial sample values were greater than 10xIDL, therefore all associated data greater than or equal to the CRDL (or ≥ 10xIDL when 10xIDL > CRDL).

J--->Be & K in MBQB43, MBQB54
J--->Ca in MBQB54
J--->Cu & Mg in MBQB43, MBQB54, MBQB63

% TOTAL SOLIDS

For sample MBQB73 (9.2%) the % total solids was less than 10%, therefore all associated values not previously qualified were rejected.

R--->ALL METALS in MBQB73

SDG MBQB55 (SOIL)

CRDL

For Cu, all CRI's % (75.6%/73.2%/73.4%) recoveries were between 50--79% requiring estimation of all results within the effected range. For Pb, the second CRI % (71.7%) recovery was between 50--79% requiring estimation of all results within the effected range.

J--->Cu in MBQB37, MBQB38, MBQB55, MBQB69, MBQB70 --->73, MBQW83-->86
J--->Pb in MBQB64, MBQW84, MBQW85, MBQW86.

A.2.2. (continuation)

MATRIX SPIKE RECOVERY

For Cr (48.0%), the matrix % recovery fell between 10-74% requiring estimation of all associated data.

J--->Cr in MBQB02, MBQB03, MBQB13, MBQB14, MBQB16, MBQB23, MBQB27, MBQB37, MBQB38, MBQB55, MBQB60, MBQB64, MBQB69, MBQB71-->73, MBQW83-->86

FIELD DUPLICATE

For Cu, the sample and duplicate values were less than 5x the CRDL and the difference between sample-duplicate was greater than 2x CRDL, therefore the associated data required estimation. Please note that all results had been previously qualified.

ICP SERIAL DILUTION

For Ca, Mg, Ni & K, the %D were greater than 10% when the initial sample values were greater than 10xIDL, therefore all associated data greater than or equal to the CRDL (or ≥ 10xIDL when 10xIDL > CRDL).

J--->Mg & K in MBQB02, MBQB03, MBQB13, MBQB14, MBQB16, MBQB23, MBQB27, MBQB37, MBQB38, MBQB60, MBQB64
J--->Ni in MBQB02, MBQB03, MBQB13, MBQB14, MBQB16, MBQB27, MBQB37, MBQB60, MBQB64, MBQB71.
J--->Ca in MBQB02, MBQB13, MBQB14, MBQB16, MBQB27, MBQB37, MBQB60, MBQB64, MBQW83.

% TOTAL SOLIDS

For sample MBQW83 (47.1%) the % total solid was less than 50% but greater than 10%, therefore all associated values not previously qualified were estimated.

J--->ALL METALS NOT PREVIOUSLY QUALIFIED in MBQW83

SDG MBQX17 (AQUEOUS)

CRDL

For Pb, the second CRI % (79.3%) recovery was between 50--79% requiring estimation of all results within the effected range.

A.2.2. (continuation)

J--->Pb in MBNM21-->23, MBQX22, MBQX23, MBQX26-->28.

ICP SERIAL DILUTION

For Na, the %D was greater than 10% when the initial sample values were greater than 10xIDL, therefore all associated data greater than or equal to the CRDL (or ≥ 10xIDL when 10xIDL > CRDL).

J--->Na in MBNM21, MBNM23, MBQX22, MBQX23, MBQX26, MBQX28, MBQX31, MBQX32.

A.2.3. Contract-Problems/Non-Compliance

SDG # MBQB43: Chain of custody was missing for sample MBQB73; trip report provided necessary information.

MMB Reviewer: HS Date: 03/28/01
Signature

Contractor Reviewer: C Stance / Chad M Allen Date: 3/23/01
Signature

Verified by: _____ Date: _____
Signature

CONTRACT NON-COMPLIANCE
(SMO REPORT)

Regional Review of Uncontrolled Hazardous Waste
Site Contract Laboratory Data Package

CASE NO. 28924

The hardcopied (laboratory name) _____
Inorganic data package received at Region II has been reviewed and the quality assurance and performance data summarized. The data reviewed included:
SMO Sample No.: _____

Conc. & Matrix: _____

Contract No. (_____) requires that specific analytical work be done and that associated reports be provided by the contractor to the Regions, EMSL-LV, and SMO. The general criteria used to determine the performance were based on an examination of:

- Data Completeness
- Matrix Spike Results
- Calibration Standards Results
- Duplicate Analysis Results
- Blank Analysis Results
- MSA Results

Items of non-compliance with the above contract are described below.

Comments: _____

CS / CA
Reviewer's Initial

03/23/01
Date

DPO MAILING LIST FOR DATA REVIEWERS

1. USEPA Region I (ESD)
60 Westview Street
Lexington, MA 02173
Deb Szaro
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IL, IN, MI, MN, OH, WI
NLE, TAI/ENG

6. USEPA Region VI (ESD)
Monterey Park Plaza, Bldg. C
6608 Hornwood Drive
Houston, TX 77074
David Stockton
(713) 953-3425
AR, LA, NM, TX, OK
ANACON, RADIAN, SPECS, EIS, Glochem
Research, Inc., SPL Inc., SWRI,
Allied, KEYTX, EIRA

7. USEPA Region VII Laboratory
25 Funston Road
Kansas City, KS 66115
Debra Morey
(913) 236-3881
IO, KS, NB, MO
Wilson, Kansas City Scientific
Enterprises, Eagle Picher

8. USEPA Region VIII Laboratory
Box 25366
Denver Federal Center
Lakewood, CO 80225
Eva Hoffman
(303) 236-7371
CO, ND, SD, UT, WY, MT
ACCU, CSMRI, RMAL, Data Chem., Cenref

9. USEPA Region XI (ESD)
QA Management Section
215 Fremont Street
San Francisco, CA 94105
Kent Kitchingman
(415) 974-0924
AZ, CA, HI, NV, American Samoa,
Guam Trust Territories of Pacific
Islands, Wake Island
ALI, CAL Weston, S-Cubed, IT_CA,
Vegas

10. USEPA Region X Laboratory
P.O. Box 549
Manchester, WA 98353
Gerald Muth
(206) 442-0370
AK, ID, OR, WA
Laucks Testing Labs, Century Testing
Labs (For VOA Only), Weyerhauser Co.,
Columbia Testing, Silver Valley

11. Carla Dempsey - (OS-230)
USEPA
401 "M" Street S.W.
Washington, DC 20460
FTS 382-5746

12. Edward Kantor
USEPA
EMSL-LV
944 E. Harmon Avenue
Box 93478
Las Vegas, NV 89119

13. Sample Management Office
Viar and Company
P.O. Box 818
Alexandria, VA 22313

CLP DATA ASSESSMENT SUMMARY FORM

TYPE OF REVIEW: INORGANIC **DATE:** 03/23/01 **CASE #:** 28924

SITE: DIAMOND AEROSOL **LAB NAME:** SENTINEL

REVIEWER'S INITIALS: CS **NUMBER OF SAMPLES:** 62 WATER
64 SOIL

ANALYTES REJECTED DUE TO EXCEEDING REVIEW CRITERIA:*

	Holding Time	CRDL	Prep Blank	Field Blank	Inter-ference	Spike Recov	Det. Limit	LCS	Serial Dil	%TS	Total Analytes	Rejections
ICP									20	22	2772	42
Flame AA												
Furnace AA												
Mercury										1	126	1
Cyanide										1	126	1
Total									20	24	3024	44

ANALYTES FLAGGED AS ESTIMATED (J) DUE TO EXCEEDING CRITERIA FOR:*

	Holding Time	CRDL	Prep Blan	% Solids	Preser vation	Spike Recov.	Dup Lab	Dup Field	Det. Limit	LCS	Serial Diluti on	%TS	Total Analytes	Estim ation
ICP		36				80			385			35	2772	536
Flame AA														
Furnace AA														
Mercury												2	126	2
Cyanide						49						2	126	51
Total		36				129			385			39	3024	589

Note: Asterisk (*) indicates additional exceedances of review criteria.

Region II

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.: 28924

SITE: DIAMOND AEROSOL

LABORATORY: SENTINEL

NO. OF SAMPLES/MATRIX: 62 WATER, 64 SOIL

SDG.#: MBQX03, MBNM36, MBQA99, MBNM24, MBQB12, MBQB43, MBQX17, MBQB55

REVIEWER (IF NOT ESD):

SOW#: ILM04.1

REVIEWER'S NAME: C. STANCA, C. ALAIMO

DPO: ACTION FYI

COMPLETION DATE: 03/23/01

DATA ASSESSMENT SUMMARY

	ICP	AA	MERCURY	CYANIDE
Holding Times	O		O	O
Calibration	O		O	O
Blanks	O		O	O
ICS	O		N/A	N/A
LCS	O		N/A	N/A
Duplicate Analysis	O		O	O
Matrix Spike	O		O	O
MSA	N/A		N/A	N/A
Serial Dilution	Z		N/A	N/A
Sample Verification	O		O	O
Other QC	Z		O	O
Overall Assessment	O		O	O

O = Data has no problems/or qualified due to minor problems.
X = Data qualified due to major problems.
Z = Data unacceptable.

DIAMOND AEROSOL

CASE # 25924

Evaluation of Metals Data for the Contract Laboratory Program (CLP)

based on

BCW. 3/90

(SOP Revision XI)

PREPARED BY: Hanif Sheikh DATE: 1-30-92
Hanif Sheikh, Quality Assurance Chemist
Toxic and Hazardous Waste Section

APPROVED BY: Kevin Kubik DATE: 1-30-92
Kevin Kubik, Chief
Toxic and Hazardous Waste Section

APPROVED BY: Robert Runyon DATE: 1/30/92
Robert Runyon, Chief
Monitoring Management Branch

e: Evaluation of Metals Data for the Contract Laboratory Program

Date: Jan. 1992
Number: HW-2
Revision: 11

Scope

This procedure is applicable to inorganic data obtained from contractor laboratories working for Hazardous Waste Site Contract Laboratory Program (CLP).

The data validation is based upon analytical and quality assurance requirements specified in Statement of Work (SOW) 3/90 .

Responsibilities - Data reviewers will complete the following tasks as assigned by the Data Review Coordinator:

. For a total review:

.1 Data Assessment - "Total Review-Inorganics" Checklist Appendix (A.1).
The reviewer must answer every question on the checklist.

.2 Data Assessment - Data Assessment Narrative (Appendix A.2)
The answer on the checklist must match the action in the narrative (appendix A.2) and on Form I's. Do not use pencil to write the narrative.

.3 Contract Non-Compliance - SMO Report (Appendix A.3)
This report is to be completed only when a serious contract violation is encountered, or upon the request of the Data Validation Task Monitor, or Technical Project Officer (TPO). Forward 5 copies: one each for internal files, appropriate Regional TPO, Sample Management Office (SMO) and last two addresses of Mailing List for Data Reviewers (Appendix A.4). In other cases, all contract violations should be appended to the end of the Data Assessment Narrative (Sec. A.2.2).

4 CLP Data Assessment Summary Forms

1 Appendix A.5
Fill in the total number of analytes analyzed by different analyses and the number of analytes rejected or flagged as estimated due to corresponding quality control criteria. Place an "X" in boxes where analyses were not performed, or criteria do not apply.

2 Appendix A.6
Data reviewer is also required to fill out Inorganic Regional Data Assessment form (Appendix A.7) provided by EPA Headquarters. Codes listed on the form will be used to describe the Data Assessment Summary.

2.1.5 Data Review Log: It is recommended that each data reviewer should maintain a log of the reviews completed to include: a. date of start of case review

b. date of completion of case review
c. site
d. case number
e. contract laboratory
f. number of samples
g. matrix
h. hours worked
i. reviewer's initials

2.1.6 Telephone Record Log - the data reviewer should enter the bare facts of inquiry, before initiating any phone conversation with CLP laboratory. After the case review has been completed, mail white copy of Telephone Record Log to the laboratory and pink copy to SMO. File yellow copy in the Telephone Record Log folder, and attach a xerox copy of the Telephone Record Log to the completed Data Assessment Narrative (Appendix A.2).

2.1.7 Forwarded Paperwork

2.1.7.1 Upon completion of review, the following are to be forwarded to the Regional Sample Control Center (RSCC) located in the Surveillance and Monitoring Branch:
a. data package
b. completed data assessment checklist (Appendix A.1,original)
c. SMO Contract Compliance Screening (CCS)
d. Record of Communication (copy)
e. CLP Reanalysis Request/Approval Record (original + 3 copies)
f. Appendix A.6 (original).

2.1.7.2 Forward 2 copies of completed Data Assessment Narrative (Appendix A.2) along with 2 copies of the Inorganic Data Assessment Form (Appendix A.6) and Telephone Record Log , if any,: one each for appropriate Regional TPO, and the other one to EPA EMSL office in Las Vegas. The addresses of TPOs and EPA office in Las Vegas are given in Appendix A-4.

2.1.8 Filed Paperwork - Upon completion of review, the following are to be filed within MMB files:
a. Two copies of completed Data Assessment Narrative (Appendix A.2) each carrying Appendix A.6.
b. Telephone Record Log (copy)
c. SMO Report (copy Appendix A-3)
d. CLP Reanalysis Request/Approval Record (copy)

3.0 Data Completeness
Each data package is checked by a Regional Sample Control Coordinator (RSSC) for completeness. A data package is assumed to be complete when all the deliverables required under the contract are present. If a data package is incomplete, the RSSC would call the laboratory for missing document(s). If the laboratory does not respond within a week, SMO and MMB coordinator of Region II will be notified.

4.0 Rejection of Data - All values determined to be unacceptable on the Inorganic Analysis Data Sheet (Form I) must be lined over with a red pencil. As soon as any review criteria causes data to be rejected, that data can be eliminated from any further review or consideration.

5.0 Acceptance Criteria - In order that reviews be consistent among reviewers, acceptance criteria as stated in Appendix A.1 (pages 4-25) should be used. Additional guidance can be found in the National Inorganic Functional Guidelines of October 1, 1989.

6.0 SMO Contract Compliance Screening (CCS) - This is intended to aid reviewer in locating any problems, both corrected and uncorrected. However, the validation should be carried out even if CCS is not present. Resubmittals received from laboratory in response to CCS must be used by the reviewer.

7.0 Request for Reanalysis - Data reviewers must note all items of contract non-compliance within Data Assessment Narrative. If holding times and sample storage times have not been exceeded, TPO may request reanalysis if items of non-compliance are critical to data assessment. Requests are to be made on "CLP Re-Analysis Request/Approval Record".

8.0 Record of Communication - Provided by the Regional Sample Control Center (RSCC) to indicate which data packages have been received and are ready to be reviewed.

9.0 Rounding off numbers - The data reviewer will follow the standard practice.

	YES	NO	N/A
A.1.1 Contract Compliance Screening Report (CCS) - Present?	[✓]	___	___
ACTION: If no, contact RSCC.			
A.1.2 Record of Communication (from RSCC) - Present?	[✓]	___	___
ACTION: If no, request from RSCC.			
A.1.3 Trip Report - Present and complete?	[✓]	___	___
ACTION: If no, contact RSCC for trip report.			
A.1.4 Sample Traffic Report - Present?	[✓]	___	___
Legible?	[✓]	___	___
ACTION: If no, request from Regional Sample Control Center (RSCC).			
A.1.5 Cover Page - Present?	[✓]	___	___
Is cover page properly filled in and signed by the lab manager or the manager's designee?	[✓]	___	___
ACTION: If no, prepare Telephone Record Log, and contact laboratory.			
Do numbers of samples correspond to numbers on Record of Communication?	[✓]	___	___
Do sample numbers on cover page agree with sample numbers on: (a) Traffic Report Sheet?	[✓]	___	___
(b) Form I's?	[✓]	___	___
ACTION: If no for any of the above, contact RSCC for clarification.			

		Yes	No	N/A
A.1.6	Form I to IX			
A.1.6.1	Are all the Form I through Form IX labeled with:			
	Laboratory name?	[✓]	___	___
	Case/SAS number?	[✓]	___	___
	EPA sample No.?	[✓]	___	___
	SDG No.?	[✓]	___	___
	Contract No.?	[✓]	___	___
	Correct units?	[✓]	___	___
	Matrix?	[✓]	___	___

ACTION: If no for any of the above, note under Contract Problem/Non-Compliance section of the "Data Assessment Narrative".

A.1.6.2	Do any computation/transcription errors exceed 10% of reported values on Forms I-IX for:			
	(NOTE: Check all forms against raw data.)			
	(a) all analytes analyzed by ICP?	[✓]	___	___
	(b) all analytes analyzed by GFAA?	[ ]	___	✓
	(c) all analytes analyzed by AA Flame?	[ ]	___	✓
	(d) Mercury?	[✓]	___	___
	(e) Cyanide?	[✓]	___	___

ACTION: If yes, prepare Telephone Log, contact laboratory for corrected data and correct errors with red pencil and initial.

Title: Evaluation of Metals Data for the Contract Laboratory Program
Appendix A.1: Data Assessment - Contract Compliance (Total Review)

Date: Jan. 1992
Number: HW-2
Revision: 11

		YES	NO	N/A
A.1.7	Raw Data			
A.1.7.1	Digestion Log* for flame AA/ICP (Form XIII) present?	[✓]		
	Digestion Log for furnace AA Form XIII present?	[ ]		✓
	Distillation Log for mercury Form XIII present?	[✓]		
	Distillation Log for cyanides Form XIII present?	[✓]		
	Are pH values (pH<2 for all metals, pH>12 for cyanide) present?	[✓]		
	*Weights, dilutions and volumes used to obtain values.			
	Percent solids calculation present for soils/sediments?	[✓]		
	Are preparation dates present on sample preparation logs/bench sheets?	[✓]		
A.1.7.2	Measurement read out record present? ICP	[✓]		
	Flame AA	[ ]		✓
	Furnace AA	[ ]		✓
	Mercury	[✓]		
	Cyanides	[✓]		
A.1.7.3	Are all raw data to support all sample analyses and QC operations present?	[✓]		
	Legible?	[✓]		
	Properly Labeled?	[✓]		

ACTION: If no for any of the above questions in sections A.1.7.1 through A.1.7.3, write Telephone Record Log and contact laboratory for resubmittals.

Compliance (Total Review)

		YES	NO	N/A
A.1.8	**Holding Times** - (aqueous and soil samples)			
	(Examine sample traffic reports and digestion/distillation logs.)			
	Mercury analysis (28 days). . . . . exceeded?	___	[✓]	___
	Cyanide distillation (14 days). . . . . exceeded?	___	[✓]	___
	Other Metals analysis (6 months). . . . exceeded?	___	[✓]	___
	NOTE: Prepare a list of all samples and analytes for which holding times have been exceeded. Specify the number of days from date of collection to the date of preparation (from raw data). Attach to checklist.			
	ACTION: If yes, reject (red-line) values less than Instrument Detection Limit (IDL) and flag as estimated (J) the values above IDL even though sample(s) was preserved properly.			
A.1.8.2	Is pH of aqueous samples for: Metals Analysis >2?	___	[✓]	___
	Cyanides Analysis <12?	___	[✓]	___
	Action: If yes, flag the associated metals and cyanides data as estimated.			
A.1.9	**Form I (Final Data)**			
A.1.9.1	Are all Form I's present and complete?	[✓]	___	___
	ACTION: If no, prepare telephone record log and contact laboratory for submittal.			
A.1.9.2	Are correct units (ug/l for waters and mg/kg for soils) indicated on Form I's?	[✓]	___	___
	Are soil sample results for each parameter corrected for percent solids?	[✓]	___	___
	Are all "less than IDL" values properly coded with "U"?	[✓]	___	___

		YES	NO	N/A
	Are the correct concentration qualifiers used with final data?	[✓]	___	___
	ACTION: If no for any of the above, prepare Telephone Record Log, and contact laboratory for corrected data.			
A.1.9.3	Are EPA sample # s and corresponding laboratory sample ID # s the same as on the Cover Page, Form I's and in the raw data?	[✓]	___	___
	Was a brief physical description of samples given on Form I's?	[___]	___	___
	Was the dilution of any sample diluted beyond the requirements of the contract noted on Form I or Form XIV?	___	[___]	___
	ACTION: If no for any of the above, note under Contract-Problem/Non-Compliance of the "Data Assessment Narrative".			
A.1.10	Calibration			
A.1.10.1	Is record of at least 2 point calibration present for ICP analysis?	[✓]	___	___
	Is record of 5 point calibration present for Hg analysis?	[✓]	___	___
	Is record of 4 point calibration present for:			
	Flame AA?	[___]	___	✓
	Furnace AA?	[___]	___	✓
	Cyanides?	[✓]	___	___
	Is one calibration standard at the CRDL level for all AA (except Hg) and cyanides analyses?	[✓]	___	___
	ACTION: If no for any of the above, write in the Contract Problem/Non-Compliance section of the "Data Assessment Narrative".			

		YES	NO	N/A
A.1.10.2	Is correlation coefficient less than 0.995 for:			
	Mercury Analysis?	___	[✓]	___
	Cyanide Analysis?	___	[✓]	___
	Atomic Absorption Analysis?	___	[___]	✓

ACTION: If yes, flag the associated data as estimated.

NOTE: The data validator shall calculate the correlation coefficient using concentrations of the standards and the corresponding instrument response (e.g. absorbance, peak area, peak height, etc.).

A.1.10.3	In the instance where less than 4 standards are measured in absorbance (or peak area, peak height, etc.) mode, are the remaining standards analyzed in concentration mode immediately after calibration within ±10% of the true values?	[___]	___	✓

ACTION: If no, flag the associated data as estimated if standards are not within ±10% of true values. Do not flag the data as estimated in linear range indicated by good recovery of standard(s).

A.1.11	Form II A (Initial and Continuing Calibration Verification)-			
A.1.11.1	Present and complete for every metal and cyanide?	[✓]	___	___
	Present and complete for AA and ICP when both are used for the same analyte?	[___]	___	✓

ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory.

A.1.11.2	Circle on each Form IIA all percent recoveries that are outside the contract windows. Are all calibration standards (initial and continuing) within control limits:			
	Metals- 90-110%R?	[✓]	___	___
	Hg - 80-120%R?	[✓]	___	___
	Cyanides- 85-115%R?	[✓]	___	___

	YES	NO	N/A
ACTION: Flag as estimated (J) all positive data (not flagged with a "U") analyzed between a calibration standard with %R between 75-89% (65-79% for Hg; 70-84% for CN) or 111-125% (121-135% for Hg; 116-130% for CN) recovery and nearest good calibration standard. Qualify results <IDL as estimated (UJ) if the ICV or CCV %R is 75-89% (CN, 70-84% ; HG, 65-79%). Reject (red-line) as unacceptable data if recovery of the ICV or CCV is outside the range 75-125% (CN, 70-130%; Hg, 65-135%). Qualify five samples on either side of verification standard out of control limits.			
A.1.11.3 Was continuing calibration performed every 10 samples or every 2 hours?	✓		
Was ICV for cyanides distilled?	✓		
ACTION: If no for any of the above, write in the Contract-Problem/Non-Compliance section of the "Data Assessment Narrative".			
A.1.12 Form II B (CRDL Standards for AA and ICP) -			
A.1.12.1 Was a CRDL standard (CRA) analyzed after initial calibration for all AA metals (except Hg)?	✓		
Was a mid-range calib. verification standard distilled and analyzed for cyanide analysis?	✓		
Was a 2xCRDL (or 2xIDL when IDL>CRDL) analyzed (CRI) for each ICP run? (Note: CRI for AL,Ba,Ca,Fe,Mg,Na,or K is not required.)	✓		
ACTION: If no for any of the above, flag as estimated all data falling within the affected ranges. The affected ranges are: AA Analysis - **True Value ± CRDL; ICP Analysis - **True Value ± 2CRDL; CN Analysis - **True Value ± 0.5 x True Value.			

**True value of CRA, CRI or mid-range standard. Substitute IDL for CRDL when IDL > CRDL. Compute the concentration of the missing mid-range standard from the calibration range.

		YES	NO	N/A
A.1.12.2	Was CRI analyzed after ICV/ICB and before the final CCV/CCB, and twice every eight hours of ICP run?	✓		
	ACTION: If no, write in Contract Problem/Non-Compliance Section of the "Data Assessment Narrative".			
A.1.12.3	Circle on each Form IIB all the percent recoveries that are outside the acceptance windows.			
	Are CRA and CRI standards within control limits:			
	Metals 80 - 120%R?		✓	
	Is mid-range standard within control limits:			
	Cyanide 80 - 120%R?	✓		
	ACTION: Flag as estimated all sample results within the affected range if the recovery of the standard is between 50-79%; flag only positive data within the affected range if the recovery is between 121-150%; reject all data within the affected range if the recovery is less than 50%; reject only positive data within the affected range if the recovery is greater than 150%. Qualify 50% of the samples on either side of CRI standard outside the control limits.			
	Note: Flag or reject the final results only when sample raw data are within the affected ranges and the CRDL standards are outside the acceptance windows.			
A.1.13	Form III (Initial and Continuing Calibration Blanks)			
A.1.13.1	Present and complete?	✓		
	For both AA and ICP when both are used for the same analyte?			✓
	Was an initial calibration blank analyzed?	✓		
	Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)?	✓		

		YES	NO	N/A
	ACTION: If no, prepare Telephone Record Log, contact laboratory and write in the Contract-Problems/ Non-Compliance section of the "Data Assessment Narrative".			
A.1.13.2	Circle on each Form III all calibration blank values that are above CRDL (or 2 x IDL when IDL > CRDL).			
	Are all calibration blanks (when IDL<CRDL) less than or equal to the Contract Required Detection Limits (CRDLs)?	✓		
	Are all calibration blanks less than two times Instrument Detection Limit (when IDL>CRDL)?			✓
	ACTION: If no for any of the above, flag as estimated (J) positive sample results when raw sample value is less than or equal to calibration blank value analyzed between calibration blank with value over CRDL (or 2xIDL) and nearest good calibration blank. Flag five samples on either side of the calibration blank outside the control limits.			
A.1.14	FORM III (Preparation Blank) - (Note: The preparation blank for mercury is the same as the calibration blank.)			
A.1.14.1	Was one prep. blank analyzed for:			
	each Sample Delivery Group (SDG)?	✓		
	each batch of digested samples?	✓		
	each matrix type?	✓		
	both AA and ICP when both are used for the same analyte?			✓
	ACTION: If no for any of the above, flag as estimated (J) all the associated positive data <10 x IDLs for which prep. blank was not analyzed.			
	NOTE: If only one blank was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (J).			

		YES	NO	N/A
A.1.14.2	Is concentration of prep. blank value greater than the CRDL when IDL is less than or equal to CRDL?		✓	
	If yes, is the concentration of the sample with the least concentrated analyte less than 10 times the prep.blank?			✓
	ACTION: If yes, reject (red-line) all associated data greater than CRDL concentration but less than ten times the prep. blank value.			
A.1.14.3	Is concentration of prep. blank value (Form III) less than two times IDL, when IDL is greater than CRDL?			✓
	ACTION: If no, reject (red-line) all positive sample results when sample raw data are less than 10 times the prep. blank value.			
A.1.14.4	Is concentration of prep. blank below the negative CRDL?		✓	
	ACTION: If yes, reject (red-line) all associated sample results less than 10xCRDL.			
A.1.15	Form IV (ICP Interference Check Sample)			
A.1.15.1	Present and complete?	✓		
	(NOTE: Not required for furnace AA, flame AA, mercury, cyanide and Ca, Mg, K and Na.)			
	Was ICS analyzed at beginning and end of run (or at least twice every 8 hours)?	✓		
	ACTION: If no, flag as estimated (J) all the samples for which AL, Ca, Fe, or Mg is higher than in ICS.			
A.1.15.2	Circle all values on each Form IV that are more than ± 20% of true or established mean value.			
	Are all Interference Check Sample results inside the control limits (± 20%)?	✓		
	If no, is concentration of Al, Ca, Fe, or Mg lower than the respective concentration in ICS?			✓

		YES	NO	N/A
	ACTION: If no, flag as estimated (J) those positive results for which ICS recovery is between 121-150%; flag all sample results as estimated if ICS recovery falls within 50-79%; reject (red-line) those sample results for which ICS recovery is less than 50%; if ICS recovery is above 150%, reject positive results only (not flagged with a "U").			
A.1.16	Form V A (Spiked Sample Recovery - Pre-Digestion/Pre-Distillation)- (Note: Not required for Ca, Mg, K, and Na (both matrices), Al, and Fe (soil only.)			
A.1.16.1	Present and complete for: each SDG?	[✓]	___	___
	each matrix type?	[✓]	___	___
	each conc. range (i.e. low, med., high)?	[✓]	___	___
	For both AA and ICP when both are used for the same analyte?	[ ]	___	✓
	ACTION: If no for any of the above, flag as estimated (J) all the positive data less than four times the spiking levels specified in SOW for which spiked sample was not analyzed.			
	NOTE: If one spiked sample was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (J).			
A.1.16.2	Was field blank used for spiked sample?	___	[✓]	___
	ACTION: If yes, flag all positive data less than 4 x spike added as estimated (J) for which field blank was used as spiked sample.			
A.1.16.3	Circle on each Form VA all spike recoveries that are outside control limits (75% to 125%).			
	Are all recoveries within control limits?	[ ]	___	___
	If no, is sample concentration greater than or equal to four times spike concentration?	[ ]	✓	___

	YES	NO	N/A
ACTION: If yes, disregard spike recoveries for analytes whose concentrations are greater than or equal to four times spike added. If no, circle those analytes on Form V for which sample concentration is less than four times the spike concentration.			
Are results outside the control limits (75-125%) flagged with "N" on Form I's and Form VA?	[ ]		
ACTION: If no, write in the Contract - Problem/Non - Compliance section of "Data Assessment Narrative".			
A.1.16.4 Aqueous Are any spike recoveries: (a) less than 30%?		✓	
(b) between 30-74%?	✓		
(c) between 126-150%?		✓	
(d) greater than 150%?		✓	
ACTION: If less than 30%, reject all associated aqueous data; if between 30-74%, flag all associated aqueous data as estimated (J); if between 126-150%, flag as estimated (J) all associated aqueous data not flagged with a "U"; if greater than 150%, reject (red-line) all associated aqueous data not flagged with a "U".			
A.1.16.5 Soil/Sediment Are any spike recoveries: (a) less than 10%?		✓	
(b) between 10-74%?	✓		
(c) between 126-200%?		✓	
(d) greater than 200%?		✓	

		YES	NO	N/A
	ACTION: If less than 10%, reject all associated data; if between 10-74%, flag all associated data as estimated; if between 126-200%, flag as estimated all associated data was not flagged with a "U"; if greater than 200%, reject all associated data not flagged with a "U".			
A.1.17	Form VI (Lab Duplicates)			
A.1.17.1	Present and complete for: each SDG?	[✓]		
	each matrix type?	[✓]		
	each concentration range (i.e. low, med., high)?	[✓]		
	both AA and ICP when both are used for the same analyte?	[ ]		✓
	ACTION: If no for any the above, flag as estimated (J) all the data ≥CRDL* for which duplicate sample was not analyzed.			
	Note: 1. If one duplicate sample was analyzed for more than 20 samples, then first 20 samples do not have to be flagged as estimated.			
	2. If percent solids for soil sample and its duplicate differ by more than 1%, prepare a Form VI for each duplicate pair, report concentrations in ug/L on wet weight basis and calculate RPD or Difference for each analyte.			
A.1.17.2	Was field blank used for duplicate analysis?		[✓]	
	ACTION: If yes, flag all data ≥CRDL* as estimated (J) for which field blank was used as duplicate.			
A.1.17.3	Are all values within control limits (RPD 20% or difference ≤ ±CRDL)?	[ ]	✓	
	If no, are all results outside the control limits flagged with an * on Form I's and VI?	[✓]		
	ACTION: If no, write in the Contract - Problems/Non-Compliance section of "Data Assessment Narrative".			

* Substitute IDL for CRDL when IDL > CRDL.

	YES	NO	N/A

NOTE: 1. RPD is not calculable for an analyte of the sample - duplicate pair when both values are less than IDL.
2. If the result of lab duplicate analyzed by GFAA is rejectable due to coefficient of correlation of MSA, analytical spike recovery, or duplicate injections criteria, do not apply precision criteria to metals analyzed by GFAA.

A.1.17.4 Aqueous

Circle on each Form VI all values that are:

RPD > 50%, or
Difference > CRDL*

Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CRDL?	___	✓	___
Is any difference** between sample and duplicate greater than *CRDL where sample and/or duplicate is less than 5 times *CRDL?	___	✓	___

ACTION: If yes, flag the associated data as estimated.

A.1.17.5 Soil/Sediment

Circle on each Form VI all values that are:

RPD > 100%, or

Difference > 2 x CRDL*

Is any RPD (where sample and duplicate are both greater than or equal to 5 times *CRDL) : > 100%?	___	✓	___
Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x*CRDL) : > 2x*CRDL?	___	✓	___

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
	ACTION: If yes, flag the associated data as estimated.			
A.1.18	Field Duplicates			
A.1.18.1	Were field duplicates analyzed?	✓		

ACTION: If yes, prepare a Form VI for each aqueous field duplicate pair. Prepare a Form VI for each soil duplicate pair, if percent solids for sample and its duplicate differ by more than 1%; report concentrations of soils in ug/l on wet weight basis and calculate RPDs or Difference for each analyte.

NOTE: 1. Do not calculate RPD when both values are less than IDL.
2. Flag all associated data only for field duplicate pair.

A.1.18.2 Aqueous

Circle all values on self prepared Form VI for field duplicates that are:

RPD > 50%, or
Difference > CRDL*

Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CRDL?		✓	
Is any **difference between sample and duplicate greater than *CRDL where sample and/or duplicate is less than 5 times *CRDL?		✓	

ACTION: If yes, flag the associated data as estimated.

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
A.1.18.3	Soil/Sediment			
	Circle all values on self prepared Form VI for field duplicates that are: RPD >100%, or Difference > 2 x CRDL*			
	Is any RPD (where sample and duplicate are both greater than 5 times *CRDL) : >100%?		✓	
	Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x *CRDL): >2x *CRDL?	✓		
	ACTION: If yes, flag the associated data as estimated.			
A.1.19	Form VII (Laboratory Control Sample) (Note: LCS - not required for aqueous Hg and cyanide analyses.)			
A.1.19.1	Was one LCS prepared and analyzed for: each SDG?	✓		
	each batch samples digested/distilled?	✓		
	both AA and ICP when both are used for the same analyte?			✓
	ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory for submittal of results of LCS. Flag as estimated (J) all the data for which LCS was not analyzed.			
	NOTE: If only one LCS was analyzed for more than 20 samples, then first 20 samples close to LCS do not have to be flagged as estimated.			

* Substitute IDL for CRDL when IDL > CRDL.
** Use absolute values of sample and duplicate to calculate the difference.

		YES	NO	N/A
A.1.19.2	**Aqueous LCS**			
	Circle on each Form VII the LCS percent recoveries outside control limits (80 - 120%) except for aqueous Ag and Sb.			
	Is any LCS recovery: less than 50%?	___	[ ]	___
	between 50% and 79%?	___	[ ]	___
	between 121% and 150%?	___	[ ]	___
	greater than 150%?	___	[ ]	___

ACTION: Less than 50%, reject (red-line) all data; between 50% and 79%, flag all associated data as estimated (J); between 121% and 150%, flag all positive (not flagged with a "U") results as estimated; greater than 150%, reject all positive results.

A.1.19.3	**Solid LCS**			
	NOTE: 1. If "Found" value of LCS is rejectable due to duplicate injections or analytical spike recovery criteria, regardless of LCS recovery, flag the associated data as estimated (J). 2. If IDL of an analyte is equal to or greater than true value of LCS, disregard the "Action" below even though LCS is out of control limits.			
	Is LCS "Found" value higher than the control limits on Form VII?	___	[ ]	___

ACTION: If yes, qualify all associated positive data as estimated.

	Is LCS "Found" value lower than the Control limits on Form VII?	___	[ ]	___

ACTION: If yes, qualify all associated data as estimated.

		YES	NO	N/A
A.1.20	Form IX (ICP Serial Dilution) -			
	NOTE: Serial dilution analysis is required only for initial concentrations equal to or greater than 10 x IDL.			
A.1.20.1	Was Serial Dilution analysis performed for: each SDG?	✓		
	each matrix type?	✓		
	each concentration range (i.e. low, med.)?	✓		
	ACTION: If no for any of the above, flag as estimated all the positive data ≥ 10xIDLs or ≥ CRDL when 10xIDL ≤ CRDL for which Serial Dilution Analysis was not performed.			
A.1.20.2	Was field blank(s) used for Serial Dilution Analysis?		✓	
	ACTION: If yes, flag all associated data ≥ 10 x IDL as estimated (J). If 10xIDL ≤ CRDL, flag all data ≥ CRDL.			
A.1.20.3	Are results outside control limit flagged with an "E" on Form I's and Form IX when initial concentration on Form IX is equal to 50 times IDL or greater.	✓		
	ACTION: If no, write in the Contract-Problem/Non-Compliance section of the "Data Assessment Narrative".			
A.1.20.4	Circle on each Form IX all percent difference that are outside the control limits for initial concentrations equal to or greater than 10 x IDLs only.			
	Are any % difference values:			
	> 10%?	✓		
	≥ 100%?	✓		

		YES	NO	N/A
	ACTION: Flag as estimated (J) all the associated sample data ≥ 10xIDLs (or ≥ CRDL when 10xIDL ≤ CRDL) for which percent difference is greater than 10% but less than 100%. Reject (red-line) all the associated sample results equal to or greater than 10xIDLs (or ≥ CRDL when 10xIDL ≤ CRDL) for which PD is greater than or equal to 100%.			
	Note: Flag or reject on Form I's only the sample results whose associated raw data are ≥ 10xIDL (or ≥ CRDL when 10xIDL≤ CRDL)			
A.1.21	Furnace Atomic Absorbtion (AA) QC Analysis			
A.1.21.1	Are duplicate injections present in furnace raw data (except during full Method of Standard Addition) for each sample analyzed by GFAA?	[ ]		✓
	ACTION: If no, reject the data on Form I's for which duplicate injections were not performed.			
A.1.21.2	Do the duplicate injection readings agree within 20% Relative Standard Deviation (RSD) or Coefficient of Variation (CV) for concentration greater than CRDL?	[ ]		✓
	Was a dilution analyzed for sample with analytical spike recovery less than 40%?	[ ]		✓
	ACTION: If no for any of the above, flag all the associated data as estimated.			
A.1.21.3	Is *analytical spike recovery outside the control limits (85-115%) for any sample?		[ ]	✓
	ACTION: If yes, flag as estimated the affected sample results if the recovery is between 10-84%; if the recovery is between 115-200%, flag the associated positive sample results as estimated; reject the associated sample results if the recovery is less than 10%; reject positive sample results if the recovery is greater than 200%.			

* Analytical spike is not required on the pre-digestion spiked sample.

		YES	NO	N/A
	NOTE: Reject or flag the data only when the affected sample(s) was not subsequently analyzed by Method of Standard Addition.			
A.1.22	Form VIII (Method of Standard Addition Results)	[ ]		✓
A.1.22.1	Present?		[ ]	✓
	If no, is any Form I result coded with "S" or a "+"?			
	ACTION: If yes, write request on Telephone Record Log and contact laboratory for submittal of Form VIII.			
A.1.22.2	Is coefficient of correlation for MSA less than 0.990 for any sample?		[ ]	✓
	ACTION: If yes, reject (red-line) the affected data.			
A.1.22.3	Was *MSA required for any sample but not performed?		[ ]	✓
	Is coefficient of correlation for MSA less than 0.995?		[ ]	✓
	Are MSA calculations outside the linear range of the calibration curve generated at the beginning of the analytical run?		[ ]	✓
	ACTION: If yes for any of the above, flag all the associated data as estimated (J).			
A.1.22.4	Was proper quantitation procedure followed correctly as outlined in the SOW on page B-23?	[ ]		✓
	ACTION: If no, note exception under Contract Problem/ Non-Compliance section of the "Data Assessment Narrative", and prepare a separate list.			

* MSA is not required on LCS and prep. blank.

		YES	NO	N/A
A.1.23	Dissolved/Total or Inorganic/Total Analytes -			
A.1.23.1	Were any analyses performed for dissolved as well as total analytes on the same sample(s).	___	[✓]	___
	Were any analyses performed for inorganic as well as total (organic + inorganic) analytes on the same sample(s)?	___	[✓]	___
	NOTE: 1. If yes, prepare a list comparing differences between all dissolved (or inorganic) and total analytes. Compute the differences as a percent of the total analyte only when dissolved concentration is greater than CRDL as well as total concentration. 2. Apply the following questions only if inorganic (or dissolved) results are (i) above CRDL, and (ii) greater than total constituents. 3. At least one preparation blank, ICS, and LCS should be analyzed in each analytical run.			
A.1.23.2	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 10%?	___	[___]	✓
A.1.23.3	Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 50%?	___	[___]	✓
	ACTION: If more than 10%, flag both dissolved (or inorganic) and total values as estimated (J); if more than 50%, reject (red-line) the data for both values.			
A.1.24	Form I (Field Blank) -			
	Note: Designate "Field Blank" as such on Form I.)			
A.1.24.1	Circle all field blank values on Form I that are greater than CRDL, (or 2 x IDL when IDL > CRDL).			
	Is field blank concentration less than CRDL (or 2 x IDL when IDL > CRDL) for all parameters of associated aqueous and soil samples?	[✓]	___	___

	YES	NO	N/A
If no, was field blank value already rejected due to other QC criteria?	[ ]		✓

ACTION: If no, reject (except field blank results) all associated positive sample data less than or equal to five times the field blank value. Reject on Form I's the soil sample results that when converted to ug/L on wet basis are less than or equal to five times the field blank value in ug/L.

A.1.25 Form X, XI, XII (Verification of Instrumental Parameters).

A.1.25.1 Is verification report present for:			
Instrument Detection Limits (quarterly)?	✓		
ICP Interelement Correction Factors (annually)?	✓		
ICP Linear Ranges (quarterly)?	✓		

ACTION: If no, contact TPO of the lab.

A.1.25.2 Form X (Instrument Detection Limits) - (Note: IDL is not required for Cyanide.)

A.1.25.2.1 Are IDLs present for: all the analytes?	✓		
all the instruments used?	✓		
For both AA and ICP when both are used for the same analyte?	[ ]		✓

ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory.

A.1.25.2.2 Is IDL greater than CRDL for any analyte?		✓	
If yes, is the concentration on Form I of the sample analyzed on the instrument whose IDL exceeds CRDL, greater than 5 x IDL.	[ ]		✓

	YES	NO	N/A
Action : If no, flag as estimated all values less than five times IDL of the instrument whose IDL exceeds CRDL.			
A.1.25.3 **Form XI (Linear Ranges)**			
A.1.25.3.1 Was any sample result higher than high linear range of ICP.	___	[✓]	___
Was any sample result higher than the highest calibration standard for non-ICP parameters?	___	[✓]	___
If yes for any of the above, was the sample diluted to obtain the result on Form I?	[___]	___	✓
ACTION: If no, flag the result reported on Form I as estimated(J).			
A.1.26 **Percent Solids of Sediments**			
A.1.26.1 Are percent solids in sediment(s): < 50%?	___	[___]	___
< 10%?	✓	[___]	___

ACTION: If yes, qualify as estimated all the results of a sample that has per cent solids between 10%-50% (i.e. moisture content between 50%-90%). Reject all the results of a sample that has per cent solids less than 10% (i.e. moisture content greater than 90%).

NOTE: Reject or flag(J) only the sample results that were not previously rejected or flaged due to other QC criteria.

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBQA99	36357S
MBQA99D	36357S2
MBQA99S	36357MS
MBQB00	36358S
MBQB01	36359S
MBQB04	36360S
MBQB05	36361S
MBQB10	36362S
MBQB11	36363S
MBQB17	36364S
MBQB18	36365S
MBQB19	36366S
MBQB22	36367S
MBQB30	36368S
MBQB34	36369S
MBQB35	36370S
MBQB36	36371S
MBQB39	36372S
MBQB40	36373S
MBQB44	36374S
MBQB45	36375S
MBQB51	36376S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: BAKISUNE Title: [signature] Date: 2/2/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 1.5°C, 2.5°C, 3.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:
MBQB22's tag read MBQB57
Refer to ROC regarding cracked lid for MBQB22
Refer to Record of Communication regarding misidentified tag numbers for samples:
MBQA99's tag read 6 while the TR read 7
MBQB22's " " 354 " " " " 144
Refer to Record of Communication regarding sample preservation anomalies for samples:
" " " " " " the following samples' tags not listing CN: MBQB34, MBQB35, MBQB36, MBQB39, MBQB40, MBQB44, MBQB45, + MBQB51, + MBQB22

QC Specified: Yes X No____ If no, chose:_____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
Mg, K

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: NONE

OTHER: I received MBQB52, MBQB53, MBQW82, and BPH81 which were not listed on the TRs.
MBQB52, B53, W82 are in SDG MBQB12
BPH81 is MBQB73 in SDG MBQB43
See COC

Signature: [signature]

Name & Title: BAK.1 Gwe [signature] Date: 2/2/01

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQA99

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36357S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 81.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21100			P
7440-36-0	Antimony	1.6	B	N	P
7440-38-2	Arsenic	4.5			P
7440-39-3	Barium	77.7			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	1.4		*	P
7440-70-2	Calcium	1030	B		P
7440-47-3	Chromium	43.4		*	P
7440-48-4	Cobalt	17.1			P
7440-50-8	Copper	~~19.4~~			P
7439-89-6	Iron	37100			P
7439-92-1	Lead	10.1			P
7439-95-4	Magnesium	2370		E	P
7439-96-5	Manganese	507			P
7439-97-6	Mercury	0.07	B		CV
7440-02-0	Nickel	15.8			P
7440-09-7	Potassium	700	B	E	P
7782-49-2	Selenium	1.3			P
7440-22-4	Silver	0.68	B		P
7440-23-5	Sodium	383	B		P
7440-28-0	Thallium	0.88	U		P
7440-62-2	Vanadium	67.1			P
7440-66-6	Zinc	44.1			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB00

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36358S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 84.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16300			P
7440-36-0	Antimony	0.95	B	N J	P
7440-38-2	Arsenic	3.7			P
7440-39-3	Barium	54.1			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	947	B		P
7440-47-3	Chromium	35.7		*	P
7440-48-4	Cobalt	14.5			P
7440-50-8	Copper	~~15.1~~			P
7439-89-6	Iron	25500			P
7439-92-1	Lead	7.6		J	P
7439-95-4	Magnesium	2160		E J	P
7439-96-5	Manganese	332			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	12.9		J	P
7440-09-7	Potassium	592	B	E	P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	411	B		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	56.7			P
7440-66-6	Zinc	31.8			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB01

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36359S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 82.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17700			P
7440-36-0	Antimony	1.3	B	N	P
7440-38-2	Arsenic	3.7			P
7440-39-3	Barium	72.2			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.24	B	*	P
7440-70-2	Calcium	872	B		P
7440-47-3	Chromium	42.7		*	P
7440-48-4	Cobalt	18.9			P
7440-50-8	Copper	~~18.2~~			P
7439-89-6	Iron	33800			P
7439-92-1	Lead	11.1			P
7439-95-4	Magnesium	2290		E	P
7439-96-5	Manganese	498			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	13.8			P
7440-09-7	Potassium	778	B	E	P
7782-49-2	Selenium	1.5			P
7440-22-4	Silver	0.46	B		P
7440-23-5	Sodium	364	B		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	61.0			P
7440-66-6	Zinc	44.9			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB04

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36360S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16600			P
7440-36-0	Antimony	1.1	B	N J	P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	83.2			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	16700		J	P
7440-47-3	Chromium	36.9		*	P
7440-48-4	Cobalt	16.0			P
7440-50-8	Copper	~~24.6~~			P
7439-89-6	Iron	27100			P
7439-92-1	Lead	3.9			P
7439-95-4	Magnesium	12900		E J	P
7439-96-5	Manganese	462			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	18.9		J	P
7440-09-7	Potassium	2810		E J	P
7782-49-2	Selenium	1.2			P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	439	B		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	34.5			P
7440-66-6	Zinc	50.2			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB05

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36361S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 80.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21300			P
7440-36-0	Antimony	1.1	B	N	P
7440-38-2	Arsenic	0.57	U		P
7440-39-3	Barium	128			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	5360			P
7440-47-3	Chromium	28.0		*	P
7440-48-4	Cobalt	17.7			P
7440-50-8	Copper	~~28.4~~			P
7439-89-6	Iron	28400			P
7439-92-1	Lead	4.5			P
7439-95-4	Magnesium	7130		E	P
7439-96-5	Manganese	490			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	19.0			P
7440-09-7	Potassium	1920		E	P
7782-49-2	Selenium	0.77	B		P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	717	B		P
7440-28-0	Thallium	0.90	U		P
7440-62-2	Vanadium	39.0			P
7440-66-6	Zinc	62.5			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB10

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36362S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 82.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25900			P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	1.9	B		P
7440-39-3	Barium	119			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	2330			P
7440-47-3	Chromium	59.2		*	P
7440-48-4	Cobalt	28.0			P
7440-50-8	Copper	~~34.5~~			P
7439-89-6	Iron	43000			P
7439-92-1	Lead	4.5			P
7439-95-4	Magnesium	5510		E	P
7439-96-5	Manganese	717			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	25.7			P
7440-09-7	Potassium	2860		E	P
7782-49-2	Selenium	1.7			P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	465	B		P
7440-28-0	Thallium	0.88	U		P
7440-62-2	Vanadium	75.9			P
7440-66-6	Zinc	58.0			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB11

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36363S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28300			P
7440-36-0	Antimony	1.7	B	N	P
7440-38-2	Arsenic	1.8	B		P
7440-39-3	Barium	174			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	3750			P
7440-47-3	Chromium	52.8		*	P
7440-48-4	Cobalt	31.4			P
7440-50-8	Copper	~~47.4~~			P
7439-89-6	Iron	46800			P
7439-92-1	Lead	6.2			P
7439-95-4	Magnesium	8190		E	P
7439-96-5	Manganese	1120			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	44.2			P
7440-09-7	Potassium	3460		E	P
7782-49-2	Selenium	2.0			P
7440-22-4	Silver	0.55	B		P
7440-23-5	Sodium	625	B		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	74.9			P
7440-66-6	Zinc	62.9			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB17

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36364S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 74.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23100			P
7440-36-0	Antimony	1.5	B	N J	P
7440-38-2	Arsenic	2.6	B		P
7440-39-3	Barium	117			P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.11	U	*	P
7440-70-2	Calcium	2280		J	P
7440-47-3	Chromium	57.8		*	P
7440-48-4	Cobalt	32.5			P
7440-50-8	Copper	~~31.2~~			P
7439-89-6	Iron	44100			P
7439-92-1	Lead	13.5		J	P
7439-95-4	Magnesium	4020		E J	P
7439-96-5	Manganese	863			P
7439-97-6	Mercury	0.07	B		CV
7440-02-0	Nickel	32.6		J	P
7440-09-7	Potassium	1790		E J	P
7782-49-2	Selenium	1.8			P
7440-22-4	Silver	0.35	U		P
7440-23-5	Sodium	511	B		P
7440-28-0	Thallium	0.97	U		P
7440-62-2	Vanadium	85.8			P
7440-66-6	Zinc	57.4			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB18

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36365S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15200			P
7440-36-0	Antimony	1.2	B	N	P
7440-38-2	Arsenic	2.7			P
7440-39-3	Barium	84.9			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	942	B		P
7440-47-3	Chromium	35.6		*	P
7440-48-4	Cobalt	14.1			P
7440-50-8	Copper	~~13.2~~			P
7439-89-6	Iron	24400			P
7439-92-1	Lead	7.9			P
7439-95-4	Magnesium	1880		E	P
7439-96-5	Manganese	449			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	11.6			P
7440-09-7	Potassium	692	B	E	P
7782-49-2	Selenium	0.94	B		P
7440-22-4	Silver	0.34	B		P
7440-23-5	Sodium	389	B		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	46.7			P
7440-66-6	Zinc	38.0			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB19

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36366S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 82.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17300			P
7440-36-0	Antimony	1.3	B	N	P
7440-38-2	Arsenic	2.7			P
7440-39-3	Barium	77.6			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	1130	B		P
7440-47-3	Chromium	43.1		*	P
7440-48-4	Cobalt	17.4			P
7440-50-8	Copper	~~20.5~~			P
7439-89-6	Iron	30500			P
7439-92-1	Lead	9.7			P
7439-95-4	Magnesium	2500		E	P
7439-96-5	Manganese	598			P
7439-97-6	Mercury	0.08	B		CV
7440-02-0	Nickel	14.8			P
7440-09-7	Potassium	1100	B	E	P
7782-49-2	Selenium	1.2			P
7440-22-4	Silver	0.43	B		P
7440-23-5	Sodium	417	B		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	55.5			P
7440-66-6	Zinc	52.5			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB22

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36367S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 81.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22000			P
7440-36-0	Antimony	1.5	B	N	P
7440-38-2	Arsenic	3.4			P
7440-39-3	Barium	74.0			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	1190	B		P
7440-47-3	Chromium	46.7		*	P
7440-48-4	Cobalt	17.4			P
7440-50-8	Copper	~~18.6~~			P
7439-89-6	Iron	33700			P
7439-92-1	Lead	9.5			P
7439-95-4	Magnesium	3130		E	P
7439-96-5	Manganese	459			P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	15.4			P
7440-09-7	Potassium	1130	B	E	P
7782-49-2	Selenium	1.3			P
7440-22-4	Silver	0.39	B		P
7440-23-5	Sodium	415	B		P
7440-28-0	Thallium	0.88	U		P
7440-62-2	Vanadium	66.1			P
7440-66-6	Zinc	48.9			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB30

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36368S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 77.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	37700			P
7440-36-0	Antimony	1.7	B	N	P
7440-38-2	Arsenic	1.6	B		P
7440-39-3	Barium	167			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	1060	B		P
7440-47-3	Chromium	139		*	P
7440-48-4	Cobalt	34.9			P
7440-50-8	Copper	~~30.3~~			P
7439-89-6	Iron	51000			P
7439-92-1	Lead	5.5			P
7439-95-4	Magnesium	6140		E	P
7439-96-5	Manganese	451			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	37.6			P
7440-09-7	Potassium	3560		E	P
7782-49-2	Selenium	2.3			P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	491	B		P
7440-28-0	Thallium	0.94	U		P
7440-62-2	Vanadium	97.7			P
7440-66-6	Zinc	49.7			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB34

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36369S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 73.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30200			P
7440-36-0	Antimony	1.6	B	N	P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	124			P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.11	U	*	P
7440-70-2	Calcium	2870			P
7440-47-3	Chromium	91.4		*	P
7440-48-4	Cobalt	30.8			P
7440-50-8	Copper	~~58.6~~			P
7439-89-6	Iron	52900			P
7439-92-1	Lead	3.6			P
7439-95-4	Magnesium	8290		E	P
7439-96-5	Manganese	617			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	32.4			P
7440-09-7	Potassium	3210		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.35	U		P
7440-23-5	Sodium	539	B		P
7440-28-0	Thallium	0.97	U		P
7440-62-2	Vanadium	92.0			P
7440-66-6	Zinc	70.7			P
	Cyanide	0.10	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB35

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36370S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 71.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30900			P
7440-36-0	Antimony	2.0	B	N	P
7440-38-2	Arsenic	1.1	B		P
7440-39-3	Barium	148			P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.11	U	*	P
7440-70-2	Calcium	3930			P
7440-47-3	Chromium	142		*	P
7440-48-4	Cobalt	29.9			P
7440-50-8	Copper	~~47.3~~			P
7439-89-6	Iron	56700			P
7439-92-1	Lead	2.6			P
7439-95-4	Magnesium	9360		E	P
7439-96-5	Manganese	644			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	35.6			P
7440-09-7	Potassium	3380		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.37	U		P
7440-23-5	Sodium	605	B		P
7440-28-0	Thallium	1.0	U		P
7440-62-2	Vanadium	104			P
7440-66-6	Zinc	72.8			P
	Cyanide	0.10	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB36

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36371S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22200			P
7440-36-0	Antimony	0.79	U	N	P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	95.3			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	770	B		P
7440-47-3	Chromium	31.5		*	P
7440-48-4	Cobalt	10.6	B		P
7440-50-8	Copper	~~16.2~~			P
7439-89-6	Iron	27100			P
7439-92-1	Lead	4.2			P
7439-95-4	Magnesium	1410		E	P
7439-96-5	Manganese	227			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	11.2			P
7440-09-7	Potassium	872	B	E	P
7782-49-2	Selenium	0.96	B		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	598	B		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	45.3			P
7440-66-6	Zinc	25.0			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB39

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36372S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 77.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30000			P
7440-36-0	Antimony	1.7	B	N	P
7440-38-2	Arsenic	0.60	U		P
7440-39-3	Barium	108			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	6050			P
7440-47-3	Chromium	52.5		*	P
7440-48-4	Cobalt	23.9			P
7440-50-8	Copper	~~47.2~~			P
7439-89-6	Iron	41700			P
7439-92-1	Lead	1.5			P
7439-95-4	Magnesium	9170		E	P
7439-96-5	Manganese	474			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	33.5			P
7440-09-7	Potassium	3430		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	678	B		P
7440-28-0	Thallium	0.93	U		P
7440-62-2	Vanadium	61.6			P
7440-66-6	Zinc	40.1			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB40

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36373S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 80.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22000			P
7440-36-0	Antimony	0.99	B	N J	P
7440-38-2	Arsenic	0.57	U		P
7440-39-3	Barium	101			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	4720		J	P
7440-47-3	Chromium	22.4		*	P
7440-48-4	Cobalt	21.1			P
7440-50-8	Copper	~~33.3~~			P
7439-89-6	Iron	24500			P
7439-92-1	Lead	3.0			P
7439-95-4	Magnesium	5600		E J	P
7439-96-5	Manganese	560			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	17.9		J	P
7440-09-7	Potassium	1690		E J	P
7782-49-2	Selenium	0.47	B		P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	738	B		P
7440-28-0	Thallium	0.89	U		P
7440-62-2	Vanadium	33.4			P
7440-66-6	Zinc	45.0			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB44

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36374S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 80.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600			P
7440-36-0	Antimony	1.4	B	N	P
7440-38-2	Arsenic	2.4	B		P
7440-39-3	Barium	57.1			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	1060	B		P
7440-47-3	Chromium	45.6		*	P
7440-48-4	Cobalt	13.9			P
7440-50-8	Copper	10.7			P
7439-89-6	Iron	24300			P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	1830		E	P
7439-96-5	Manganese	877			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	10.6			P
7440-09-7	Potassium	743	B	E	P
7782-49-2	Selenium	0.92	B		P
7440-22-4	Silver	0.42	B		P
7440-23-5	Sodium	373	B		P
7440-28-0	Thallium	0.89	U		P
7440-62-2	Vanadium	46.6			P
7440-66-6	Zinc	30.5			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB45

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36375S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 78.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31900			P
7440-36-0	Antimony	2.0	B	N	P
7440-38-2	Arsenic	2.3	B		P
7440-39-3	Barium	170			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	3090			P
7440-47-3	Chromium	59.7		*	P
7440-48-4	Cobalt	44.8			P
7440-50-8	Copper	~~46.9~~			P
7439-89-6	Iron	54900			P
7439-92-1	Lead	4.0			P
7439-95-4	Magnesium	9780		E	P
7439-96-5	Manganese	1040			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	53.8			P
7440-09-7	Potassium	4360		E	P
7782-49-2	Selenium	1.7			P
7440-22-4	Silver	0.33	U		P
7440-23-5	Sodium	560	B		P
7440-28-0	Thallium	0.92	U		P
7440-62-2	Vanadium	85.6			P
7440-66-6	Zinc	59.6			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB51

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQA99

Matrix (soil/water): SOIL Lab Sample ID: 36376S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 82.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28400			P
7440-36-0	Antimony	1.8	B	N	P
7440-38-2	Arsenic	0.97	B		P
7440-39-3	Barium	131			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.10	U	*	P
7440-70-2	Calcium	3100			P
7440-47-3	Chromium	39.3		*	P
7440-48-4	Cobalt	30.6			P
7440-50-8	Copper	~~47.5~~			P
7439-89-6	Iron	48200			P
7439-92-1	Lead	2.1			P
7439-95-4	Magnesium	8250		E	P
7439-96-5	Manganese	786			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	34.5			P
7440-09-7	Potassium	2860		E	P
7782-49-2	Selenium	1.7			P
7440-22-4	Silver	0.54	B		P
7440-23-5	Sodium	457	B		P
7440-28-0	Thallium	0.88	U		P
7440-62-2	Vanadium	68.9			P
7440-66-6	Zinc	61.7			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68WØØØ85

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ ____

SDG No./First Sample in SDG. MBQA99 Sample Receipt Date: 01/24/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQB51 Sample Receipt Date: 01/24/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBQA99	12	MBQB30
2	MBQB00	13	MBQB34
3	MBQB01	14	MBQB35
4	MBQB04	15	MBQB36
5	MBQB05	16	MBQB39
6	MBQB10	17	MBQB40
7	MBQB11	18	MBQB44
8	MBQB17	19	MBQB45
9	MBQB18	20	MBQB51
10	MBQB19	21	———
11	MBQB22	22	———

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

1/24/Ø1
Date

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Subject: **Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99**
Date: Wed, 24 Jan 2001 13:49:13 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers.
I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue CN not on sample tags | FINAL
Date: Thu, 25 Jan 2001 10:23:32 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Ray Klimcsak (E-mail)" <klimcsak.raymond@epa.gov>

Kimberly,
Per Region 2, the lab should analyze all of the samples for this case for cyanide. Also, the lab should note the discrepancy with the tag numbers and proceed with the numbers that are on the tags themselves. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that all of the samples for this case should be analyzed for cyanide. Also, the lab should proceed with the numbers that are on the sample tags, and note the discrepancy in the case narrative.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:50 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue CN not on sample tags

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab is reporting that samples MBQB34, MBQB35, MBQB36, MBQB39, MBQB40, MBQB44, MBQB45, MBQB51 do not have CN listed on the sample tags. Also, sample MBQB22 has MBQB57 as the sample ID on the tag, and the tag does not have CN analysis listed, but the TR and the sample jar do. In addition, the top of the bottle is cracked, but there is no loss of sample volume, and the custody seals are intact. The sample tag for sample MBQA99 lists the tag number as 6, but the TR lists the tag number as 7. The sample tag for sample MBQB22 lists the tag number as 354, but the TR lists the tag number as 144. When Kelly called in the shipping information this morning, she mentioned that there were some incorrect tag numbers for the samples that were shipped to SENTIN. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:01 PM

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To: Bauer, Heather
Subject: Case 28924 SDG MBQA99

Heather,
These samples do not have CN listed on their sample tags:
MBQB34, MBQB35, MBQB36, MBQB39, MBQB40, MBQB44, MBQB45, MBQB51
Sample MBQB22 has MBQB57 as EPA sample ID listed on the tag. Tag does not have CN analysis lisited whereas the TR and the bottle do list CN. The top is cracked on the bottle yet there is no loss of sample and the custody seals were intact.
Sample MBQA99's tag list 6 as tag # yet the TR list 7 as the tag #.
Sample MBQB22's tag list 354 as the tag # yet the TR list 144 as the tag #.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

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Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

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To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

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Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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FEB 14 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBQB02	36418S
MBQB03	36419S
MBQB13	36420S
MBQB14	36421S
MBQB16	36422S
MBQB23	36423S
MBQB27	36424S
MBQB37	36425S
MBQB38	36426S
MBQB55	36377S
MBQB60	36378S
MBQB64	36379S
MBQB69	36380S
MBQB69D	36380S2
MBQB69S	36380MS
MBQB70	36381S
MBQB71	36382S
MBQB72	36383S
MBQW83	36384S
MBQW84	36385S
MBQW85	36386S
MBQW86	36387S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: BAKilgore Title: QAOfficer Date: 2/5/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 2.5°C, 3.5°C, 1.5°C, -0.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:
" " " " " " sample tags without CN listed

QC Specified: Yes X No____ If no, chose:_____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
Mg, K

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: AIΦ4.2 - Rounding - Double Checked by Calculating RPD using Form 6 Values and got RPD = 6.45 which rounds to 6.4

OTHER: I received MBQB52, MBQB53, MBQW82, and BPH81 which were not listed on the TRs.
MBQB52, B53, & W82 are in SDG MBQB12.
BPH81 is MBQB73 in SDG MBQB43.
See ROC

Signature: [signature]

Name & Title: BALLISWE QAOTer Date: 2/5/01

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB02

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36418S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 80.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22300			P
7440-36-0	Antimony	1.0	B		P
7440-38-2	Arsenic	2.9			P
7440-39-3	Barium	101			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.75	B		P
7440-70-2	Calcium	2070			P
7440-47-3	Chromium	47.0		N*	P
7440-48-4	Cobalt	24.4			P
7440-50-8	Copper	29.7			P
7439-89-6	Iron	39000			P
7439-92-1	Lead	30.4			P
7439-95-4	Magnesium	4090		E	P
7439-96-5	Manganese	570			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	21.0			P
7440-09-7	Potassium	2150		E	P
7782-49-2	Selenium	0.90	B		P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	297	U		P
7440-28-0	Thallium	0.90	U		P
7440-62-2	Vanadium	75.3			P
7440-66-6	Zinc	152			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB03

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36419S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 83.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29200			P
7440-36-0	Antimony	1.2	B		P
7440-38-2	Arsenic	2.3	B		P
7440-39-3	Barium	119			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.60	B		P
7440-70-2	Calcium	887	B		P
7440-47-3	Chromium	51.9		N*	P
7440-48-4	Cobalt	27.6			P
7440-50-8	Copper	25.6			P
7439-89-6	Iron	39800			P
7439-92-1	Lead	5.4			P
7439-95-4	Magnesium	2740		E	P
7439-96-5	Manganese	659			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	22.1			P
7440-09-7	Potassium	2160		E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	284	U		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	76.4			P
7440-66-6	Zinc	43.4			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB13

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36420S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 83.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23400			P
7440-36-0	Antimony	1.0	B		P
7440-38-2	Arsenic	0.77	B		P
7440-39-3	Barium	120			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.46	B		P
7440-70-2	Calcium	2250			P
7440-47-3	Chromium	44.7		N*	P
7440-48-4	Cobalt	28.2			P
7440-50-8	Copper	29.3			P
7439-89-6	Iron	42300			P
7439-92-1	Lead	4.4			P
7439-95-4	Magnesium	5850		E	P
7439-96-5	Manganese	749			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	25.3			P
7440-09-7	Potassium	2880		E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	285	U		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	75.4			P
7440-66-6	Zinc	50.4			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB14

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36421S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 80.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18000			P
7440-36-0	Antimony	0.82	U		P
7440-38-2	Arsenic	1.2	B		P
7440-39-3	Barium	95.2			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.50	B		P
7440-70-2	Calcium	1970			P
7440-47-3	Chromium	43.1		N*	P
7440-48-4	Cobalt	23.4			P
7440-50-8	Copper	27.1			P
7439-89-6	Iron	36600			P
7439-92-1	Lead	4.8			P
7439-95-4	Magnesium	4720		E	P
7439-96-5	Manganese	640			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	20.3			P
7440-09-7	Potassium	2300		E	P
7782-49-2	Selenium	0.42	U		P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	296	U		P
7440-28-0	Thallium	0.90	U		P
7440-62-2	Vanadium	60.2			P
7440-66-6	Zinc	49.2			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB16

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36422S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 79.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22200			P
7440-36-0	Antimony	1.0	B		P
7440-38-2	Arsenic	2.3	B		P
7440-39-3	Barium	132			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.84	B		P
7440-70-2	Calcium	1850			P
7440-47-3	Chromium	85.2		N*	P
7440-48-4	Cobalt	27.2			P
7440-50-8	Copper	30.8			P
7439-89-6	Iron	41500			P
7439-92-1	Lead	30.1			P
7439-95-4	Magnesium	4510		E	P
7439-96-5	Manganese	580			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	24.1			P
7440-09-7	Potassium	2800		E	P
7782-49-2	Selenium	0.86	B		P
7440-22-4	Silver	0.33	U		P
7440-23-5	Sodium	301	U		P
7440-28-0	Thallium	0.91	U		P
7440-62-2	Vanadium	77.9			P
7440-66-6	Zinc	121			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB23

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36423S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 83.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14000			P
7440-36-0	Antimony	0.79	U		P
7440-38-2	Arsenic	2.8			P
7440-39-3	Barium	74.3			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.48	B		P
7440-70-2	Calcium	381	B		P
7440-47-3	Chromium	48.8		N*	P
7440-48-4	Cobalt	6.4	B		P
7440-50-8	Copper	29.2			P
7439-89-6	Iron	26600			P
7439-92-1	Lead	7.6			P
7439-95-4	Magnesium	1660		E	P
7439-96-5	Manganese	115			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	9.4	B		P
7440-09-7	Potassium	1840		E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	284	U		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	47.7			P
7440-66-6	Zinc	28.3			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB27

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36424S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 83.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19800			P
7440-36-0	Antimony	1.0	B		P
7440-38-2	Arsenic	4.4			P
7440-39-3	Barium	161			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.82	B		P
7440-70-2	Calcium	1580			P
7440-47-3	Chromium	42.4		N*	P
7440-48-4	Cobalt	31.6			P
7440-50-8	Copper	39.4			P
7439-89-6	Iron	40100			P
7439-92-1	Lead	11.8			P
7439-95-4	Magnesium	4950		E	P
7439-96-5	Manganese	1390			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	25.9			P
7440-09-7	Potassium	2150		E	P
7782-49-2	Selenium	0.79	B		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	286	U		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	67.0			P
7440-66-6	Zinc	63.9			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB37

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36425S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 75.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26700			P
7440-36-0	Antimony	0.87	U		P
7440-38-2	Arsenic	2.9			P
7440-39-3	Barium	141			P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.77	B		P
7440-70-2	Calcium	1940			P
7440-47-3	Chromium	129		N*	P
7440-48-4	Cobalt	40.3			P
7440-50-8	Copper	5.8	B		P
7439-89-6	Iron	55400			P
7439-92-1	Lead	4.2			P
7439-95-4	Magnesium	14300		E	P
7439-96-5	Manganese	450			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	49.0			P
7440-09-7	Potassium	11700		E	P
7782-49-2	Selenium	0.45	U		P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	708	B		P
7440-28-0	Thallium	0.95	U		P
7440-62-2	Vanadium	93.0			P
7440-66-6	Zinc	86.6			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB38

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36426S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 85.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10400			P
7440-36-0	Antimony	0.77	U		P
7440-38-2	Arsenic	1.4	B		P
7440-39-3	Barium	42.7	B		P
7440-41-7	Beryllium	0.09	U		P
7440-43-9	Cadmium	0.38	B		P
7440-70-2	Calcium	579	B		P
7440-47-3	Chromium	19.1		N*	P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	8.8			P
7439-89-6	Iron	16600			P
7439-92-1	Lead	3.1			P
7439-95-4	Magnesium	1550		E	P
7439-96-5	Manganese	97.2			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	6.7	B		P
7440-09-7	Potassium	1890		E	P
7782-49-2	Selenium	0.40	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	279	U		P
7440-28-0	Thallium	0.85	U		P
7440-62-2	Vanadium	24.8			P
7440-66-6	Zinc	22.8			P
	Cyanide	0.16	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB55

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36377S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 87.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11000			P
7440-36-0	Antimony	0.76	U		P
7440-38-2	Arsenic	0.71	B		P
7440-39-3	Barium	20.0	B		P
7440-41-7	Beryllium	0.09	U		P
7440-43-9	Cadmium	0.09	U		P
7440-70-2	Calcium	265	B		P
7440-47-3	Chromium	6.2		N*	P
7440-48-4	Cobalt	3.2	B		P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	5380			P
7439-92-1	Lead	3.8			P
7439-95-4	Magnesium	338	B	E	P
7439-96-5	Manganese	56.5			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	446	B	E	P
7782-49-2	Selenium	0.39	U		P
7440-22-4	Silver	0.30	U		P
7440-23-5	Sodium	273	U		P
7440-28-0	Thallium	0.82	U		P
7440-62-2	Vanadium	8.0	B		P
7440-66-6	Zinc	6.5			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB60

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36378S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25600			P
7440-36-0	Antimony	1.2	B		P
7440-38-2	Arsenic	1.2	B		P
7440-39-3	Barium	109			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.46	B		P
7440-70-2	Calcium	2400			P
7440-47-3	Chromium	45.5		N*	P
7440-48-4	Cobalt	26.0			P
7440-50-8	Copper	27.3			P
7439-89-6	Iron	40700			P
7439-92-1	Lead	5.1			P
7439-95-4	Magnesium	6260		E	P
7439-96-5	Manganese	687			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	26.2			P
7440-09-7	Potassium	2740		E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	286	U		P
7440-28-0	Thallium	0.87	U		P
7440-62-2	Vanadium	66.4			P
7440-66-6	Zinc	63.4			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB64

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36379S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 73.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51900			P
7440-36-0	Antimony	1.1	B		P
7440-38-2	Arsenic	1.4	B		P
7440-39-3	Barium	218			P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.41	B		P
7440-70-2	Calcium	1460			P
7440-47-3	Chromium	216		N*	P
7440-48-4	Cobalt	48.1			P
7440-50-8	Copper	41.6			P
7439-89-6	Iron	61600			P
7439-92-1	Lead	2.4			P
7439-95-4	Magnesium	11000		E	P
7439-96-5	Manganese	995			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	71.9			P
7440-09-7	Potassium	6060		E	P
7782-49-2	Selenium	0.46	U		P
7440-22-4	Silver	0.35	U		P
7440-23-5	Sodium	325	U		P
7440-28-0	Thallium	0.98	U		P
7440-62-2	Vanadium	122			P
7440-66-6	Zinc	60.1			P
	Cyanide	0.10	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB69

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36380S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 77.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3710			P
7440-36-0	Antimony	0.85	U		P
7440-38-2	Arsenic	2.1	B		P
7440-39-3	Barium	28.0	B		P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium	0.39	B		P
7440-70-2	Calcium	593	B		P
7440-47-3	Chromium	40.9		N*	P
7440-48-4	Cobalt	5.8	B		P
7440-50-8	Copper	5.4	B		P
7439-89-6	Iron	18300			P
7439-92-1	Lead	3.7			P
7439-95-4	Magnesium	965	B	E	P
7439-96-5	Manganese	406			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	9.4	B		P
7440-09-7	Potassium	250	B	E	P
7782-49-2	Selenium	0.44	U		P
7440-22-4	Silver	0.36	B		P
7440-23-5	Sodium	307	U		P
7440-28-0	Thallium	0.93	U		P
7440-62-2	Vanadium	24.2			P
7440-66-6	Zinc	51.6			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB70

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36381S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.8

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3080			P
7440-36-0	Antimony	0.79	U		P
7440-38-2	Arsenic	0.86	B		P
7440-39-3	Barium	19.9	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.29	B		P
7440-70-2	Calcium	792	B		P
7440-47-3	Chromium	13.5		N*	P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	2.2	B		P
7439-89-6	Iron	11300			P
7439-92-1	Lead	4.7			P
7439-95-4	Magnesium	557	B	E	P
7439-96-5	Manganese	174			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	3.8	B		P
7440-09-7	Potassium	247	B	E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	284	U		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	22.8			P
7440-66-6	Zinc	26.3			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB71

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36382S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 78.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3670			P
7440-36-0	Antimony	0.84	U		P
7440-38-2	Arsenic	0.79	B		P
7440-39-3	Barium	23.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.46	B		P
7440-70-2	Calcium	753	B		P
7440-47-3	Chromium	21.8		N*	P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	16.6			P
7439-89-6	Iron	20100			P
7439-92-1	Lead	7.0			P
7439-95-4	Magnesium	689	B	E	P
7439-96-5	Manganese	221			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	12.0			P
7440-09-7	Potassium	302	B	E	P
7782-49-2	Selenium	0.46	B		P
7440-22-4	Silver	0.36	B		P
7440-23-5	Sodium	303	U		P
7440-28-0	Thallium	0.92	U		P
7440-62-2	Vanadium	28.4			P
7440-66-6	Zinc	68.2			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB72

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36383S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 76.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2420			P
7440-36-0	Antimony	0.87	U		P
7440-38-2	Arsenic	0.60	U		P
7440-39-3	Barium	14.2	B		P
7440-41-7	Beryllium	0.11	U		P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	565	B		P
7440-47-3	Chromium	8.2		N*	P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	0.60	U		P
7439-89-6	Iron	5480			P
7439-92-1	Lead	5.3			P
7439-95-4	Magnesium	352	B	E	P
7439-96-5	Manganese	119			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	153	B	E	P
7782-49-2	Selenium	0.45	U		P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	313	U		P
7440-28-0	Thallium	0.95	U		P
7440-62-2	Vanadium	10.1	B		P
7440-66-6	Zinc	16.7			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW83

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36384S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 47.1

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8690			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	3.4	B		P
7440-39-3	Barium	72.3	B		P
7440-41-7	Beryllium	0.17	B		P
7440-43-9	Cadmium	0.64	B		P
7440-70-2	Calcium	2800			P
7440-47-3	Chromium	12.7		N*	P
7440-48-4	Cobalt	7.0	B		P
7440-50-8	Copper	7.3	B		P
7439-89-6	Iron	9380			P
7439-92-1	Lead	51.0			P
7439-95-4	Magnesium	980	B	E	P
7439-96-5	Manganese	457			P
7439-97-6	Mercury	0.12	B		CV
7440-02-0	Nickel	7.7	B		P
7440-09-7	Potassium	379	B	E	P
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	0.55	U		P
7440-23-5	Sodium	505	U		P
7440-28-0	Thallium	1.5	U		P
7440-62-2	Vanadium	19.0	B		P
7440-66-6	Zinc	84.8			P
	Cyanide	0.15	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW84

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36385S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 77.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2570			P
7440-36-0	Antimony	0.85	U		P
7440-38-2	Arsenic	0.72	B		P
7440-39-3	Barium	16.3	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.16	B		P
7440-70-2	Calcium	832	B		P
7440-47-3	Chromium	12.0		N*	P
7440-48-4	Cobalt	3.4	B		P
7440-50-8	Copper	3.9	B		P
7439-89-6	Iron	7430			P
7439-92-1	Lead	2.7			P
7439-95-4	Magnesium	601	B	E	P
7439-96-5	Manganese	184			P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	3.7	B		P
7440-09-7	Potassium	324	B	E	P
7782-49-2	Selenium	0.44	U		P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	307	U		P
7440-28-0	Thallium	0.93	U		P
7440-62-2	Vanadium	12.5	B		P
7440-66-6	Zinc	24.8			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW85

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36386S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2020			P
7440-36-0	Antimony	0.79	U		P
7440-38-2	Arsenic	0.70	B		P
7440-39-3	Barium	14.5	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	0.24	B		P
7440-70-2	Calcium	376	B		P
7440-47-3	Chromium	10.7		N*	P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	2.6	B		P
7439-89-6	Iron	8260			P
7439-92-1	Lead	2.8			P
7439-95-4	Magnesium	354	B	E	P
7439-96-5	Manganese	190			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	169	B	E	P
7782-49-2	Selenium	0.41	U		P
7440-22-4	Silver	0.31	U		P
7440-23-5	Sodium	286	U		P
7440-28-0	Thallium	0.86	U		P
7440-62-2	Vanadium	13.5			P
7440-66-6	Zinc	25.2			P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW86

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB55

Matrix (soil/water): SOIL Lab Sample ID: 36387S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 77.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1920			P
7440-36-0	Antimony	0.85	U		P
7440-38-2	Arsenic	0.70	B		P
7440-39-3	Barium	15.8	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.26	B		P
7440-70-2	Calcium	198	B		P
7440-47-3	Chromium	4.7		N*	P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	3.4	B		P
7439-89-6	Iron	5110			P
7439-92-1	Lead	2.8			P
7439-95-4	Magnesium	195	B	E	P
7439-96-5	Manganese	294			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	184	B	E	P
7782-49-2	Selenium	0.72	B		P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	307	U		P
7440-28-0	Thallium	0.93	U		P
7440-62-2	Vanadium	7.2	B		P
7440-66-6	Zinc	25.1			P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68WØØØ85

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBQB55 Sample Receipt Date: 01/24/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQB38 Sample Receipt Date: 01/25/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBQB55	12	MBQB02
2	MBQB60	13	MBQB03
3	MBQB64	14	MBQB13
4	MBQB69	15	MBQB14
5	MBQB70	16	MBQB16
6	MBQB71	17	MBQB23
7	MBQB72	18	MBQB27
8	MBQW83	19	MBQB37
9	MBQW84	20	MBQB38
10	MBQW85	21	
11	MBQW86	22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

1/25/Ø1
Date

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Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99
Date: Wed, 24 Jan 2001 13:49:13 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers.
I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue CN not on sample tag | FINAL
Date: Thu, 25 Jan 2001 10:58:17 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Ray Klimcsak (E-mail)" <klimcsak.raymond@epa.gov>

Kimberly,
Per Region 2, all of the samples for this case should be analyzed for cyanide. Sample MBQB72 should also be analyzed for cyanide. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that all of the samples for this case should be analyzed for cyanide. Sample MBQB72 should also be analyzed for cyanide.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:42 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue CN not on sample tag

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab reported that none of the sample tags list CN, but that the CN is listed on the TRs and the sample bottles. Also, sample MBQB72 does not have CN listed on either the jar or the tag. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:54 PM
To: Bauer, Heather
Subject: Case 28924 SDG MBQB55

Heather,
None of the sample tags have CN listed, although it is listed on the TRs and sample bottles.
MBQB72 does not have CN listed on the jar as well as not listed on the tag.
Thanks,
Kimberly

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Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, MBQB12
Date: Wed, 31 Jan 2001 15:43:30 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
No temperature blank was received with samples on 1/25/01. The temperature of the samples was -0.5C.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

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Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

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To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

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Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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FEB 14 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBQB43	36487S
MBQB43D	36487S2
MBQB43S	36487MS
MBQB54	36488S
MBQB63	36489S
MBQB73	36529S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name: Title: Date: 2/06/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 5.5°C, 3.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:
" " " " " " organic sample. BPH81 (inorganic - MBQB73)

QC Specified: Yes____ No X If no, chose: MBQB43

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
Be, Cu, K, Mg

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: None

OTHER: We received MBQB52, MBQB53, MBQW82, and BPH81 which were not listed on the TR.
MBQB52, B53, & W82 are in SDG MBQB12
BPH81 is MBQB73 in SDG MBQB43
See ROC

Signature:

Name & Title: Date: 2/6/01

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB43

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

Matrix (soil/water): SOIL Lab Sample ID: 36487S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 78.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31300			P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	112			P
7440-41-7	Beryllium	1.4		E	P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1260	B		P
7440-47-3	Chromium	68.4			P
7440-48-4	Cobalt	27.9			P
7440-50-8	Copper	34.1		E	P
7439-89-6	Iron	46600			P
7439-92-1	Lead	10.4		*	P
7439-95-4	Magnesium	3560		E	P
7439-96-5	Manganese	758			P
7439-97-6	Mercury	0.08	B		CV
7440-02-0	Nickel	26.1			P
7440-09-7	Potassium	2120		E	P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	2.5	B		P
7440-23-5	Sodium	108	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	86.4			P
7440-66-6	Zinc	60.2			P
	Cyanide	0.33	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB54

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

Matrix (soil/water): SOIL Lab Sample ID: 36488S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 78.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27400			P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	2.6			P
7440-39-3	Barium	88.9			P
7440-41-7	Beryllium	1.6		E	P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1760			P
7440-47-3	Chromium	47.9			P
7440-48-4	Cobalt	17.6			P
7440-50-8	Copper	73.7		E	P
7439-89-6	Iron	37600			P
7439-92-1	Lead	10.2		*	P
7439-95-4	Magnesium	3910		E	P
7439-96-5	Manganese	649			P
7439-97-6	Mercury	0.62			CV
7440-02-0	Nickel	18.8			P
7440-09-7	Potassium	1580		E	P
7782-49-2	Selenium	2.0			P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	191	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	67.7			P
7440-66-6	Zinc	71.8			P
	Cyanide	0.10	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB63

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

Matrix (soil/water): SOIL Lab Sample ID: 36489S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 81.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24000			P
7440-36-0	Antimony	0.57	U	N	P
7440-38-2	Arsenic	3.7			P
7440-39-3	Barium	67.4			P
7440-41-7	Beryllium	0.74	B	E	P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1120	B		P
7440-47-3	Chromium	36.7			P
7440-48-4	Cobalt	13.9			P
7440-50-8	Copper	22.1		E	P
7439-89-6	Iron	30800			P
7439-92-1	Lead	8.9		*	P
7439-95-4	Magnesium	2510		E	P
7439-96-5	Manganese	374			P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	16.1			P
7440-09-7	Potassium	945	B	E	P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	149	B		P
7440-28-0	Thallium	0.57	U		P
7440-62-2	Vanadium	60.4			P
7440-66-6	Zinc	45.4			P
	Cyanide	0.09	U		CA

Color Before: RED Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB73

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB43

Matrix (soil/water): SOIL Lab Sample ID: 36529S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 9.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	19500			P
7440-36-0	Antimony	5.0	U	N	P
7440-38-2	Arsenic	8.0	U		P
7440-39-3	Barium	171	B		P
7440-41-7	Beryllium	1.1	B	E	P
7440-43-9	Cadmium	1.5	B		P
7440-70-2	Calcium	9230	B		P
7440-47-3	Chromium	44.6			P
7440-48-4	Cobalt	29.3	B		P
7440-50-8	Copper	40.0	B	E	P
7439-89-6	Iron	51300			P
7439-92-1	Lead	18.8		*	P
7439-95-4	Magnesium	4300	B	E	P
7439-96-5	Manganese	1160			P
7439-97-6	Mercury	0.49	U		CV
7440-02-0	Nickel	29.1	B		P
7440-09-7	Potassium	2480	B	E	P
7782-49-2	Selenium	9.9	B		P
7440-22-4	Silver	3.5	B		P
7440-23-5	Sodium	1690	B		P
7440-28-0	Thallium	6.9	B		P
7440-62-2	Vanadium	56.1	B		P
7440-66-6	Zinc	345			P
	Cyanide	0.76	U		CA

Color Before: GREY Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68WØØØ85

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBQB43* Sample Receipt Date: 01/24/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQB63 Sample Receipt Date: 01/26/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBQB73*	12	
2	MBQB43 +	13	
3	MBQB54 +	14	
4	MBQB63 +	15	
5		16	
6		17	
7		18	
8		19	
9		20	
10		21	
11		22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes 1/31/01
Signature Date

* MBQB73 was received 1/24/01 as organic sample BPH81. It was not listed on the TR. The other samples were logged in before a resolution was received. Therefore the SDG is named with the other samples.

+ all received ~~1/26/01~~ 1/26/01 2/6/01

168

Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

179

Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

184

To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

181

Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

182

Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

183

Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

184

To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

185

Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

186

Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD
Date: Thu, 1 Feb 2001 11:16:21 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>

Kimberly,
Following is the resolution from Region 2. Per Region 2, the lab may proceed with the suggested sample for MS/MSD. Please let me know how the lab determined the temperature of the cooler.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Thursday, February 01, 2001 10:27 AM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD

They can use the suggested sample for the MS/MSD. Again, could you please let me know how they are determining the temperature of the samples?

Thanks - Jen

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
<Heather.Bauer@dyncorp.com>
02/01/01 10:30 AM

To: Jennifer Feranda/R2/USEPA/US@EPA
cc: Adly Michael/R2/USEPA/US@EPA
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD

187

118

Jen,
Following is an e-mail from SENTIN regarding Case 28924. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 31, 2001 4:42 PM
To: Bauer, Heather
Subject: Case 28924 SDG MBQB43

Heather,
Another QC was needed so I chose MBQB43. I needed to release MBQB73 as soon as a new EPA sample ID number was given to it because it was for CN analysis. This is why I needed another QC.
No temperature blank was received with samples on 1/26/01. The temperature of the samples was 5.5C.
Thanks,
Kimberly

188

119

Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD | FINAL
Date: Thu, 1 Feb 2001 16:55:32 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Following is the resolution from Region 2. Per the Region, the lab should note the missing temperature blank, and proceed with the analysis of the samples. Also, the lab should proceed with the MS/MSD that was chosen. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Thursday, February 01, 2001 4:31 PM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD

See previous message.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: Adly Michael/R2/USEPA/US@EPA
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD

02/01/01 02:30 PM

Jen,
The lab determined the temperature of the cooler by selecting a random sample and shooting it with a laser. The integrity of the sample was not compromised. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov

189

[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Thursday, February 01, 2001 10:27 AM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD

They can use the suggested sample for the MS/MSD. Again, could you please let me know how they are determining the temperature of the samples?

Thanks - Jen

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: Adly Michael/R2/USEPA/US@EPA
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB43 | Issue MS/MSD
02/01/01 10:30 AM

Jen,
Following is an e-mail from SENTIN regarding Case 28924. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 31, 2001 4:42 PM
To: Bauer, Heather
Subject: Case 28924 SDG MBQB43

Heather,
Another QC was needed so I chose MBQB43. I needed to release MBQB73 as soon as a new EPA sample ID number was given to it because it was for CN analysis. This is why I needed another QC. No temperature blank was received with samples on 1/26/01. The temperature of the samples was 5.5C.
Thanks,
Kimberly

19P

FEB 14 2001

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBQB06	36478S
MBQB07	36479S
MBQB08	36480S
MBQB09	36481S
MBQB12	36427S
MBQB12D	36427S2
MBQB12S	36427MS
MBQB20	36482S
MBQB21	36483S
MBQB29	36484S
MBQB41	36485S
MBQB42	36486S
MBQB46	36428S
MBQB47	36429S
MBQB48	36430S
MBQB50	36431S
MBQB52	36460S
MBQB53	36461S
MBQB58	36432S
MBQB61	36433S
MBQB62	36434S
MBQW82	36462S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name: BAllilgue Title: QAOfa Date: 2/6/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 3.5°C, 2.5°C, 1.5°C, -0.5°C, 5.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:
" " " " " " MBQB42 which did not list CN on the sample tag
Refer to Record of Communication regarding sample preservation anomalies for samples:
" " " " " " MBQB52, MBQB53, MBQW82 not on TR

QC Specified: Yes X No____ If no, chose:_____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
Al, Ba, Ca, Co, Cr, Cu, Fe, K, Mg, Mn, V, Zn

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: None

OTHER: We received MBQB52, MBQB53, MBQW82, and BPH81 which were not listed on the TRs.
MBQB52, B53, & W82 are in SDG MBQB12
BPH81 is in MBQB43 HC 2/1/01
See RDC

Signature: [signature]

Name & Title: [signature] Date: 2/6/01

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB06

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36478S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 63.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16900		E	P
7440-36-0	Antimony	0.73	U	N	P
7440-38-2	Arsenic	1.2	U	N	P
7440-39-3	Barium	128		E	P
7440-41-7	Beryllium	1.1	B		P
7440-43-9	Cadmium	0.06	U		P
7440-70-2	Calcium	4470		E	P
7440-47-3	Chromium	45.9		E	P
7440-48-4	Cobalt	18.0		E	P
7440-50-8	Copper	35.6		*E	P
7439-89-6	Iron	35400		E	P
7439-92-1	Lead	5.2			P
7439-95-4	Magnesium	5740		E	P
7439-96-5	Manganese	699		*E	P
7439-97-6	Mercury	0.08	U		CV
7440-02-0	Nickel	20.3			P
7440-09-7	Potassium	4020		E	P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	199	B		P
7440-28-0	Thallium	0.73	U		P
7440-62-2	Vanadium	58.9		E	P
7440-66-6	Zinc	58.4		E	P
	Cyanide	19.1			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB07

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36479S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 68.7

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16200		E	P
7440-36-0	Antimony	0.67	U	N	P
7440-38-2	Arsenic	1.6	B	N	P
7440-39-3	Barium	108		E	P
7440-41-7	Beryllium	0.99	B		P
7440-43-9	Cadmium	0.06	U		P
7440-70-2	Calcium	4550		E	P
7440-47-3	Chromium	41.6		E	P
7440-48-4	Cobalt	19.3		E	P
7440-50-8	Copper	32.4		*E	P
7439-89-6	Iron	31700		E	P
7439-92-1	Lead	4.5			P
7439-95-4	Magnesium	5240		E	P
7439-96-5	Manganese	678		*E	P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	19.8			P
7440-09-7	Potassium	3550		E	P
7782-49-2	Selenium	0.82	U		P
7440-22-4	Silver	1.6	B		P
7440-23-5	Sodium	239	B		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	52.9		E	P
7440-66-6	Zinc	50.5		E	P
	Cyanide	21.1			CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB08

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36480S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 56.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8310		E	P
7440-36-0	Antimony	1.5	B	N	P
7440-38-2	Arsenic	4.2		N	P
7440-39-3	Barium	66.4	B	E	P
7440-41-7	Beryllium	0.57	B		P
7440-43-9	Cadmium	1.2	B		P
7440-70-2	Calcium	3480		E	P
7440-47-3	Chromium	34.6		E	P
7440-48-4	Cobalt	5.2	B	E	P
7440-50-8	Copper	23.9		*E	P
7439-89-6	Iron	13800		E	P
7439-92-1	Lead	50.5			P
7439-95-4	Magnesium	1620	B	E	P
7439-96-5	Manganese	189		*E	P
7439-97-6	Mercury	0.13	B		CV
7440-02-0	Nickel	11.4	B		P
7440-09-7	Potassium	487	B	E	P
7782-49-2	Selenium	1.3	B		P
7440-22-4	Silver	0.85	B		P
7440-23-5	Sodium	93.0	B		P
7440-28-0	Thallium	0.82	U		P
7440-62-2	Vanadium	33.5		E	P
7440-66-6	Zinc	382		E	P
	Cyanide	0.12	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB09

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36481S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 75.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25200		E	P
7440-36-0	Antimony	0.64	B	N	P
7440-38-2	Arsenic	2.6	B	N	P
7440-39-3	Barium	119		E	P
7440-41-7	Beryllium	1.1	B		P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1910		E	P
7440-47-3	Chromium	58.1		E	P
7440-48-4	Cobalt	20.5		E	P
7440-50-8	Copper	32.2		*E	P
7439-89-6	Iron	43000		E	P
7439-92-1	Lead	13.7			P
7439-95-4	Magnesium	3510		E	P
7439-96-5	Manganese	695		*E	P
7439-97-6	Mercury	0.09	B		CV
7440-02-0	Nickel	20.0			P
7440-09-7	Potassium	2430		E	P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	2.2	B		P
7440-23-5	Sodium	20.2	U		P
7440-28-0	Thallium	0.61	U		P
7440-62-2	Vanadium	75.9		E	P
7440-66-6	Zinc	60.3		E	P
	Cyanide	0.14	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB12

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36427S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 88.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	17400		E	P
7440-36-0	Antimony	0.52	U	N	P
7440-38-2	Arsenic	1.7	B	N	P
7440-39-3	Barium	104		E	P
7440-41-7	Beryllium	1.0	B		P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1920		E	P
7440-47-3	Chromium	20.2		E	P
7440-48-4	Cobalt	15.1		E	P
7440-50-8	Copper	33.0		*E	P
7439-89-6	Iron	26500		E	P
7439-92-1	Lead	5.5			P
7439-95-4	Magnesium	3200		E	P
7439-96-5	Manganese	529		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	11.9			P
7440-09-7	Potassium	1830		E	P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	1.0	B		P
7440-23-5	Sodium	130	B		P
7440-28-0	Thallium	0.52	U		P
7440-62-2	Vanadium	39.0		E	P
7440-66-6	Zinc	55.7		E	P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB20

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36482S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 78.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23600		E	P
7440-36-0	Antimony	0.58	U	N	P
7440-38-2	Arsenic	2.0	B	N	P
7440-39-3	Barium	96.1		E	P
7440-41-7	Beryllium	1.7			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1700		E	P
7440-47-3	Chromium	53.7		E	P
7440-48-4	Cobalt	17.4		E	P
7440-50-8	Copper	32.8		*E	P
7439-89-6	Iron	37900		E	P
7439-92-1	Lead	6.8			P
7439-95-4	Magnesium	3700		E	P
7439-96-5	Manganese	634		*E	P
7439-97-6	Mercury	0.23			CV
7440-02-0	Nickel	17.3			P
7440-09-7	Potassium	1740		E	P
7782-49-2	Selenium	1.2	B		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	33.0	B		P
7440-28-0	Thallium	0.71	B		P
7440-62-2	Vanadium	73.5		E	P
7440-66-6	Zinc	59.7		E	P
	Cyanide	0.14	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB21

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36483S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 77.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25000		E	P
7440-36-0	Antimony	0.60	U	N	P
7440-38-2	Arsenic	2.3	B	N	P
7440-39-3	Barium	96.7		E	P
7440-41-7	Beryllium	1.7			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1500		E	P
7440-47-3	Chromium	50.3		E	P
7440-48-4	Cobalt	21.0		E	P
7440-50-8	Copper	30.9		*E	P
7439-89-6	Iron	37000		E	P
7439-92-1	Lead	7.3			P
7439-95-4	Magnesium	3760		E	P
7439-96-5	Manganese	762		*E	P
7439-97-6	Mercury	0.47			CV
7440-02-0	Nickel	18.0			P
7440-09-7	Potassium	1720		E	P
7782-49-2	Selenium	1.2	B		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	66.5	B		P
7440-28-0	Thallium	0.60	U		P
7440-62-2	Vanadium	71.6		E	P
7440-66-6	Zinc	62.8		E	P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB29

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36484S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 72.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13700		E	P
7440-36-0	Antimony	0.64	U	N	P
7440-38-2	Arsenic	1.3	B	N	P
7440-39-3	Barium	90.9		E	P
7440-41-7	Beryllium	0.88	B		P
7440-43-9	Cadmium	0.06	U		P
7440-70-2	Calcium	3710		E	P
7440-47-3	Chromium	25.3		E	P
7440-48-4	Cobalt	11.9	B	E	P
7440-50-8	Copper	17.7		*E	P
7439-89-6	Iron	22400		E	P
7439-92-1	Lead	7.6			P
7439-95-4	Magnesium	2350		E	P
7439-96-5	Manganese	577		*E	P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	10.7	B		P
7440-09-7	Potassium	1350	B	E	P
7782-49-2	Selenium	0.87	B		P
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	59.4	B		P
7440-28-0	Thallium	0.64	U		P
7440-62-2	Vanadium	37.6		E	P
7440-66-6	Zinc	59.6		E	P
	Cyanide	0.10	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB41

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36485S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 72.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25800		E	P
7440-36-0	Antimony	0.64	U	N	P
7440-38-2	Arsenic	1.0	U	N	P
7440-39-3	Barium	146		E	P
7440-41-7	Beryllium	1.2	B		P
7440-43-9	Cadmium	0.06	U		P
7440-70-2	Calcium	3220		E	P
7440-47-3	Chromium	51.6		E	P
7440-48-4	Cobalt	22.2		E	P
7440-50-8	Copper	40.4		*E	P
7439-89-6	Iron	38700		E	P
7439-92-1	Lead	3.3			P
7439-95-4	Magnesium	6360		E	P
7439-96-5	Manganese	603		*E	P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	25.4			P
7440-09-7	Potassium	3810		E	P
7782-49-2	Selenium	0.77	U		P
7440-22-4	Silver	1.9	B		P
7440-23-5	Sodium	226	B		P
7440-28-0	Thallium	0.64	U		P
7440-62-2	Vanadium	63.8		E	P
7440-66-6	Zinc	48.9		E	P
	Cyanide	0.12	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB42

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36486S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 78.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12800		E	P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	4.9		N	P
7440-39-3	Barium	81.0		E	P
7440-41-7	Beryllium	0.62	B		P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1350		E	P
7440-47-3	Chromium	41.8		E	P
7440-48-4	Cobalt	18.5		E	P
7440-50-8	Copper	17.1		*E	P
7439-89-6	Iron	28700		E	P
7439-92-1	Lead	8.3			P
7439-95-4	Magnesium	2310		E	P
7439-96-5	Manganese	465		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	14.1			P
7440-09-7	Potassium	722	B	E	P
7782-49-2	Selenium	0.88	B		P
7440-22-4	Silver	1.4	B		P
7440-23-5	Sodium	42.2	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	46.8		E	P
7440-66-6	Zinc	65.7		E	P
	Cyanide	0.13	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB46

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36428S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 74.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26200		E	P
7440-36-0	Antimony	0.62	U	N	P
7440-38-2	Arsenic	1.3	B	N	P
7440-39-3	Barium	116		E	P
7440-41-7	Beryllium	3.3			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1510		E	P
7440-47-3	Chromium	104		E	P
7440-48-4	Cobalt	24.3		E	P
7440-50-8	Copper	37.6		*E	P
7439-89-6	Iron	44600		E	P
7439-92-1	Lead	3.6			P
7439-95-4	Magnesium	4500		E	P
7439-96-5	Manganese	610		*E	P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	24.6			P
7440-09-7	Potassium	1520		E	P
7782-49-2	Selenium	1.2	B		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	73.4	B		P
7440-28-0	Thallium	1.9	B		P
7440-62-2	Vanadium	102		E	P
7440-66-6	Zinc	74.8		E	P
	Cyanide	0.09	U		CA

Color Before: RED Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQB47

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36429S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 80.3

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22800		E	P
7440-36-0	Antimony	0.57	U	N	P
7440-38-2	Arsenic	1.3	B	N	P
7440-39-3	Barium	128		E	P
7440-41-7	Beryllium	1.7			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1400		E	P
7440-47-3	Chromium	63.7		E	P
7440-48-4	Cobalt	19.0		E	P
7440-50-8	Copper	32.0		*E	P
7439-89-6	Iron	36700		E	P
7439-92-1	Lead	3.8			P
7439-95-4	Magnesium	4510		E	P
7439-96-5	Manganese	594		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	22.8			P
7440-09-7	Potassium	2140		E	P
7782-49-2	Selenium	0.70	U		P
7440-22-4	Silver	1.6	B		P
7440-23-5	Sodium	89.1	B		P
7440-28-0	Thallium	0.88	B		P
7440-62-2	Vanadium	67.6		E	P
7440-66-6	Zinc	62.8		E	P
	Cyanide	0.61	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB48

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36430S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 72.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32600		E	P
7440-36-0	Antimony	0.63	U	N	P
7440-38-2	Arsenic	1.2	B	N	P
7440-39-3	Barium	188		E	P
7440-41-7	Beryllium	2.1			P
7440-43-9	Cadmium	0.06	U		P
7440-70-2	Calcium	2390		E	P
7440-47-3	Chromium	130		E	P
7440-48-4	Cobalt	21.1		E	P
7440-50-8	Copper	45.8		*E	P
7439-89-6	Iron	49000		E	P
7439-92-1	Lead	2.4			P
7439-95-4	Magnesium	4390		E	P
7439-96-5	Manganese	589		*E	P
7439-97-6	Mercury	0.07	U		CV
7440-02-0	Nickel	37.1			P
7440-09-7	Potassium	2170		E	P
7782-49-2	Selenium	0.77	U		P
7440-22-4	Silver	2.1	B		P
7440-23-5	Sodium	190	B		P
7440-28-0	Thallium	0.77	B		P
7440-62-2	Vanadium	100		E	P
7440-66-6	Zinc	57.3		E	P
	Cyanide	0.10	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB50

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36431S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 82.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29500		E	P
7440-36-0	Antimony	0.56	U	N	P
7440-38-2	Arsenic	2.7		N	P
7440-39-3	Barium	162		E	P
7440-41-7	Beryllium	1.6			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1580		E	P
7440-47-3	Chromium	69.2		E	P
7440-48-4	Cobalt	30.8		E	P
7440-50-8	Copper	39.1		*E	P
7439-89-6	Iron	49400		E	P
7439-92-1	Lead	4.0			P
7439-95-4	Magnesium	4570		E	P
7439-96-5	Manganese	493		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	31.5			P
7440-09-7	Potassium	3590		E	P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	2.1	B		P
7440-23-5	Sodium	49.3	B		P
7440-28-0	Thallium	0.56	U		P
7440-62-2	Vanadium	84.8		E	P
7440-66-6	Zinc	47.0		E	P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB52

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36460S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 83.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16800		E	P
7440-36-0	Antimony	0.55	U	N	P
7440-38-2	Arsenic	1.7	B	N	P
7440-39-3	Barium	61.3		E	P
7440-41-7	Beryllium	1.1	B		P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	814	B	E	P
7440-47-3	Chromium	27.3		E	P
7440-48-4	Cobalt	35.5		E	P
7440-50-8	Copper	22.6		*E	P
7439-89-6	Iron	26700		E	P
7439-92-1	Lead	3.4			P
7439-95-4	Magnesium	1490		E	P
7439-96-5	Manganese	979		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	9.9			P
7440-09-7	Potassium	988	B	E	P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	1.2	B		P
7440-23-5	Sodium	22.4	B		P
7440-28-0	Thallium	0.55	U		P
7440-62-2	Vanadium	45.5		E	P
7440-66-6	Zinc	20.1		E	P
	Cyanide	0.08	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB53

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36461S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 78.0

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27700		E	P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	2.1	B	N	P
7440-39-3	Barium	109		E	P
7440-41-7	Beryllium	3.2			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1260	B	E	P
7440-47-3	Chromium	81.2		E	P
7440-48-4	Cobalt	17.6		E	P
7440-50-8	Copper	38.9		*E	P
7439-89-6	Iron	42100		E	P
7439-92-1	Lead	3.5			P
7439-95-4	Magnesium	3140		E	P
7439-96-5	Manganese	436		*E	P
7439-97-6	Mercury	0.06	U		CV
7440-02-0	Nickel	18.4			P
7440-09-7	Potassium	1680		E	P
7782-49-2	Selenium	0.84	B		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	50.6	B		P
7440-28-0	Thallium	1.1	B		P
7440-62-2	Vanadium	54.2		E	P
7440-66-6	Zinc	48.3		E	P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB58

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36432S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 78.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27900		E	P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	1.5	B	N	P
7440-39-3	Barium	153		E	P
7440-41-7	Beryllium	1.5			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1900		E	P
7440-47-3	Chromium	61.0		E	P
7440-48-4	Cobalt	25.9		E	P
7440-50-8	Copper	42.1		*E	P
7439-89-6	Iron	54000		E	P
7439-92-1	Lead	4.4			P
7439-95-4	Magnesium	4610		E	P
7439-96-5	Manganese	1190		*E	P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	28.1			P
7440-09-7	Potassium	2180		E	P
7782-49-2	Selenium	0.90	B		P
7440-22-4	Silver	2.4	B		P
7440-23-5	Sodium	96.3	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	108		E	P
7440-66-6	Zinc	55.6		E	P
	Cyanide	0.45	B		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB61

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36433S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 77.9

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23300		E	P
7440-36-0	Antimony	0.59	U	N	P
7440-38-2	Arsenic	1.6	B	N	P
7440-39-3	Barium	112		E	P
7440-41-7	Beryllium	1.3			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	2220		E	P
7440-47-3	Chromium	48.4		E	P
7440-48-4	Cobalt	20.1		E	P
7440-50-8	Copper	42.8		*E	P
7439-89-6	Iron	38900		E	P
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	4760		E	P
7439-96-5	Manganese	710		*E	P
7439-97-6	Mercury	0.07	B		CV
7440-02-0	Nickel	20.1			P
7440-09-7	Potassium	2540		E	P
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	153	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	62.5		E	P
7440-66-6	Zinc	62.3		E	P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQB62

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36434S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 80.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22700		E	P
7440-36-0	Antimony	0.57	U	N	P
7440-38-2	Arsenic	2.7		N	P
7440-39-3	Barium	106		E	P
7440-41-7	Beryllium	1.4			P
7440-43-9	Cadmium	0.05	U		P
7440-70-2	Calcium	1600		E	P
7440-47-3	Chromium	51.5		E	P
7440-48-4	Cobalt	20.5		E	P
7440-50-8	Copper	31.3		*E	P
7439-89-6	Iron	39100		E	P
7439-92-1	Lead	9.4			P
7439-95-4	Magnesium	4270		E	P
7439-96-5	Manganese	675		*E	P
7439-97-6	Mercury	0.06	B		CV
7440-02-0	Nickel	23.6			P
7440-09-7	Potassium	1920		E	P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	1.8	B		P
7440-23-5	Sodium	56.7	B		P
7440-28-0	Thallium	0.57	U		P
7440-62-2	Vanadium	70.2		E	P
7440-66-6	Zinc	58.6		E	P
	Cyanide	0.09	U		CA

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

FORM I - IN ILM04.1

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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW82

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQB12

Matrix (soil/water): SOIL Lab Sample ID: 36462S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 36.6

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11100		E	P
7440-36-0	Antimony	1.3	U	N	P
7440-38-2	Arsenic	4.1	B	N	P
7440-39-3	Barium	78.7	B	E	P
7440-41-7	Beryllium	0.55	B		P
7440-43-9	Cadmium	0.22	B		P
7440-70-2	Calcium	2960		E	P
7440-47-3	Chromium	31.6		E	P
7440-48-4	Cobalt	3.7	B	E	P
7440-50-8	Copper	10.5	B	*E	P
7439-89-6	Iron	10600		E	P
7439-92-1	Lead	48.2			P
7439-95-4	Magnesium	1650	B	E	P
7439-96-5	Manganese	165		*E	P
7439-97-6	Mercury	0.14	U		CV
7440-02-0	Nickel	8.9	B		P
7440-09-7	Potassium	493	B	E	P
7782-49-2	Selenium	2.3	B		P
7440-22-4	Silver	0.71	B		P
7440-23-5	Sodium	121	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	30.1		E	P
7440-66-6	Zinc	52.6		E	P
	Cyanide	0.35	B		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Thu, 25 Jan 2001 12:17:27 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Ray Klimcsak (E-mail)" <klimcsak.raymond@epa.gov>

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My

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e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.
Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

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Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue CN | FIN AL
Date: Tue, 30 Jan 2001 09:07:57 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>

Kimberly,
Per Region 2, please analyze all of the inorganic samples for this case for cyanide, and note the discrepancy in the case narrative. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 7:40 AM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue CN

Sorry I didn't get back to you sooner on this. All inorganic samples for this case should be analyzed for CN.

Thanks - Jen

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc:
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue CN
01/26/01 02:42 PM

Jen,
SENTIN has sent another two e-mails regarding the CN not being listed on the sample tags. You had left a voice-mail yesterday saying that all of the samples for this case should be analyzed for cyanide. Would you like for the lab to proceed in the same manner for these samples.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Friday, January 26, 2001 2:01 PM

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To: Bauer, Heather
Subject: Case 28924 SDG MBQB43

Heather,
CN is not listed on any of the sample tags for samples MBQB43, MBQB54, and MBQB63.
Thanks,
Kimberly

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Friday, January 26, 2001 2:03 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDG MBQB12

Kimberly Hayes wrote:

Heather,
I'm sorry but the only sample which did not list CN on the sample tag in this SDG is MBQB42.
Thanks,
Kimberly

Amanda Gossett wrote:

Heather,
CN is not listed on any of the sample tags for this SDG. It is listed for analysis on the TR and sample bottles.
Thanks,
Kimberly

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Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, MBQB12
Date: Wed, 31 Jan 2001 15:43:30 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
No temperature blank was received with samples on 1/25/01. The temperature of the samples was -0.5C.
Thanks,
Kimberly

205

Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue Missing temperature blank | FINAL
Date: Thu, 1 Feb 2001 16:51:30 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Following is the resolution from Region 2. Per the Region, the lab should note the missing temperature blank, and proceed with the analysis of the samples. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Thursday, February 01, 2001 4:31 PM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue Missing temperature blank

Note and proceed with analysis.

Thanks - Jen

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: Adly Michael/R2/USEPA/US@EPA
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue Missing temperature blank
02/01/01 02:31 PM

Jen,
The lab determined the temperature of the cooler by selecting a random sample and shooting it with a laser. The integrity of the sample was not compromised. Also, all of the samples were intact in the cooler that was -0.5 C. Please advise on how the lab should proceed.

Thanks,
Heather

206

150

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Thursday, February 01, 2001 10:49 AM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue missing temperature blank

Before I can determine how the lab should proceed, I need to know how they are taking the sample temperatures. Also, for the cooler that the temperature was -0.5 C, were all the samples intact?

Thanks - Jen

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"
Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: Adly Michael/R2/USEPA/US@EPA
Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQB12 | Issue missing temperature blank
02/01/01 10:43 AM

Jen,
Following is an e-mail from SENTIN regarding Case 28924. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 31, 2001 4:47 PM
To: Bauer, Heather
Subject: Case 28924 SDG MBQB12

Heather,
No temperature blank was received with the samples received on 1/26/01. The temperature of the samples was 5.5C.
Thanks,
Kimberly

207

TELEPHONE MEMORANDUM

FEB 23 2001

TO: Heather Bauer

FROM: Kimberly Hayes

DATE/TIME: 2/13/01 1400

SUBJECT: SDG MBQB43
SDG MBQB12

DESCRIPTION:
Received samples MBQB52, MBQB53, MBQW82, and MBQB73 on 1/24/01. These were not listed on the Traffic Reports. I received Traffic Reports listing these sample on 2/13/01. I was instructed by the region through Heather Bauer to sign and date the Traffic Reports received on 2/13/01 as the date and time I received the samples.

Corrective Action Required: Sign and date TRs received 2/13/01 for the day samples were received.

CorrectiveActionTaken: Signed and dated TRs 1/24/01 for the day the samples were received.

Signature: Kimberly Hayes Date: 2/13/01

FEB 14 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBNM21	36531S
MBNM22	36532S
MBNM23	36533S
MBQX17	36528S
MBQX17D	36528S2
MBQX17S	36528MS
MBQX22	36534S
MBQX23	36535S
MBQX26	36536S
MBQX27	36537S
MBQX28	36538S
MBQX29	36539S
MBQX30	36540S
MBQX31	36541S
MBQX32	36542S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: BDILilgwe Title: QAOFLR Date: 2/9/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 1.5°C, 3.0°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:

QC Specified: Yes ~~X~~ HC 2/9/01 No X If no, chose: MBQX17

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
K, Na

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: NONE

OTHER:

Signature:

Name & Title: Date: 2/9/01

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM21

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36531S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	84.8	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.80	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	144	U		P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	2.5	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	28.6	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	271	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	93700		E	P
7440-28-0	Thallium	3.5	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	5.1	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM22

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36532S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	81.0	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	7.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	15.0	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	5210			P
7439-96-5	Manganese	0.70	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1650	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	3740	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	12.9	B		P
	Cyanide	1.4	U		CA

J

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM23

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36533S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	85.9	B		P
7440-36-0	Antimony	2.7	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	32.8	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	9160			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	187			P
7439-89-6	Iron	22.2	B		P
7439-92-1	Lead	1.5	U		P J
7439-95-4	Magnesium	3940	B		P
7439-96-5	Manganese	0.60	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	833	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6480		E	P J
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.3	B		P
7440-66-6	Zinc	10.6	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX17

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36528S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	64.7	B		P
7440-36-0	Antimony	2.8	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	11.2	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	0.80	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	185			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	B		P
7439-95-4	Magnesium	4990	B		P
7439-96-5	Manganese	1.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	2160	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	4420	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	11.6	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX22

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36534S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	108	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	5.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	12400			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	163			P
7439-89-6	Iron	44.8	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	5120			P
7439-96-5	Manganese	3.7	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1160	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5860		E	P
7440-28-0	Thallium	3.3	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	24.4			P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX23

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36535S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	76.0	B		P
7440-36-0	Antimony	2.8	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	6.3	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	14200			P
7440-47-3	Chromium	1.2	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	87.8			P
7439-89-6	Iron	4950			P
7439-92-1	Lead	3.7			P J
7439-95-4	Magnesium	6650			P
7439-96-5	Manganese	50.0			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium	973	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	7690		E	P J
7440-28-0	Thallium	2.8	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	34.8			P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
CN Portion was Yellow

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX26

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36536S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	81.4	B		P
7440-36-0	Antimony	3.0	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	40.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	21300			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	7.0	B		P
7439-89-6	Iron	21.3	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	5290			P
7439-96-5	Manganese	0.60	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1190	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	8390		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	4.3	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX27

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36537S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	94.8	B		P
7440-36-0	Antimony	3.3	B		P
7440-38-2	Arsenic	5.8	B		P
7440-39-3	Barium	4.9	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	16000			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	18.6	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7820			P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1320	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	4380	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	9.0	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX28

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36538S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	89.0	B		P
7440-36-0	Antimony	3.0	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	24.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	16500			P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	22.4	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	6680			P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	876	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6910		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	B		P
7440-66-6	Zinc	3.8	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX29

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36539S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	131	B		P
7440-36-0	Antimony	3.6	B		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	2.6	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	B		P
7440-70-2	Calcium	10600			P
7440-47-3	Chromium	0.70	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	171			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	4700	B		P
7439-96-5	Manganese	0.60	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.4	B		P
7440-09-7	Potassium	962	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	4350	B	E	P
7440-28-0	Thallium	2.6	B		P
7440-62-2	Vanadium	0.90	B		P
7440-66-6	Zinc	17.0	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX30

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36540S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	107	B		P
7440-36-0	Antimony	3.4	B		P
7440-38-2	Arsenic	3.9	B		P
7440-39-3	Barium	2.2	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	18900			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	25.9			P
7439-89-6	Iron	24.0	B		P
7439-92-1	Lead	1.7	B		P
7439-95-4	Magnesium	7860			P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1080	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	4960	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	7.1	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX31

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36541S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	96.3	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	4.2	B		P
7440-39-3	Barium	9.2	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	24100			P
7440-47-3	Chromium	0.90	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	116			P
7439-89-6	Iron	170			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	11700			P
7439-96-5	Manganese	9.4	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1340	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	13500		E	P
7440-28-0	Thallium	2.6	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	10.1	B		P
	Cyanide	1.4	U		CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX32

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX17

Matrix (soil/water): WATER Lab Sample ID: 36542S

Level (low/med): LOW Date Received: 01/31/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	166	B		P
7440-36-0	Antimony	2.5	B		P
7440-38-2	Arsenic	4.7	B		P
7440-39-3	Barium	17.6	B		P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	17300			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	63.8			P
7439-89-6	Iron	82.3	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7900			P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1380	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6340		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.0	B		P
7440-66-6	Zinc	11.9	B		P
	Cyanide	2.7	B		CA

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Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68W00085

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBQX17 Sample Receipt Date: 01/30/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQX32 Sample Receipt Date: 01/31/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBQX17	12	MBQX31
2	MBNM21	13	MBQX32
3	MBNM22	14	
4	MBNM23	15	
5	MBQX22	16	
6	MBQX23	17	
7	MBQX26	18	
8	MBQX27	19	
9	MBQX28	20	
10	MBQX29	21	
11	MBQX30	22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

2/2/01
Date

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Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue Missing temperature blank | FINAL
Date: Thu, 8 Feb 2001 11:06:22 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>, "Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Following is the resolution from Region 2. Per the Region, the lab should note the missing temperature blank and the sample temperature in the case narrative and proceed with the analysis. Please let me know if you have any other questions or problems.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, February 08, 2001 10:50 AM
To: Bauer, Heather
Cc: Adly Michael (E-mail)
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue Missing temperature blank

Heather - Please have the lab note and proceed with analysis.

Jennifer

"Bauer, Heather" wrote:

Jen,
Following is an e-mail from SENTIN regarding Case 28924. The lab has received another cooler that is missing a temperature blank. The samples were at 3.0 C. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Thursday, February 08, 2001 10:16 AM
To: Bauer, Heather
Subject: Case 28924 SDG MBQX17

Heather,
No temperature blank was received on 1/31/01. The temperature of the samples was 3.0C.
Thanks,
Kimberly

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Subject: Case 28924 SDG MBQX17
Date: Fri, 09 Feb 2001 14:23:23 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
I needed another QC so I specified MBQX17 since we received six bottles for this sample.
Thanks,
Kimberly

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FEB 13 2001

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBNM24	36574S
MBNM24D	36574S2
MBNM24S	36574MS
MBNM25	36575S
MBNM26	36576S
MBNM27	36577S
MBNM28	36578S
MBNM29	36579S
MBNM30	36580S
MBNM31	36581S
MBNM32	36582S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name: Title: Date: 2/8/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 2.0°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:

QC Specified: Yes____ No X If no, chose: MBNM24

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
K, Na

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: None

OTHER:

Signature: [signature]

Name & Title: Bakil Sure QA Ohr Date: 2/8/01

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM24

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36574S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	7.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	23900			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	6.6	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	4610	B		P
7439-96-5	Manganese	2.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	907	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6530		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM25

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36575S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.40	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	26200			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	15.2	B		P
7439-89-6	Iron	348			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	8990			P
7439-96-5	Manganese	0.70	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1480	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5230		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	7.0	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM26

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36576S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	45.6	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	7.5	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	30200			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	73.0			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	6720			P
7439-96-5	Manganese	0.60	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1130	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	7100		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	7.4	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM27

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36577S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.40	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	144	U		P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	61.9			P
7439-89-6	Iron	39.8	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	28.6	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	197	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	44500		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM28

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36578S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	17.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	8430			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	70.8			P
7439-89-6	Iron	127			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	3220	B		P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	868	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	8270		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	9.6	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM29

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36579S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	12.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	58.6			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	2.6	B		P
7439-95-4	Magnesium	4770	B		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	774	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6230		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	5.2	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM30

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36580S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	5.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	12600			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	189			P
7439-89-6	Iron	1830			P
7439-92-1	Lead	3.2			P
7439-95-4	Magnesium	5950			P
7439-96-5	Manganese	971			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1470	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	4160	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	10.6	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM31

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36581S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.60	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	28400			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	32.8			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.8	B	J	P
7439-95-4	Magnesium	6030			P
7439-96-5	Manganese	1.3	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1150	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5700		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM32

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM24

Matrix (soil/water): WATER Lab Sample ID: 36582S

Level (low/med): LOW Date Received: 02/02/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.40	U		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	144	U		P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	21.5	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	28.6	U		P
7439-96-5	Manganese	0.50	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	219	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	41100		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68WØØØ85

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBNM24 Sample Receipt Date: 02/02/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBNM32 Sample Receipt Date: 02/02/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBNM24	12	
2	MBNM25	13	
3	MBNM26	14	
4	MBNM27	15	
5	MBNM28	16	
6	MBNM29	17	
7	MBNM30	18	
8	MBNM31	19	
9	MBNM32	20	
10		21	
11		22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

2/2/Ø1
Date

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Subject: Re: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue MS/M SS and missing temperature blank | FINAL
Date: Thu, 08 Feb 2001 09:38:19 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
This issue is regarding SDG MBNM24 not MBQX17. I'm sorry for the inconvenience.

Thanks,
Kimberly

"Bauer, Heather" wrote:

> *Kimberly,*
> *Following is the resolution from Region 2. Per the Region, the lab should*
> *note the missing temperature blank and proceed with the analysis. Per the*
> *Region, the lab may also proceed with using sample MBNM24 for MS/MSD.*
> *Please let me know if you have any other questions or problems.*
>
> *Thanks,*
> *Heather*
>
> *Heather Bauer*
> *DynCorp*
> *(703)264-9348*
>
> *-----Original Message-----*
> *From: Feranda.Jennifer@epamail.epa.gov*
> *[mailto:Feranda.Jennifer@epamail.epa.gov]*
> *Sent: Tuesday, February 06, 2001 9:44 AM*
> *To: Bauer, Heather*
> *Cc: Michael.Adly@epamail.epa.gov*
> *Subject: RE: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue MS/M*
> *SS and missing temperature blank*
>
> *Hi Heather - See message below regarding the MS/MSD for MBQX17. Also,*
> *regarding the temp. blank, please have lab note and proceed.*
>
> *Jen*
>
> *Jennifer E. Feranda*
> *CLP PO/RSCC*
> *USEPA Region 2*
> *DESA/HWSB*
> *(732) 321-6687*
> *----- Forwarded by Jennifer Feranda/R2/USEPA/US on 02/06/01 09:42 AM -----*
> *"Yang, Yunru"*
> *YANGY@mail.rfweston.com*
> *To: Jennifer Feranda/R2/USEPA/US@EPA*
> *cc:*
> *Subject: RE: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue*
> *MS/M SS and missing temperature blank*
> *02/06/01 09:23 AM*
>
> *Jennifer:*
>
> *Please let the lab know that it is OK to use MBNM24 for the MS/MSS. If the*
> *organic lab also needs another MS/MSS, they can use the corresponding sample*

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> BPJ36. Now, I am not sure if there is enough volumes for the organic MS/MSS
> though.
>
> Yunru Yang
> Roy F. Weston, Inc.
> Raritan Plaza III, Suite 2B phone: (732) 417-5822
> 101 Fieldcrest Ave. fax: (732) 417-5801
> Edison, NJ 08837-3622 e-mail: yangy@mail.rfweston.com
>
> -----Original Message-----
> From: Feranda.Jennifer@epamail.epa.gov
> [mailto:Feranda.Jennifer@epamail.epa.gov]
> Sent: Tuesday, February 06, 2001 8:39 AM
> To: Yang, Yunru
> Cc: Michael.Adly@epamail.epa.gov
> Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue MS/MSD and
> missing temperature blank
>
> Good Morning Yunru - Please see the attached message from SMO. Is Weston
> aware that they are supposed to be including temperature indicator bottles
> in the cooler with the samples? We can talk about this later. The main
> question is do you have any problem with the lab using MBNM24 a MS/MSD.
> Please let me know ASAP.
>
> Thanks - Jennifer
>
> Jennifer E. Feranda
> CLP PO/RSCC
> USEPA Region 2
> DESA/HWSB
> (732) 321-6687
> ----- Forwarded by Jennifer Feranda/R2/USEPA/US on 02/06/01 08:35 AM -----
> "Bauer, Heather"
> Heather.Bauer@dyncorp.com
> To: Jennifer Feranda/R2/USEPA/US@EPA
> cc: Adly Michael/R2/USEPA/US@EPA
> Subject: Region 02 | Case 28924 | Lab SENTIN | SDG MBQX17 | Issue MS/MSD
> and missing temperature blank
> 02/05/01 01:43 PM
>
> Jen,
> Following is an e-mail from SENTIN regarding Case 28924. The lab received
> another cooler that was missing a temperature blank, but the cooler
> temperature was at 2.0 C. The lab also needs another sample for MS/MSD, so
> they chose sample MBNM24. Please advise on how the lab should proceed.
>
> Thanks,
> Heather
>
> Heather Bauer
> DynCorp
> (703)264-9348
>
> -----Original Message-----
> From: Amanda Gossett [mailto:gossetta@bellsouth.net]
> Sent: Monday, February 05, 2001 1:08 PM
> To: Bauer, Heather
> Subject: Case 28924 SDG MBQX17
>
> Heather,
> No temperature blank was received with the samples on 2/2/01. The

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> *temperature of the samples was 2.0C. Another QC was needed so I chose*
> *MBNM24.*
> *Thanks,*
> *Kimberly*

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FEB 14 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBNM40	36476S
MBNM41	36477S
MBQX03	36404S
MBQX03D	36404S2
MBQX03S	36404MS
MBQX04	36416S
MBQX05	36417S
MBQX08	36513S
MBQX09	36514S
MBQX10	36515S
MBQX11	36516S
MBQX12	36517S
MBQX13	36518S
MBQX14	36519S
MBQX15	36520S
MBQX16	36521S
MBQX18	36523S
MBQX19	36524S
MBQX20	36525S
MBQX21	36526S
MBQX24	36527S
MBQX25	36522S

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: Bakilswe Title: QAOfc Date: 2/6/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQXØ3

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 2.5°C, -Ø.5°C, 5.5°C, 6.5°C, 1.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:
One of the bottles of MBQXØ3 had a pH 7 - See ROC - bottle not used

QC Specified: Yes X No____ If no, chose:____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
K, Na

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: None

OTHER: We received MBQB52, MBQB53, MBQW82, and BPH81 which were not listed on the TRs.
HC 2/1/01 ~~MBQB52~~ MBQB52, B53, & W82 are in SDG MBQB12
BPH81 is MBQB73 in SDG MBQB43
See ROC.

Signature: [signature]

Name & Title: [signature] QAOfca Date: 2/6/01

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM40
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36476S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	105	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.60	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	144	U		P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	36.2	B		P
7439-92-1	Lead	1.9	B		P
7439-95-4	Magnesium	28.6	U		P
7439-96-5	Manganese	1.6	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	139	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	491	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	5.3	B		P
	Cyanide	4.3	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
FB

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM41
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36477S

Level (low/med): LOW Date Received: 01/26/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	73.7	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.40	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	144	U		P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	28.6	U		P
7439-96-5	Manganese	0.80	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	132	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.70	B		P
7440-23-5	Sodium	522	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX03

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36404S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4250			P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	45.9	B		P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	11500			P
7440-47-3	Chromium	17.1			P
7440-48-4	Cobalt	2.8	B		P
7440-50-8	Copper	9.0	B		P
7439-89-6	Iron	9970			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	6490			P
7439-96-5	Manganese	124			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	9.9	B		P
7440-09-7	Potassium	1460	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	4660	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	12.4	B		P
7440-66-6	Zinc	22.9			P
	Cyanide	1.4	U	N	CA

Color Before: ORANGE Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX04

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36416S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	100	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	5.7	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	14100			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	76.6	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7550			P
7439-96-5	Manganese	3.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	804	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	4520	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	4.2	B		P
	Cyanide	3.5	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX05

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36417S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	155	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	5.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	14700			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	180			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7600			P
7439-96-5	Manganese	5.3	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium	1270	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5110		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.5	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX08

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36513S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.4	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	1.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	22100			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	19.4	B		P
7439-89-6	Iron	42.5	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7700			P
7439-96-5	Manganese	2.1	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1410	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	6030		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	670			P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX09

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36514S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	70.2	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	11.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	19100			P
7440-47-3	Chromium	0.50	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	89.2			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	8.4			P
7439-95-4	Magnesium	4370	B		P
7439-96-5	Manganese	0.80	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	724	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.50	B		P
7440-23-5	Sodium	7730		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	9.2	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX10

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36515S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	62.1	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	25.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	65500			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	13.6	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	16700			P
7439-96-5	Manganese	31.2			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1240	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	8400		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	4.3	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQX11

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36516S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	74.6	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	26.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	32200			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	256			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	14100			P
7439-96-5	Manganese	1.1	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	1540	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	13400		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	38.6			P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX12

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36517S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	68.7	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	27.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	31500			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	258			P
7439-89-6	Iron	18.9	B		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	13900			P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.0	B		P
7440-09-7	Potassium	1450	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	12700		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	34.8			P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQX13

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36518S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.4	B		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	0.80	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	179	B		P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	16.4	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	48.3	B		P
7439-96-5	Manganese	1.4	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	181	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	78100		E	P
7440-28-0	Thallium	2.5	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	20.2			P
	Cyanide	2.9	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX14

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36519S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	1.8	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	35100			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	31.3			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	10700			P
7439-96-5	Manganese	2.6	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1200	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	6390		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	5.2	B		P
	Cyanide	5.8	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX15

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36520S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	14.1	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	21100			P
7440-47-3	Chromium	0.80	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	38.6			P
7439-89-6	Iron	1240			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	9050			P
7439-96-5	Manganese	4.6	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1480	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	9600		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	11.2	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX16

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36521S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	2.2	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	B		P
7440-70-2	Calcium	15100			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	29.4			P
7439-89-6	Iron	141			P
7439-92-1	Lead	2.4	B		P
7439-95-4	Magnesium	6210			P
7439-96-5	Manganese	11.9	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	877	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	4410	B	E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	859			P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQX18

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36523S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	2.3	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	16800			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	307			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	6770			P
7439-96-5	Manganese	1.2	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	987	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5210		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	20.3			P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX19

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36524S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	6.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	13700			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	268			P
7439-89-6	Iron	134			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	9940			P
7439-96-5	Manganese	7.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	1470	B	E	P
7782-49-2	Selenium	3.3	B	J	P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	7370		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	13.0	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX20

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36525S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	4.6	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	14900			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	90.7			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2540	B		P
7439-96-5	Manganese	1.4	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	673	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	5130		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	17.8	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX21

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36526S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	11.4	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	10900			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	54.4			P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	6420			P
7439-96-5	Manganese	1.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	949	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	7190		E	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.0	B		P
7440-66-6	Zinc	9.2	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQX24

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36527S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	2.8	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	24700			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	7330			P
7439-96-5	Manganese	36.0			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1270	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	U		P
7440-23-5	Sodium	8710		E J	P
7440-28-0	Thallium	4.9	B		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	170			P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQX25

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBQX03

Matrix (soil/water): WATER Lab Sample ID: 36522S

Level (low/med): LOW Date Received: 01/30/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	41.4	U		P
7440-36-0	Antimony	2.3	U		P
7440-38-2	Arsenic	3.7	U		P
7440-39-3	Barium	1.0	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	30100			P
7440-47-3	Chromium	0.50	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	6.4	B		P
7439-89-6	Iron	14.9	U		P
7439-92-1	Lead	2.6	B		P
7439-95-4	Magnesium	7890			P
7439-96-5	Manganese	1.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	1420	B	E	P
7782-49-2	Selenium	2.8	U		P
7440-22-4	Silver	0.40	B		P
7440-23-5	Sodium	6600		E J	P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	3.4	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68W0085

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBQX03 Sample Receipt Date: 01/24/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQX25 Sample Receipt Date: 01/30/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBQX03	12	MBQX14
2	MBQX04	13	MBQX15
3	MBQX05	14	MBQX16
4	MBNM40	15	MBQX18
5	MBNM41	16	MBQX19
6	MBQX08	17	MBQX20
7	MBQX09	18	MBQX21
8	MBQX10	19	MBQX24
9	MBQX11	20	MBQX25
10	MBQX12	21	
11	MBQX13	22	

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

1/30/01
Date

Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99
Date: Wed, 24 Jan 2001 13:49:13 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers.
I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue pH | FINAL
Date: Thu, 25 Jan 2001 10:19:45 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Ray Klimcsak (E-mail)" <klimcsak.raymond@epa.gov>

Kimberly,
Per Region 2, the lab should note the pH of the sample in the case narrative and proceed with the analysis of sample MBQX03. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that the lab should note the pH value in the case narrative for sample MBQX03 and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:52 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue pH

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received sample MBQX03 as the sample for MS/MSD, and one of the three bottles for the CN analysis has a pH of 7. The lab says that they have enough volume, so that they will not need to use that container. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:04 PM
To: Bauer, Heather
Subject: Case 28924 SDG MBQX03

Heather,
MBQX03 is the QC and one of the three bottles for CN analysis has a pH 7. Since we have plenty of sample volume we will not use this bottle.
Thanks,
Kimberly

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Subject: Case 28924 SDG MBQX03
Date: Wed, 31 Jan 2001 15:45:57 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
No temperature blank was received with samples on 1/26/01. The temperature of the samples was 5.5C.
No temperature blank was received with samples on 1/30/01. The temperature of the samples was 6.5C and 1.5C.
Thanks,
Kimberly

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Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, MBQB12
Date: Wed, 31 Jan 2001 15:43:30 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
No temperature blank was received with samples on 1/25/01. The temperature of the samples was -0.5C.
Thanks,
Kimberly

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Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

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Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

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To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

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Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

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FEB 14 2001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

SOW No.: ILM04.1

EPA SAMPLE NO.	Lab Sample ID.
MBNM36	36388S
MBNM37	36389S
MBNM38	36390S
MBNM39	36412S
MBQW87	36391S
MBQW87D	36391S2
MBQW87S	36391MS
MBQW88	36392S
MBQW89	36393S
MBQW90	36394S
MBQW91	36395S
MBQW92	36396S
MBQW93	36397S
MBQW94	36398S
MBQW95	36399S
MBQW96	36400S
MBQW97	36413S
MBQW98	36414S
MBQW99	36415S
MBQX00	36401S
MBQX02	36402S
MBQX06	36403S

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name: BAKilgore Title: QA Officer Date: 2/7/01

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

SOW No.: ILM04.1

SAMPLE RECEIPT: Temperature Blank: PRESENT____ ABSENT X
If Absent, a non-invasive laser measurement is taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 3.5°C, 1.5°C, 2.5°C, -0.5°C
Refer to Record of Communication regarding mislabeled EPA Sample numbers for samples:

Refer to Record of Communication regarding misidentified tag numbers for samples:

Refer to Record of Communication regarding sample preservation anomalies for samples:

QC Specified: Yes X No____ If no, chose:_____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
NONE

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: 1008 - SOW missing/invalid (Caused by ILM04.1 SOW)
Full Assessment: NONE

OTHER: I received MBQB52, MBQB53, MBQW82, + BPH81 which were not listed on the TRs.
MBQB52, B53 & W82 are in SDG MBQB12
BPH81 is ~~X~~ MBQB73 in SDG MBQB43
See ROC HC 2/1/01

Signature: [signature]

Name & Title: BA Kilgwe QA Ofca Date: 2/7/01

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM36
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36388S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	0.90	U		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	158	U		P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	26.4	U		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	38.6	U		P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	50.8	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	1190	U		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	4.5	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
FB

U.S. EPA - CLP
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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM37
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36389S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	0.90	U		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	158	U		P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	47.4	B		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	38.6	U		P
7439-96-5	Manganese	4.0	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	91.6	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	1190	U		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	5.6	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
FB

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBNM38
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36390S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	0.90	U		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	158	U		P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	26.4	U		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	38.6	U		P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	49.4	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	1190	U		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	4.5	U		P
	Cyanide	2.9	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
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U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBNM39
FIELD BLANK

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36412S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	0.90	U		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	158	U		P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	80.5	B		P
7439-92-1	Lead	2.5	U	J	P
7439-95-4	Magnesium	38.6	U		P
7439-96-5	Manganese	1.7	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	71.3	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	1190	U		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	4.5	U		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW87

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36391S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	51.6	B		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	12.2	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	7510			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	134			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	3010	B		P
7439-96-5	Manganese	14.4	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	752	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	7310			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	10.6	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW88

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36392S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	80.6	B		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	19.4	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	9570			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	323			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	3560	B		P
7439-96-5	Manganese	25.2			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	1050	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	9070			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	13.0	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW89

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36393S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	102	B		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	20.1	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	9890			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	347			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	3710	B		P
7439-96-5	Manganese	26.4			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	1150	B		P
7782-49-2	Selenium	2.0	B		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	9600			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	19.1	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW90

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36394S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	131	B		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	9.6	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	5460			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	207			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	2940	B		P
7439-96-5	Manganese	11.6	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	486	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	2510	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	4.5	U		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
CN PORTION IS GREY

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW91

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36395S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48300			P
7440-36-0	Antimony	7.4	B		P
7440-38-2	Arsenic	20.0			P
7440-39-3	Barium	819		J	P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	8.4			P
7440-70-2	Calcium	46200			P
7440-47-3	Chromium	145			P
7440-48-4	Cobalt	85.1			P
7440-50-8	Copper	153			P
7439-89-6	Iron	329000			P
7439-92-1	Lead	64.4			P
7439-95-4	Magnesium	20600			P
7439-96-5	Manganese	5890			P
7439-97-6	Mercury	0.44			CV
7440-02-0	Nickel	75.4			P
7440-09-7	Potassium	7010		J	P
7782-49-2	Selenium	17.9			P
7440-22-4	Silver	3.5	B		P
7440-23-5	Sodium	3790	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	226			P
7440-66-6	Zinc	1210			P
	Cyanide	2.0	B	N J	CA

Color Before: BLACK Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW92

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36396S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	93900			P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	10.2			P
7440-39-3	Barium	792		J	P
7440-41-7	Beryllium	0.70	B		P
7440-43-9	Cadmium	2.0	B		P
7440-70-2	Calcium	37200			P
7440-47-3	Chromium	204			P
7440-48-4	Cobalt	41.1	B		P
7440-50-8	Copper	95.6			P
7439-89-6	Iron	68400			P
7439-92-1	Lead	386			P
7439-95-4	Magnesium	19700			P
7439-96-5	Manganese	2390			P
7439-97-6	Mercury	0.94			CV
7440-02-0	Nickel	75.8			P
7440-09-7	Potassium	6110		J	P
7782-49-2	Selenium	9.7			P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	669000			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	180			P
7440-66-6	Zinc	472			P
	Cyanide	1.8	B	N J	CA

Color Before: BLACK Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW93

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36397S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12300			P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	5.2	B		P
7440-39-3	Barium	182	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	1.8	B		P
7440-70-2	Calcium	15700			P
7440-47-3	Chromium	19.7			P
7440-48-4	Cobalt	14.4	B		P
7440-50-8	Copper	26.4			P
7439-89-6	Iron	13600			P
7439-92-1	Lead	124			P
7439-95-4	Magnesium	5790			P
7439-96-5	Manganese	958			P
7439-97-6	Mercury	0.29			CV
7440-02-0	Nickel	15.2	B		P
7440-09-7	Potassium	1290	B		P
7782-49-2	Selenium	2.8	B		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	3240	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	36.6	B		P
7440-66-6	Zinc	181			P
	Cyanide	1.4	U	N	CA

Color Before: BLACK Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW94

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36398S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	11.4	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	5890			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	77.8	B		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	2700	B		P
7439-96-5	Manganese	3.8	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	724	B		P
7782-49-2	Selenium	1.8	B		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	4140	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	4.6	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW95

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36399S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	12.2	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	5660			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	87.7	B		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	2560	B		P
7439-96-5	Manganese	4.8	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	719	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	4360	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	6.0	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MBQW96

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36400S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	13.2	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	5210			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	116			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	2350	B		P
7439-96-5	Manganese	15.1			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	696	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	4540	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	7.7	B		P
	Cyanide	1.5	B	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW97

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36413S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	547			P
7440-36-0	Antimony	3.7	B		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	9.4	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.80	B		P
7440-70-2	Calcium	11200			P
7440-47-3	Chromium	6.8	B		P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	87800			P
7439-92-1	Lead	6.4			P
7439-95-4	Magnesium	5580			P
7439-96-5	Manganese	512			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.8	B		P
7440-09-7	Potassium	844	B		P
7782-49-2	Selenium	3.8	B		P
7440-22-4	Silver	2.8	B		P
7440-23-5	Sodium	3720	B		P
7440-28-0	Thallium	10.2			P
7440-62-2	Vanadium	7.6	B		P
7440-66-6	Zinc	10.7	B		P
	Cyanide	2.8	B	N	CA

Color Before: RED Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW98

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36414S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	5.8	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	14500			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	237			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	7780			P
7439-96-5	Manganese	134			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium	687	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	3240	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	6.5	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQW99

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36415S

Level (low/med): LOW Date Received: 01/25/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	5.3	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	14600			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	143			P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	7800			P
7439-96-5	Manganese	130			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	692	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	3330	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	6.4	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX00

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36401S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	4.0	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	16200			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	21.2	B		P
7439-89-6	Iron	40.4	B		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	7380			P
7439-96-5	Manganese	5.1	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	4020	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	6940			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	9.8	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX02

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36402S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	7.0	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	13200			P
7440-47-3	Chromium	1.6	U		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	34.2	B		P
7439-92-1	Lead	2.5	U		P
7439-95-4	Magnesium	6110			P
7439-96-5	Manganese	3.4	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.0	U		P
7440-09-7	Potassium	895	B		P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	5070			P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	9.8	B		P
	Cyanide	1.4	U	N	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP
1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MBQX06

Lab Name: Sentinel, Inc. Contract: 68-W-00-085

Lab Code: SENTIN Case No.: 28924 SAS No.: SDG No.: MBNM36

Matrix (soil/water): WATER Lab Sample ID: 36403S

Level (low/med): LOW Date Received: 01/24/01

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	48.9	U		P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	2.3	U		P
7440-39-3	Barium	70.2	B		P
7440-41-7	Beryllium	0.40	U		P
7440-43-9	Cadmium	0.40	U		P
7440-70-2	Calcium	7110			P
7440-47-3	Chromium	2.8	B		P
7440-48-4	Cobalt	1.8	U		P
7440-50-8	Copper	2.3	U		P
7439-89-6	Iron	1020			P
7439-92-1	Lead	2.5	U	J	P
7439-95-4	Magnesium	2700	B		P
7439-96-5	Manganese	39.0			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium	35200		J	P
7782-49-2	Selenium	1.7	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	2900	B		P
7440-28-0	Thallium	3.6	U		P
7440-62-2	Vanadium	1.7	U		P
7440-66-6	Zinc	8.6	B		P
	Cyanide	1.4	U	N J	CA

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

SAMPLE DELIVERY GROUP (SDG)
TRAFFIC REPORT (TR) COVER SHEET

Lab Name: Sentinel, Inc. Contract No.: 68WØØØ85

Lab Code: SENTIN Case No.: 28924

Full Sample Analysis Price in Contract: $ _____

SDG No./First Sample in SDG. MBNM36 Sample Receipt Date: 01/24/01
(Lowest EPA Sample Number in first shipment of samples received under SDG.) (MM/DD/YY)

Last Sample in SDG: MBQW99 Sample Receipt Date: 01/25/01
(Highest EPA Sample Number in last shipment of samples received under SDG.) (MM/DD/YY)

EPA Sample Numbers in the SDG (listed in alphanumeric order)

1	MBNM36	12	MBQW95
2	MBNM37	13	MBQW96
3	MBNM38	14	MBQX00
4	MBQW87	15	MBQX02
5	MBQW88	16	MBQX06
6	MBQW89	17	MBNM39
7	MBQW90	18	MBQW97
8	MBQW91	19	MBQW98
9	MBQW92	20	MBQW99
10	MBQW93	21	———
11	MBQW94	22	———

Note: There are a maximum of 20 field samples in an SDG.

Attach Traffic Reports to this form in alphanumeric order
(i.e.. the order listed on this form).

Kimberly Hayes
Signature

1/25/01
Date

295

Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99
Date: Wed, 24 Jan 2001 13:49:13 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers.
I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

305

242

Subject: **Case 28924 SDGs MBNM36, MBQB55, MBQX03, MBQB12**
Date: Wed, 31 Jan 2001 15:43:30 -0600
From: Amanda Gossett <gossetta@bellsouth.net>
To: "Bauer, Heather" <Heather.Bauer@dyncorp.com>

Heather,
No temperature blank was received with samples on 1/25/01. The temperature of the samples was -0.5C.
Thanks,
Kimberly

306

743

Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | F INAL
Date: Tue, 30 Jan 2001 15:22:10 -0500
From: "Bauer, Heather" <Heather.Bauer@dyncorp.com>
To: "Kimberly Hayes (E-mail)" <gossetta@bellsouth.net>
CC: "Jennifer Feranda (E-mail)" <feranda.jennifer@epa.gov>,
"Adly Michael (E-mail)" <Michael.Adly@epamail.epa.gov>

Kimberly,
Per Region 2, the lab should use sample BPH81 as sample MBQB73. Please let me know if you have any other questions or problems.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Feranda.Jennifer@epamail.epa.gov
[mailto:Feranda.Jennifer@epamail.epa.gov]
Sent: Tuesday, January 30, 2001 2:30 PM
To: Bauer, Heather
Cc: Michael.Adly@epamail.epa.gov
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Heather - Re: sample BPH81 - The jar labeled MBQB73 can be used for sample BPH81. There was not corresponding inorganic sample for the sample location.

Jennifer E. Feranda
CLP PO/RSCC
USEPA Region 2
DESA/HWSB
(732) 321-6687

"Bauer, Heather"

Heather.Bauer@dyncorp.com
To: Jennifer Feranda/R2/USEPA/US@EPA
cc: "Adly Michael (E-mail)"Michael.Adly@epamail.epa.gov

01/30/01 01:04 PM
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jen,
I have not heard from you on how the lab should proceed with sample BPH81 since it is not listed on any of the TR's. Please advise on how the lab should proceed.

- Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather

307

244

Sent: Thursday, January 25, 2001 4:30 PM
To: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
SENTIN reported that they do not have sample BPH81 listed on any of the TRs that they have received. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Bauer, Heather
Sent: Thursday, January 25, 2001 12:17 PM
To: Kimberly Hayes (E-mail)
Cc: Jennifer Feranda (E-mail); Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR | FINAL

Kimberly,
Per Region 2, the lab should note the additional samples in the case narrative and proceed with the analysis. For sample BPH81, the lab should change the sample number to the corresponding inorganic sample number, note the issue in the case narrative, and analyze the sample. Please let me know if you have any other questions.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 12:06 PM
To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Please have the lab analyze the samples. I will notify the samplers and see if they can get me a copy of an amended TR/COC.

Thanks

"Bauer, Heather" wrote:

The samples that I am asking about are the four samples that did arrive at the lab, but that were not listed on the TR. The samples IDs are MBQB52, MBQB53, and MBQW82

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Jennifer Feranda [mailto:jenf@home.com]
Sent: Thursday, January 25, 2001 11:36 AM

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To: Bauer, Heather
Subject: Re: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

I am still looking into the samples that did not arrive at the lab. I will let you know as soon as I hear back on that issue. You should be hearing from Ray with the Third Party billing number.

Thanks - Jennifer

"Bauer, Heather" wrote:

Jen,
I received your voice-mail, but you did not specify what you wanted the lab to do with the inorganic samples that were not listed on the TR. My e-mail address is "Heather.Bauer@dyncorp.com". Please let me know if you are still not able to send anything to it, and I will have someone check on it at this end.

- Heather

Heather Bauer
DynCorp
(703)264-9348

1/25 9:22 AM
Jennifer left a voice-mail to report that for the organic sample that the lab received, the lab should note the problem in the case narrative, change the sample number to the corresponding inorganic sample ID, and proceed with the analysis.

-----Original Message-----
From: Bauer, Heather
Sent: Wednesday, January 24, 2001 3:39 PM
To: Jennifer Feranda (E-mail)
Cc: Ray Klimcsak (E-mail)
Subject: Region 02 | Case 28924 | Lab SENTIN | Issue Samples not on TR

Jennifer,
Following is an e-mail from SENTIN regarding Case 28924. The lab received 4 samples that were not listed on the traffic report, MBQB52, MBQB53, MBQW82, and BPH81. Also, there were no temperature blanks present in any of the coolers that arrived on 1/24, and the temperatures of the coolers were 1.5C, 2.5C, and 3.5C for each of the three coolers. Please advise on how the lab should proceed.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 3:09 PM
To: Bauer, Heather
Subject: Re: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive BPH65. But the samples I received were MBQB52, MBQB53, and MBQW82, and BPH81.

309

Thanks,
Kimberly

"Bauer, Heather" wrote:

Kimberly,
Just to make sure that I understand what you are saying in the e-mail...MBAB52, MBAB53 and MBQW82 were received at the lab, but not listed on the TR. Also, did you by any chance receive sample BPH65? Please let me know, so that I can forward the issue on to the Region.

Thanks,
Heather

Heather Bauer
DynCorp
(703)264-9348

-----Original Message-----
From: Amanda Gossett [mailto:gossetta@bellsouth.net]
Sent: Wednesday, January 24, 2001 2:49 PM
To: Bauer, Heather
Subject: Case 28924 SDGs MBNM36, MBQB55, MBQX03, & MBQA99

Heather,
I did not receive a temperature blank in any of the coolers received 1/24/01. The temperature of the samples was 1.5C, 2.5C, 3.5C in each of the three coolers. I received MBQB52, MBQB53, MBQW82, and BPH81 which was not listed on the TR.
Thanks,
Kimberly

310

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REFERENCE NO. 33

SAMPLING TRIP REPORT

SITE NAME: Diamond Aerosol Corporation
DCN #: START-02-F-04270
TDD #: 02-00-02-0001
CASE NO.: 27965

EPA I.D. NO.: NJD049644438

SAMPLING DATE: April 13, 2000

1. Site Location: Refer to Figure 1

2. Sample Locations: Refer to Figure 2

3. Sample Descriptions: Refer to Table 1

4. Laboratories Receiving Samples:

Sample Type	Name and Address of Laboratory
Target Compound List (TCL) Organics	American Analytical & Technical Services 11950 Industriplex Boulevard Baton Rouge, LA 70809
Target Analyte List (TAL) Metals (excluding cyanide)	Liberty Analytical 501 Madison Avenue Cary, NC 27513

5. Sample Dispatch Data:

Eight aqueous samples and eight sediment samples for TAL metals analysis were shipped to Liberty Analytical on 4/13/00 at 1900 hours via Federal Express (Airbill No. 817987062826).

Eight aqueous samples and eight sediment samples for TCL volatiles, BNA and Pesticides/PCB analysis, and one aqueous samples for volatiles analysis only, were shipped to American Analytical & Technical Services on 4/13/00 at 1900 hours via Federal Express (Airbill No. 817987062815).

6. On-Site Personnel:

Name	Company	Duties on Site
Scott Snyder	Region II START	Project Manager
Gerald Gilliland	Region II START	Site Health and Safety Officer
Harry Allen	Region II START	Sample Management Officer
Kelly Curran	Region II START	Sampler

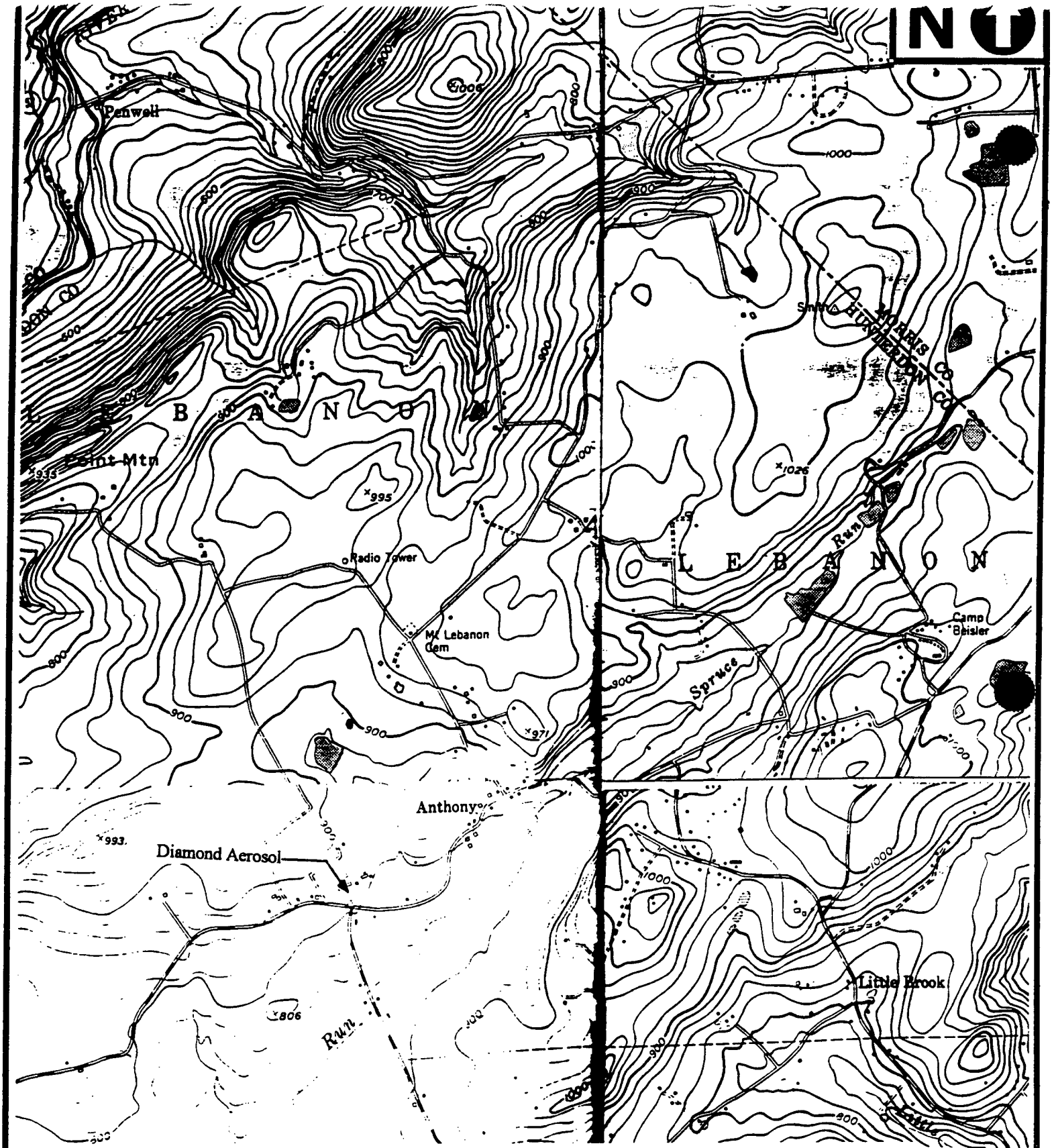
7. Additional Comments:

On April 13, 2000, the Region II Superfund Technical Assessment and Response Team (START) collected surface water and sediment samples from the Diamond Aerosol site. These samples were collected as part of an Site Inspection Prioritization (SIP) conducted on site. All samples collected by Region II START were analyzed for Target Compound List (TCL) and Target Analyte List (TAL), excluding cyanide, parameters through the U.S. EPA Contract Laboratory Program. Organic and Inorganic Traffic Reports are presented in Attachment 1.

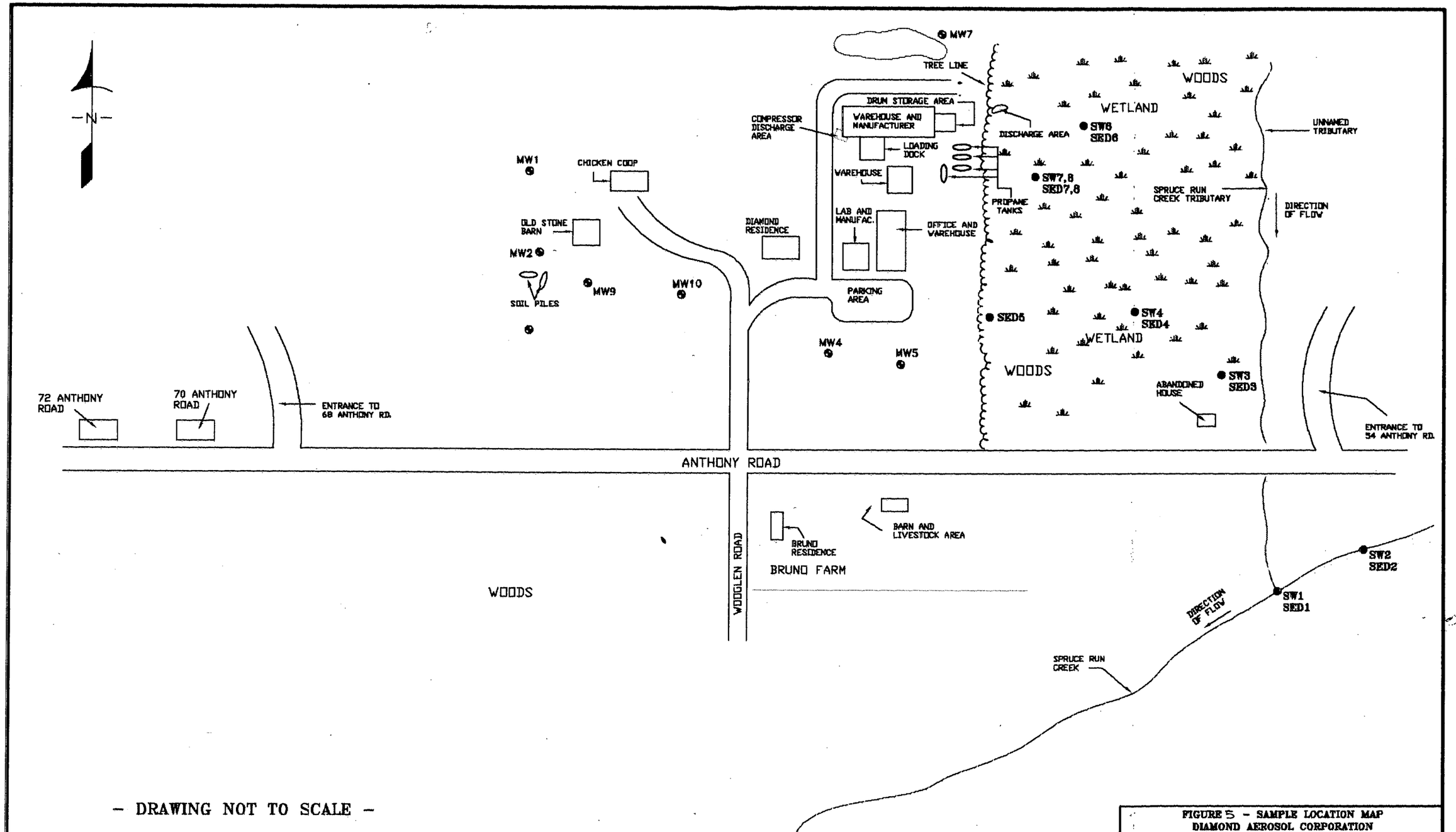
8. Report Prepared by: _____ Date: 4/20/00
Scott Snyder

9. Report Approved by: _____ Date: 4/20/00
W. S. Butterfield, CHMM

SITE LOCATION AND SAMPLING LOCATION MAPS



WESTON MANAGERS DESIGNERS/CONSULTANTS Roy F. Weston, Inc. FEDERAL PROGRAMS DIVISION	EPA TM C. Moyik	Figure 1 SITE LOCATION MAP
IN ASSOCIATION WITH RESOURCE APPLICATION, INC., C.C. JOHNSON & MALHOTRA, P.C., R.E. SARRIERA ASSOCIATES, TETRATECH INC., AND GRB ENVIRONMENTAL SERVICES, INC.	START PM S. SNYDER	Diamond Aerosol Corporation Glen Gardner, Hunterdon County, New Jersey



- DRAWING NOT TO SCALE -

FIGURE 5 - SAMPLE LOCATION MAP
DIAMOND AEROSOL CORPORATION
GLEN GARDNER, NEW JERSEY
APRIL, 2000

U.S. ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
CONTRACT# 68-W6-0018

Roy F. Weston, Inc.
FEDERAL PROGRAMS DIVISION

IN ASSOCIATION WITH TETRA TECH EMI, INC.,
C.C. JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC.,
R.E. SARRIERA ASSOCIATES, AND GRB ENVIRONMENTAL SERVICES, INC.

DRAWN BY : J. L. HAMPTON JR.
EPA TASK MONITOR: C. MOYK
START PROJECT MANAGER: S. SNYDER

D:\DWG\6519.DWG

TABLE 1
SAMPLE DESCRIPTIONS
DIAMOND AEROSOL CORPORATION
GLEN GARDNER, NEW JERSEY

SAMPLE NUMBER 6519-	ORGANIC CLP NO.	INORGANIC CLP NO.	DATE	TIME	COMMENTS
TB-01	B023W	---	4/13/00	1000	Trip Blank QA/QC purposes.
RB-01	B023T	MB007S	4/13/00	1020	Rinsate Blank collected from bowl/trowel.
SW-01	B023C	MB00B6	4/13/00	1045	Matrix Spike/Matrix Spike Duplicate (MS/MSD).
SW-02	B023F	MB00B7	4/13/00	1110	
SW-03	B023G	MB00B8	4/13/00	1230	
SW-04	B023H	MB007L	4/13/00	1300	
SW-06	B023K	MB007N	4/13/00	1500	
SW-07	B023N	MB007P	4/13/00	1530	
SW-08	B023P	MB007Q	4/13/00	1530	Duplicate of sample SW-07
SED-01	B01H1	MB00AX	4/13/00	1100	MS/MSD.
SED-02	B01HZ	MB00AY	4/13/00	1120	
SED-03	B01J0	MB00AZ	4/13/00	1240	
SED-04	B01J1	MB00B0	4/13/00	1310	
SED-05	B01J2	MB00B1	4/13/00	1330	
SED-06	B01J3	MB00B2	4/13/00	1515	
SED-07	B01J4	MB00B3	4/13/00	1550	
SED-08	B01J5	MB00B4	4/13/00	1550	Duplicate of SED-07

ATTACHMENT 1

TRAFFIC REPORTS/CHAIN OF CUSTODY RECORDS

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27965

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Weston	4/13/00	FEDEX

Regional Information

Sampler (Name): Harry L. Allen

Airbill Number: 81798706 2815

Non-Superfund Program

Sampler Signature: [signature]

Site Name: Diamond Aerosol Corp.

City, State: Glen Gardner, NJ

Site Spill ID: ZZ

3. Purpose — Lead: SF, PRP, ST, FED — Early Action: CLEM, PA, REM, RI, [X] SI, ESI — Long-Term Action: FS, RD, RA, O&M, NPLD

5. Ship To: American Analytical and Technical Services, Inc. 11950 Industriplex Boulevard Baton Rouge, LA 70809 ATTN: Nancy LeBlanc

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
B023C	1	L	G	1	X				18,19,20	6519-SW01	4/13/00/1045	MB006	HA	–
B023C	1	L	G	5		X	X		24,25,26,27,28,29,30,31,32,33,34,35	6519-SW01	4/13/00/1045	MB006	HA	–
HA														

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
(N)	1 of 5	B023C, B01HY	[signature]	

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

A21-012-15 REV.

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-2 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

304047

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27965

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Weston	4/13/00	FEDEX

Regional Information

Sampler (Name): Harry L. Allen

Airbill Number: 817987062815

Non-Superfund Program

Sampler Signature: [signature]

Site Name: Diamond Aerosol Corporation

City, State: Glen Gardner, NJ

Site Spill ID: ZZ

3. Purpose: Lead: [ ] SF [ ] PRP [ ] ST [ ] FED; Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

5. Ship To: American Analytical Services, Inc. + Technical Services, Inc. 11950 Industriplex Boulevard Baton Rouge, LA 70809 ATTN: Nancy Le Blanc

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
B023T	4	L	G	1	X				12	6519-RB01	4/13/00/1020	MB007S	HA	R
B023T	4	L	G	5		X	X		13,14,15,16	6519-RB01	4/13/00/1020	MB007S	HA	R
B023F	1	L	G	1	X				~~41,42,~~ HA 39	6519-SW02	4/13/00/1110	HA MB00B7	HA	—
B023F	1	L	G	5		X	X		41,42,43,44	6519-SW02	4/13/00/1110	MB00B7	HA	—
B01HY	5	L	G	5	X				48	6519-SED1	4/13/00/1100	MB00AX	HA	—
B01HY	5	L	G	5		X	X		47	6519-SED1	4/13/00/1100	MB00AX	HA	—
B01HZ	5	L	G	5	X				52	6519-SED2	4/13/00/1120 HA	MB00AY	HA	—
B01HZ	5	L	G	5		X	X		51	6519-SED2	4/13/00/1120	MB00AY	HA	—
B023W	4	L	G	1	X				11	6519-TB01	4/13/00/1000	NA	HA	B
HA														HA

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
	2 of 5	B01HY, B023C	[signature]	

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

A21-012-15 REV

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to [illegible]S

EPA Form 9110-2 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

384048

United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27965

1. Project Code	2. Region No. 2	Sampling Co. Weston	4. Date Shipped 4/13/00
Carrier FEDEX			
Account Code	Sampler (Name) Harry L. Allen		Airbill Number 8179870628 15
Site Name Diamond Aerosol Corporation	Sampler Signature		5. Ship To: American Analytical and Technical Services, Inc. 11950 Industriplex Boulevard Baton Rouge, LA 70809 ATTN: Nancy LeBlanc
City, State Glen Gardner, NJ	Site Spill ID ZZ	Op Unit	

3. Purpose**: Lead [ ] SF [ ] PRP [ ] ST [ ] FED [ ] BZ; Early Action [ ] IA [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action [ ] RIFS [ ] RD [ ] RA [ ] O&M

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. PE-water 7. PE-soil 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. CH3OH 7. Other (specify in Column D) N. Not Preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis TA (circle one) PR* 7 14 21 VOA	TA (circle one) PR* 7 14 21 BNA	TA (circle one) PR* 7 14 21 Pest/PCB	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Field Spike D = Field Duplicate R = Rinsate PE = Perform Eval.)
B0236	1	L	G	1	X			54	6519-SW03	4/13/00/1230	MB0038	HA	
B0236	1	L	G	5		X	X	56,57,58,59	6519-SW03	4/13/00/1230	MB0038	HA	
B0234	1	L	G	1	X			61	6519-SW04	4/13/00/1300	MB007L	HA	
B0234	1	L	G	5		X	X	63,64,65,66	6519-SW04	4/13/00/1300	MB007L	HA	
B0151	5	L	G	5	X			71	6519-SED4	4/13/00/1310	MB00B0	HA	
B0151	5	L	G	5		X	X	72,73	6519-SED4	4/13/00/1310	MB00B0	HA	
B0152	5	L	G	5	X			74 21	6519-SED5	4/13/00/1330	MB00B1	HA	
B0152	5	L	G	5		X	X	74,75	6519-SED5	4/13/00/1330	MB00B1	HA	
B0150	5	L	G	5	X			68	6519-SED3	4/13/00/1240	MB0038	HA	
B0150	5	L	G	5		X	X	70	6519-SED3	4/13/00/1240	MB0038	HA	

Shipment for Case Complete? (Y/N) Y

Page 5 of 5

VOA MS/MSD Required? Y/N Sample #: B0236, B0144
BNA MS/MSD Required? Y/N Sample #: B0236, B0144
Pest/PCB MS/MSD Required? Y/N Sample #: B0236, B0144

Additional Sampler Signatures

Chain of Custody Seal Number(s)

*PR provides 7-day data turnaround in addition to preliminary results. Requests for preliminary results will increase analytical costs.

Chain of Custody Record

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Harry L. Allen	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Distribution: Blue - Region Copy; White - Lab Copy for Return to SMO; Pink - SMO Copy; Yellow - Lab Copy for Return to Region

See Reverse for Additional Standard Instructions
**See Reverse for Purpose Code Definitions

EPA Form 9110-2 (2/99)

CLASS-99-001

207047

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27965

1. Project Code
2. Region No. 2 | Sampling Co. Weston
4. Date Shipped 4/13/2000 | Carrier FEDEX
Account Code
Sampler (Name) Harry L. Allen
Airbill Number 817987062815
Site Name Diamond Aerosol Corporation
Sampler Signature
5. Ship To: American Analytical + Technical Services, Inc. 11950 Industriplex Boulevard Baton Rouge, LA 70809 ATTN: Nancy LeBlanc
3. Purpose** Lead: SF, PRP, ST, FED, BZ; Early Action: IA, PA, REM, RI, SI, ESI; Long-Term Action: RIFS, RD, RA, O&M
City, State Glen Gardner, NJ | Site Spill ID ZZ | Op Unit

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. PE-water 7. PE-soil 8. Other (specify in Column A)
7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. CH3OH 7. Other (specify in Column D) N. Not Preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis TA (circle one) PR* 7 14 21 VOA	TA (circle one) PR* 7 14 21 BNA	TA (circle one) PR* 7 14 21 Pest/PCB	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Field Spike D = Field Duplicate R = Rinsate PE = Perform Eval.)
B023K	1	L	G	1	X			77	6519-SW06	4/13/00/ 1500	MB007N	HA	—
B023K	1	L	G	5		X	X	90,91,92,93	6519-SW06	4/13/00/ 1500	MB007N	↓	—
B023N	1	L	G	1	X			76	6519-SW07	4/13/00/ 1530	MB007P	↓	—
B023N	1	L	G	5		X	X	84,85,86,87	6519-SW07	4/13/00/ 1530	MB007P	↓	—
HA												HA	

Shipment for Case Complete? (Y/N) Y
Page 4 of 5
VOA MS/MSD Required? Y/N Sample #: B023C, B01HY
BNA MS/MSD Required? Y/N Sample #: B023C, B01HY
Pest/PCB MS/MSD Required? Y/N Sample #: B023C, B01HY
Additional Sampler Signatures
Chain of Custody Seal Number(s)

*PR provides 7-day data turnaround in addition to preliminary results. Requests for preliminary results will increase analytical costs.

Chain of Custody Record

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Distribution: White - Region Copy; Yellow - Lab Copy for Return to SMO; Pink - SMO Copy; Yellow - Lab Copy for Return to Region

See Reverse for Additional Standard Instructions
**See Reverse for Purpose Code Definitions

EPA Form 9110-2 (2/99)

CLASS-99-001

387946

United States Environmental Protection Agency
Contract Laboratory Program

Organic Analytic Report & Chain of Custody Record
(For Organic CLP Analysis)

Case No. 27965

1. Project Code	2. Region No. 2	Sampling Co. Weston	4. Date Shipped 4/13/00
Carrier FEDEX			
Account Code	Sampler (Name) Harry L. Allen	Airbill Number 817987062815	
Site Name Diamond Aerosol Corporation	Sampler Signature [signature]	5. Ship To: American Analytical & Technical Services, Inc. 11950 Industriplex Boulevard Baton Rouge, LA 70809 ATTN: Nancy LeBlanc	
City, State Glen Gardner, NJ	Site Spill ID ZZ	Op Unit	

3. Purpose**: Lead [ ] SF [ ] PRP [ ] ST [ ] FED [ ] BZ; Early Action [ ] IA [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action [ ] RIFS [ ] RD [ ] RA [ ] O&M

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. PE-water 7. PE-soil 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. CH3OH 7. Other (specify in Column D) N. Not Preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis TA (circle one) PR* 7 14 21 VOA	TA (circle one) PR* 7 14 21 BNA	TA (circle one) PR* 7 14 21 Pest/PCB	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Field Spl. D = Field Duplicate R = Rinsate PE = Perform Eval.)
B023P	1	L	G	1	X			78	6519-SW08		MB007Q	HA	D
B023P	1	L	G	5		X	X	79,80,81,82	6519-SW08		MB007Q		D
B0153	5	L	G	5	X			62	6519-SED6		MB00B2		—
B0153	5	L	G	5		X	X	13	6519-SED6		MB00B2		—
B0154	5	L	G	5	X			49	6519-SED7		MB00B3		—
B0154	5	L	G	5		X	X	40	6519-SED7		MB00B3		—
B0155	5	L	G	5	X			53	6519-SED8		MB00B4		D
B0155	5	L	G	5		X	X	10	6519-SED8		MB00B4		D
HA													HA

Shipment for Case Complete? (Y/N) Y

Page 5 of 5

VOA MS/MSD Required? Y/N Sample #:
BNA MS/MSD Required? Y/N Sample #:
Pest/PCB MS/MSD Required? Y/N Sample #:

Additional Sampler Signatures: [signature]

Chain of Custody Seal Number(s)

*PR provides 7-day data turnaround in addition to preliminary results. Requests for preliminary results will increase analytical costs.

Chain of Custody Record

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

Distribution: Blue - Region Copy; White - Lab Copy for Return to SMO; Pink - SMO Copy; Yellow - Lab Copy for Return to Region

See Reverse for Additional Standard Instruction
**See Reverse for Purpose Code Definitions

EPA Form 9110-2 (2/99)

CLASS-99-0

387948

EPA United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

Case No. 27965

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		2	Weston	4/13/00	FEDEX

Regional Information

Sampler (Name): Harry L. Allen

Airbill Number: 817987062826

Non-Superfund Program

Sampler Signature: [signature]

5. Ship To: Liberty Analytical, 501 Madison Ave, Cary, NC 27513, ATTN: Alice Evans

Site Name: Diamond Aerosol Corp.

City, State: Gloucester, NJ

Site Spill ID: ZZ

3. Purpose*: Lead: SF, PRP, ST, FED; Early Action: CLEM, PA, REM, RI, SI (X), ESI; Long-Term Action: FS, RD, RA, O&M, NPLD

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6)	B Conc. Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7)	E RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
MB00B6	1	L	G	2		X						36,37,38	6519-SW01	4/13/00 / 1045	B023C	HA	—
MB00B7	1			2		X						45	6519-SW02	/ 1110	B023F		—
MB00B8	1			2		X						60	6519-SW03	~~B023GD~~ / 1200	B023G		—
MB007L	1			2		X						67	6519-SW04	~~B023HD~~	B023H		—
MB007N	1			2		X						89	6519-SW06	/ 1500	B023K		—
MB007P	1			2		X						88	6519-SW07	/ 1530	B023N		—
MB007Q	1			2		X						83	6519-SW08	/ 1530	B023P		D
MB00AX	5			6		X						46	6519-SED1	/ 1100	B01HY		—
MB00AY	5			6		X						50	6519-SED2	/ 1120	B01HZ		—
MB00AZ	5			6		X						64	6519-SED3	/ 1240	B01J0		—

Shipment for Case Complete? (Y/N): Y

Page 1 of 2

Sample(s) to be Used for Laboratory QC: ~~B023D~~ MB00B6, MB00AX

Additional Sampler Signatures: [signature]

Chain of Custody Seal Number(s):

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-1 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-13 REV

202521

EPA United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

Case No. 27965

1. Project Code	Account Code	2. Region No. 2	Sampling Co. Weston
4. Date Shipped 4/13/00	Carrier FEDEX		
Regional Information		Sampler (Name) Harry L. Allen	Airbill Number 817987062826
Non-Superfund Program		Sampler Signature [signature]	5. Ship To Liberty Analytical 501 Madison Ave. Cary, NC 27513 ATTN: Alice Evans
Site Name Diamond Aerosol Corp.		3. Purpose* Lead: SF, PRP, ST, FED; Early Action: CLEM, PA, REM, RI, SI, ESI; Long-Term Action: FS, RD, RA, O&M, NPLD	
City, State Glen Gardner NJ	Site Spill ID ZZ		

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaOH 4. H_2SO_4 5. $K_2CR_2O_7$ 6. Ice only 7. Other (specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc. Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 7) Other:	E RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
MB00B0	5	L	G	6		X						73	6519-SED4	4/13/00/1310	B01J1	HA	—
MB00B1	5	↓	↓	6		X						~~85~~ 75	6519-SED5	4/13/00/1330	B01J2	↓	—
MB00B2	5	↓	↓	6		X						55 ~~22~~ ~~80~~	6519-SED6	4/13/00/1515	B01J3	↓	—
MB00B3	5	↓	↓	6		X						22	6519-SED7	4/13/00/1550	B01J4	↓	—
MB00B4	5	↓	↓	6		X						23	6519-SED8	4/13/00/1550	B01J5	↓	D
MB007S	4	↓	↓	2		X						17	6519-RB01	4/13/00/1020	B023W9	↓	R
HA																	HA

Shipment for Case Complete? (Y/N)	Page 2 of 2	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
		MB00B6, MB00AX	[signature]	

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	4/13/00 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

A21-012-13 REV

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - CLASS Copy; Yellow - Lab Copy for Return to CLASS

EPA Form 9110-1 (2/98)

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

382535

NOTIFICATION OF SAMPLE SHIPMENT

Case No. 27965 Caller's Name S. Sumbaly Phone # (732) 225-6116

SAS No. _____ Date of Call 4/14/00 Region USEPA Region II

ORGANIC Lab Name	No./Matrix Concentration of Samples (e.g. 10 LW)	Ship Date	Air bill No.	Shipping Complete?
AATSLA	8 LS FULLTCL	4/13/00	817987062815	Y
AATSLA	8 LW FULLTCL	4/13/00	817987062815	Y
AATSLA	1 LW VOA	4/13/00	817987062815	Y

Comments: Above organic samples were shipped in 5 coolers.

Message Taker: _____

NOTIFICATION OF SAMPLE SHIPMENT

Case No. 27965 Caller's Name S. Sumbaly Phone # (732) 225-6116

SAS No. _____ Date of Call 04/14/00 Region USEPA Region II

INORGANIC Lab Name	No./Matrix Concentration of Samples (e.g. 10 LW)	Ship Date	Air bill No.	Shipping Complete?
LIBRTY	8 LW TAL	4/13/00	817987062826	Y
LIBRTY	8 LS TAL	4/13/00	817987062826	Y

Comments: Above inorganic samples were shipped in 1 cooler.

Message Taker: _____

FACSIMILE TRANSMITTAL	Number of pages: 1
To: Nichole Coene	From: Smita Sumbaly
Co.: VIAR & Co. - SMO	Co.: Roy F. Weston - START
Phone # (703) 264-9280	Phone # (732) 225-6116
Fax # (703) 264-9222	Fax # (732) 225-7030

REFERENCE NO. 34

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START-02-436

Scott Snyder
c/o ROY F. WESTON, INC.
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EDISON, NJ 08837

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Brea, CA 92822-0129

3-3-00 - On-site reconnaissance
START spoke to Mr. George Diamond, owner and operator of the Diamond Aerosol site. Mr. Diamond made the following statements: the name of the company currently occupying the site is Dispensing Containers Corporation; the company manufactures aerosol cans; the cans manufactured on-site are samples sent out to prospective clients; the main manufacturing facility is located in Pennsylvania; most of the documents Mr. Diamond had concerning cleanup operations were lost by an engineering consulting firm hired by Diamond Aerosol; the PCB contaminated soil piles are still on-site and Mr. Diamond anticipates removal by the end of June 2000; the source of the PCB contamination was spilt can of heat transfer liquid and is not attributable to site operations; solid urinal deodorizers were the source of VOC contamination in the septic tank; methylene chloride detected in nearby wells was not attributable to the site due to the small quantities utilized by the plant; Mr. Diamond sued the lab that tested the ECRA samples; Mr. Diamond resides on-site and his well is not contaminated; his on-site well has a depth of 80 feet; the drum storage area is closed and is no longer in use;

Freon has not been used at the site since the late 1970s; the compressor discharge area was remediated; soil contamination noted by NJDEP was in fact mineral deposits common in the site area and that black coloration in the subsoil was sulfite rock; the site facility utilizes approximately 20 grams per year of VOCs in the production of interior lacquer for the cans and most substance on-site are water based; Tear gas production at the site was replaced by Pepper Spray production; cayenne pepper is the main ingredient; all nearby residences are served by private wells and there are no sewer lines; discharge from the plant to the woods was composed of cosmetics and there was no adverse impact on nearby surface water bodies; Mr. Diamond note the diverse community of wildlife, including frogs that live in the wetland and stream adjacent to and downstream of the site; on-site monitoring wells are still sampled periodically; surface water samples were collected by NJDEP in the early 80s; Mr. Diamond anticipates closing down the operation at the site completely in one year.

START made the following observations: No stained soil or stressed vegetation was noted; a wetland is located on the northeast portion of the site; a drum leaking #2 fuel oil and an over turned drum containing aluminum shavings were observed in the drum storage area; several jars containing possible terrorist ingredients were noted in the basement of the stone barn; the PCB contaminated soil piles have a volume of approximately 300 yd³ each; demolition debris and pallets were noted as having accumulated in several locations throughout the site; no evidence of hazardous materials was noted; with the exception of the leaking and over turned drums the site appeared in good order.

George B. Diamond
Chairman

DCC Dispensing Containers Corporation

62 Anthony Road
Glen Gardner, New Jersey 08826 USA
Phone: (908) 832-7882
Fax: (908) 832-7314

4-13-00 Arrived on site 0920.
Region II START Kelly Curran (KC)
Harry Allen (HA) Gary Gilliland (GG)
and Scott Snyder (SS).
Health/Safety meeting conducted at
0942
Hnu calibrated at 0945 by GG, KC.
Sample Management set up by HA @ 0950
1015 KC, SS, and GG went to collect samples
SW01/SED01 and SW02/SED02. See sample log, p. 6.
SW02/SED02 was collected 63' upstream of SW01/SED01.
1145 - RETURNED SW01, SED01, SW2,
SED-02 TO SMO HARRY ALLEN

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PHOTO LOG

#	DESCRIPTION	DIRECTION	TIME
1	S. Snyder collects SW01	NE	1045
2	" " " SED01	NE	1100
3	K. Curran collects SW02	ENE	1110
4	" " " SED02;	SE	1120
	Spruce Run Creek upstream in background; trib to left.		
5	KC, GG collects SW03;	SE	1230
6	GG collects SED03	SE	1240
7	SS collects SW04	ESE	1300
8	SS collects SED05	NE	13:30
9	SS collects SW06	E	15:00
10	SS collects SED07/SED08	SW	15:50

Sample log

Sample # Time Description

SW01 Confluence of tributary & Spruce Run
4-13-00 @ 1045, by S. Snyder

SED01 Same location as SW01. ~~Sandy, gravelly~~ Gravelly sand, some silt
4-13-00 @ 1100, by S. Snyder.

SW02 Spruce Run Creek, at confluence of tributary upstream of PPE from trib that leads from site.
4-13-00 @ 1110, by K. Curran

SED02 Same location as SW02. Gravelly sand, some silt.
4-13-00 @ 1120, by K. Curran

SW03 - DOWNGRADIENT WETLAND @ 1230
by G.G.

SED-03 - SAME LOCATION AS SW03 @ 1240

SW04 Downgradient wetland, 280' ~~SE~~ NW from SW03.
4-13-00 @ 1300 by S. Snyder.

SED04 Same location as SW04; silt & organics
@ 13:10 collected by S. Snyder

SED05 200' NW from SED04; 4-13-00 @
13:30 by S. Snyder; no running or
standing water available for sampling

SW06 Background sample, looking east
4-13-00 @ 15:00 by S. Snyder

~~SW~~ SED06 Same location as SW06;
4-13-00 @ 15:15 by S. Snyder

SW07 Background sample; 4-13-00 @
15:30 by S. Snyder

SW08 Duplicate of SW07; 4-13-00
@ 15:30 by S. Snyder

SED07 Background sample; 4-13-00 @
15:50 by S. Snyder

SED08 Duplicate of SED07; 4-13-00 @
15:50 by S. Snyder

SW06, SED06 located 300' EAST (90°) OF THE NORTHEAST CORNER OF THE FORMER RCRA DRUM STORAGE AREA.

SW07, SW08, SED07, SED08 located 165' RELATION TO SOUTH 126' SE OF THE NORTHERN MOST PROPANE TANK.

Weather - approximately 50°F with clear skies.

Departed site at 1430 hours.

11-6-00 - On-site reconnaissance
Scott Snyder, RACV (SS)
Dennis Foerter, RACV (DF)
Denise Zeno, U.S EPA (DZ)
Kristin Dobinson, U.S EPA. (KD)
SS and DF arrived on site at 1000
DZ and KD arrived on site at 1030
1037 - PID - ZERO BACKGROUND
RAD - 19 CPM
1040 - TOURED FACILITY - Tour included facility, laboratory and warehouses. RACV and U.S. EPA observed drums of tear gas ingredients, organic solvents and jars of chemical liquid in basement of old stone barn. RACV and U.S. EPA toured former drum excavation area. PCB contaminated soil piles were observed. Use of magnetometer in this area revealed no anomilies. Scattered debris was observed in the wooded area north of drum excavation area. Mr. Diamond identified the well located behind laboratory building as providing drinking water for the facility and his residence. Broken glass jars were observed scattered through out wooded area south east of PCB contaminated soil piles. At no time did PID or RAD indicate levels above back-ground. Departed site 1100

11-17-00 - On-site reconnaissance
Scott Snyder, RACV (SS)
Denise Zeno, U.S. EPA (DZ)
Kristin Dominson, U.S. EPA (KD)
Mark Gallo, U.S. EPA (MG)
Jack Bruce, U.S. EPA (JB)
RACV arrived on site 0900
U.S. EPA arrived on site 0930
Purpose of visit was to recon site with MG and JB.
0940 - RACV, U.S. EPA talked to G. Diemand. JB explained to Mr. Diemand that he would like permission to look around site and that steps may need to be taken to remove hazardous materials from the site. (SS) JB ~~G. Diemand~~ stated that G. Diemand had the right to refuse access or access to the site may be revoked at any time. G. Diemand replied that EPA could have "permanent" on-going access.
0955 - RACV, EPA tour stone barn on west side of site. On the lower level of the stone barn the following items were observed: glass jars partially filled with unidentified liquid, some with crystals forming; glass jars partially filled with white powder and other unidentified solids; a laboratory ventilation hood made from a substance believed by JB to contain —

asbestos. On the upper level the following items were observed: additional glass jars containing unidentified liquids and solids; ceramic jar labeled "mercury"; potassium metal sticks; and additional lab equipment. Behind chicken coop waste debris was observed including old reactor vessels, metal and glass.

1045 - RACV, U.S. EPA toured active portion of the facility (DCC operations) conditions were similar as those observed on previous visits.

TELECON NOT

W. O. NO.: 20064-0

DISTRIBUTION: D

BETWEEN: Kristin

AND: Scott Snyder

After being informed
Aerosol site, Ms. Dobi
mile of the site. Ms.
additional sampling to
date.

TELECON NOTE **RAC V**

W. O. NO.: 20064-052-100-4042 **DATE:** 11/28/00 **TIME:** 1025

DISTRIBUTION: Diamond Aerosol File

BETWEEN: Kristin Dobinson **OF:** U.S. EPA **PHONE:** (212) 637-4328

AND: Scott Snyder **Subject:** Domestic Well Sampling

After being informed of the approximate number of homes within 0.5 mile of the Diamond Aerosol site, Ms. Dobinson amended the TDL and directed WESTON to sample homes with 0.25 mile of the site. Ms. Dobinson stated that if contamination is detected in wells at 0.25 mile, additional sampling to include homes within 0.50 mile of the site could be conducted at a later date.

TELECON NOTE **RAC V**

W. O. NO.: 20064-052-100-4042 **DATE:** 12/7/00 **TIME:** 1330

DISTRIBUTION: Diamond Aerosol file

BETWEEN: Stanley Parker **OF:** 56 Anthony Road **PHONE:** FOIA Exemption (b)(6)

AND: Scott Snyder **Subject:** Site Access

Mr. Stanley Parker, owner of the abandoned house located at 56 Anthony Road **(Block 57, Lot 22)** contacted WESTON and stated that the house on the lot is unoccupied and therefore, there is no active well on the property. Mr. Parker stated that there is a hand dug well adjacent to the front corner of the house and that the depth of the well is approximately 15 to 20 feet. Mr. Parker gave permission for WESTON to enter the property to take a sample from the well or from the wetland and tributary. Mr. Parker requested that WESTON contact him when sampling results are received.

12-6-00 - Trip to site to check on conditions of monitoring wells (MW) MWs checked by Scott Snyder and Kelley Curran.

MW7 - Depth to water = 7 feet
Depth to Bottom of well = 18.6 feet
Stick up = 1.0 feet

MW6 - Depth to water = 3.5 feet
Depth to bottom of well = 5.5 feet
Stick up = 2.7 feet

MW9 - Depth to water = 6.6 feet
Depth to bottom of well = 20.0 feet
Stick up = 2.1 feet

MW8 - Depth to water = 8.7 feet
Depth to bottom of well = 22.5 feet
Stick up = 1.7 feet

MW1 Depth to water = 24 feet
Depth to bottom of well = 31 feet
Stick up = 2.7 feet.
Probe came up covered with rust-colored sediment.

MW10 - Depth to water = 11 feet
Depth to bottom of well 29.5'
Stickup = 1.8 feet.

MW2 was located, however, this well was inaccessable due to dense vegetation (ie., stickerbushes). MW3 and MW4 were not located due to dense vegetation.

12-21-00 - On-Site Prebid meeting with geoprobe bidders. SAT arrived on site at 0930. Inlet Pollution Services, Inc. (IPSI) arrived at 0950; TerraProbe arrived at 1000; Zebra environmental arrived at 1005. Meeting commenced at 1015. Toured proposed subsurface sample locations until 1130. B:B drilling & Summit Drilling did not show for meeting. Scott Snyder (SAT) departed site at 1145.

Note: Prior to pre-bid meeting, George Diemond, at the request of Scott Snyder gave his permission to clear brush from leachfield area and around

monitoring wells 4 & 5. Mr. Diamond stated that Mr. Helmrich would be able to provide assistance in locating the leachfield and monitoring wells.

12-21-00

WESTON MANAGERS DESIGNERS/CONSULTANTS
Roy F. Weston, Inc.
Raritan Plaza III, Suite 29
101 Fieldcrest Avenue
Edison, New Jersey 08837-3622
732-417-5800 • Fax 732-417-5801
www.rfweston.com

16 January 2001

Mr. George Diamond
Dispensing Containers Corporation
62 Anthony Road
Glen Gardner, NJ 08826

SUBJECT: REQUEST FOR PERMISSION TO CLEAR BRUSH
DCN NO.: RFW052-3D-AHDO

Dear Mr. Diamond:

The U. S. Environmental Protection Agency (EPA) has tasked Roy F. Weston, Inc. (WESTON®) to conduct an Expanded Site Inspection (ESI) at the Diamond Aerosol Corporation site (CERCLIS ID No. NJD049644438), 62 Anthony Road, Glen Gardner, Hunterdon County, New Jersey. As per our discussion on 21 December 2000, in order to access certain sampling locations, it will be necessary to clear brush from the wooded area on the southern perimeter of the facility parking area and from other locations throughout the site. Your permission to clear this vegetation is requested. Please indicate your permission by signing and returning this letter via fax (732- 417-5801). If you have any questions regarding this request please contact me at (732) 417-5812. Thank you for your time and cooperation.

George B. Diamond

George Diamond

Very truly yours,

ROY F. WESTON, INC.

Scott Snyder
Project Manager

ESI Sampling Event - 11/22/01

Arrived on site at 0800 Temp 6° F clear skies, approx 7" of snow on the ground.

Weston Personnel

Scott Snyder

Kelley Curran

Ernie Salazar

Henry Allen

Bill Morrison

Alison Sedlack

0825 - HASP briefing with Ernie Salazar and Bill Morrison

0830 - OVM No RFW 20685 calibrated by Ernie Salazar

0900 - TB01 prepared by Kelley Curran, Ernie Salazar.

0905 - HASP meeting with Henry Allen, Kelley Curran Alison Sedlak

0910 - RB01 - prepared by Henry Allen, Alison Sedlak (bowl/trowel)

0925 - PID No 70711704 calibrated by Henry Allen, No reading.

1015 - Zebra Environmental arrived on site.

Sample location S03/SS03

Drilling began at 1150 to a depth of 6' (feet). Entire core was composed of brown sandy clay. No readings on PID. Sample SS03 was collected at 1210, from ~depth

of 60"-72". VOAs collected with EnCore dedicated sampling (5g) device. Sample S03 collected at 1220. VOAs collected with EnCore. Depth of sample was 0'-1.7'.

S02/SS02 - Drilling began at 1235 to a depth of 6'. Entire core composed of brown, sandy clay. No readings on PID. Sample SS02 collected at 1240 from a depth of 55.2"-72". Sample S02 collected at 1300 at a depth of 0'-1.4'. VOAs collected with EnCore.

S01/SS01 - Drilling began at 1410 to a depth of 6'. Entire core composed of brown sandy clay. No readings on PID. Sample SS01 collected at 1420 at a depth of 57.6"-72". Sample S01 collected at 1430 at a depth of 0'-1.7'. VOAs collected with EnCore

S24/SS22. Drilling began at 1500 to a depth of 6'. Entire core composed of brown, sandy clay. No readings on PID. Sample SS22 collected at 1515, high sand content; depth of 56.4"-72". Sample S24 collected at 1525 to a depth of 1525 to a depth of 0'-1.9'. VOAs collected with EnCore

S20/SS19 Drilling begun at 1605. Sample SS19 collected at 1615 at a depth of 54"-72", sandy brown clay. No readings on PID. Some gray ashy fill material mixed with clay. Sample S20 collected at 1620, brown sandy clay with some black organic, to a depth of 0'-1.5'. No readings on PID. VOA collected using EnCore.

SS20/S21 - Drilling begun at 1635 to a depth of 6'. Sample SS20 collected at 1640 at a depth of 57"-72". Brown sandy clay mixed with gray ash colored fill. Sample S21 collected at 1650 to a depth of 0'-1.5'. VOAs collected using En Core. No readings on PID.

1/22/01

All VOA soil samples and sediment samples were collected using EnCore disposable sampling equipment.

1/23/01

Due to WESTON departure from the site at 2030 hrs. Samples collected on 1/22/01 were delivered to FED EX at 0900 1/23/01

1/23/01

1-23-01 Arrived onsite at 0820; temp.= 6°F with clear skies.

0900 - Enviroscape arrived to clear brush for MW's 4 & 5.

0920 MW4 is located. MW5 is not located despite extensive clearing and search by WESTON personnel and Enviro-scape.

1100 - Enviroscape departs site.

RB02 collected at 1100 by Harry Allen & Kelley Curran (bowl, trowel, and geoprobe drive head)

RB03 collected at 1105 by Harry Allen & Kelley Curran (pump impellor, shaft).

TB02 collected at 1100 by Harry Allen.

S07/SS07 - Drilling began at 1100 to a depth of 6'. Entire core composed of brown sandy clay. Sample SS07 collected at 1110 at a depth of 55.2" - 72". Sample S07 collected at 1115 at a depth of 0'-1.8'.

S32/SS31 (background) Drilling began at 1145. Sample SS31 was collected at 1155 to a depth of 57.6" - 72" - gravelly sand. Sample S32 collected at 1205 - gravelly clay at a depth of 0' - 1.8'.

519/S518 (background) - Drilling began at 1220 to a depth of 5.5'. Geoprobe was refused last 0.5' due to rock. Sample S518 collected at 1235 to a depth of 56.4" - ~~72~~ 66". Sample consisted of gravelly clay. Sample 519 collected at 1240 at a depth of 0 - 1.8'. Sample consisted of gravelly clay. Both background samples collected from 68 Anthony Rd.

506/S506 - Drilling began at 1505 to a depth of 6'. Sample 506 collected at 1510 at a depth of 0' - 1.8'. Sample consisted of brown, sandy, gravelly clay. Sample S506 collected at 1515 at a depth of 53.4" - 72". Sample consisted of sandy clay.

512/S511 - Drilling began at 1530 to a depth of 6'. Sample 512 collected at 1535 to a depth of 0' - 1.9'. Sample consisted of gravelly brown clay. Sample S511 collected at 1540 to a depth of 48.6" - 72". Sample consisted of brown clay.

513/S512 - Drilling began at 1545 to a depth of 6'. Sample 513 collected at 1555 at a depth of 0 - 1.85'. Sample consisted of gravelly organic topsoil. Sample S512 collected at 1600 at a depth of 50.4" - 72". Sample consisted of gravelly brown clay.

SS27 - Drilling began at 1610 to a depth of 6'. Sample was collected at 1615 at a depth of 48"-72". Sample consisted of a greenish clay.

WESTON departed site at 1730.

1/23/01

1-24-01 Arrived on site at 0745; Temp = 25° with partly cloudy skies.

PID 70711704 calibrated at 0855 by Harry Allen. Background reading of 10ppm attributed to temperature of the unit.

TB03 - Collected at 0910 by Bill Morrison.

S16/SS15 - Drilling began at 0930 to a depth of 12'. Sample S16 collected at 0935 at a depth of 0-1.5'. Sample composed of sand clay. No PID reading above background. Sample SS15 collected at 0950 at a depth of 10.5'-12'. Sample consisted of saturated clay. No PID reading above background. 4'-8' core composed of wet, gravelly clay. No PID readings above background.

S15/SS14 - Drilling began at 1000 to a depth of 12'. Sample S15 collected at 1005 to a depth of 0'-1.5'. Sample consists of gravelly clay. No readings on PID above background. Sample SS14 collected at 1025 consisted of saturated, slightly sandy clay. Sample collected at a depth of 10'-12'. No readings on PID above background. Bore hole note to fill with groundwater. 4'-5' section composed of wet, brown clay; no readings on PID above background.

RB04 (bowl, trowel, pump, drivehead) collected by Kelley Curran @ 1050

S14/SS13 - Drilling began at 1045 to a depth of 12'. Sample S14 collected at 1050 to a depth of 0-2'. Sample consisted of sandy, gravelly clay; no readings on PID above background. Sample SS13 collected at 1105 at a depth of 10'-12'. Sample consisted of wet brown clay; no readings on PID above background. 4'-5' section consisted of brown clay; no readings on PID

SS29 - Drilling began at 1150 to a depth of 6'. Sample collected at 1155. 0'-2.5 - brown sandy clay. 2.5'-4.0' brown sandy clay mixed with a white chalky substance.

4'-6' same as 2.5'-4.0' section. Sample collected at a depth of 50.4"-72".

S526 - Drilling began at 1215 to a depth of 6'. 0'-3' ~~section composed of wet sandy clay~~ section composed of sand mixed with fine white chalky powder. Sample collected at a depth of 52.8"-72" and consisted of wet sandy clay.

S25 - collected at 1310

S29/S525 - Drilling began at 1405. Due to insufficient sample volume the geoprobe was advanced to 8'. Sample S29 was collected at 0'-2' and consisted of clayey sand - very loose. Sample S525 collected at 1425 at a depth of 78"-96" consisted of silty, sandy clay. Sample S29 was collected at 1415.

S18/S517 - Drilling began at 1435 to a depth of 6'. Sample S18 collected at 1440 at a depth of 0'-2'. Sample consisted of brown sandy clay. Sample S517 collected at 1445 at a depth of 49.2"-72". Sample consisted of brown sandy clay.

S04/SS04 - Drilling began at 1515 to a depth of 6'. Sample S04 collected at 1520 at a depth of 0-1.4'. 1"-11" of organic top soil, remainder of sample consisted of brown, mottled clay. Mottles composed of organic top soil intrusions. Sample SS04 collected at 1530 at a depth of 48"-72" consisted of brown sandy clay.

S05/SS05 - Drilling began at 1540 to a depth of 6'. Sample S05 collected at 1545 at a depth of 0'-2'. Sample consisted of brown, sandy, gravelly clay. Sample SS05 collected at 1555 at a depth of 50.4"-72". Sample consisted of brown, sandy, gravelly, clay.

WESTON departed site at 1730

1/24/01

1-25-01 Arrived on site at 0920; Temp = 28° clear skies.

RB05 (bucket auger) collected by Henry Allen & Alison Sedlak at 0915

RB06 (Bowl/Trowel) collected by Henry Allen & Alison Sedlak at 0935

522/523/5521 collect at 1055 and 1105. 5521 collected at a depth of 1-1.5 feet using a bucket auger.

511/5510 collected downgradient of dump area behind chicken coop. Sample 511 collected at 1055 at a depth of 0-8". Sample 5510 collected at 1130 using a bucket auger at a depth of 30-40".

531/5530 collected adjacent to dumpster. Sample 531 collected at 1215 at a depth of 0-8". Sample 5530 collected at 1225 at a depth of 35"-45" using a bucket auger. Hydrogen sulfide smell detected.

510/5509 collected downgradient of dump site north of MW7. Sample 510 collected at 1205. Sample 5509 collected at 1235 using a bucket auger at a depth of 1-1.5 feet.

508/509/5508 collected from Bldg. No. 7 Discharge Area. Sample 508 collected at 1310. 509 collected at 1315. Sample 5508 collected at 1330 using a bucket auger at a depth of 18"-24".

WESTON departed site at 1515

1/25/01

Arrived at MW-06 and set up to begin Low-Flow Sampling. Head space in well showed background on OVM. DTW-3.17', DTB-5.20'. Purge began at 0940, runs dry quickly, so switch to Pump and Dry method. pH-6.75, Cond-0.01, Turb-13.3, DO 7.41 g/L, Temp 7.0°C Sal 0.0, TDS-0.001, ORP-159, OVM-0ppm 1010-Purge approx 1 Gallon, pH-7.25, Cond-0.001, Turb 6.9, DO-4.89, Temp 6.5 sal 0.00, TDS-0.001, ORP-133. 1020-Sample GW06 is collected for DMA, VOC, Pest/PCB, No Odor. 1050-Sampling ends.

Setup on MW-07. DTW-4.60', DTB-18.90' 1430-Purge began, Very turbid, No Odor. OVM is background. PH-6.20, Cond-0.134, DO-6.32, Temp 9.0, Sal 0.00, TDS-0.187, ORP 208 Turbidy was not working due to cold. Flow-0.15 GPM. 1445-pH 6.04 Cond-0.130, DO-5.36, Temp-9.60, Sal-0.00, TDS-0.084, ORP-215 1455-pH 6.01, Cond 0.130, DO 4.69, Temp 9.60, Sal 0.00, TDS 0.084, ORP 216. DTW-4.89. 1500 pH 6.01, Cond 0.129, DO 4.52, Temp 9.65, Sal 0.0, TDS 0.083 ORP 218, DTW-4.90. 1510 Sample taken, very turbid (Rust?) GW-07, MS/MSD.

Sampling complete for Day-1/23/01, [illegible]

1/25/01: Setup on MW-04 OVM head space gave background. TDW-6.41, DTB-10.2. 1205-Purge Began. pH 6.58, Cond 0.251, DO 4.99, Temp 4.5°C, Sal

0.01, TDS 0.161, ORP 225, Turb 3.10, Flow 0.15 GPM, Very Clear. 1220-pH 7.02, Cond 0.244, DO 2.32, Temp 7.0°C, Sal 0.01, TDS 0.159, ORP 146, Turb 2.84, DTW 6.42. 1225-pH 7.08, cond 0.245, DO 2.43, Temp 7.1°C, Sal 0.01, TDS-0.159, ORP 131, Turb-2.44 1235-pH 7.05, Cond 0.246, DO 2.24 Temp 7.0 Sal 0.01, TDS 0.160, ORP 118, Turb 2.88, DTW-6.43. Sample is collected-GW04

Setup on MW10. DTW-6.56, DTB-28.66. 1455 Purging begins, pH 6.73, Cond 0.210 DO 4.22, Temp 8.7, Sal 0.01, TDS 0.136, ORP 156, Turb 11.41. Flow 0.15 GPM. 1510-pH 5.44, Cond 0.208, DO 2.34, Temp 9.3°C, Sal 0.01 TDS-0.135, ORP-167, Turb 11.6, DTW-7.14 1515-pH 5.88, cond 0.208, DO 2.27, temp 9.2°C, Sal 0.01, TDS 0.135, ORP 167, Turb 10.3, DTW 7.18, Flow 0.1 GPM. 1526 pH 5.84, Cond 0.207, DO-2.22, Temp 9.4, Sal 0.01 TDS ~~0.0~~ 0.134, ORP 171, Turb 9.1, DTW 7.21 Sample GW10 is collected.

~~Setup on~~ Work complete for the day. Pump was decon'd between wells using Potable wash, Hexan, ~~Acetone~~ Nitric, and DI rinses. 1/23/01

1/24/01: Setup on MW07. Lock is cut off. Well is 2" steel w/ gravel in hole. 0910-Purse is started. DTW-

19.2', DTB ~30'. Water is very silty due to rust, approx 6" on bottom. pH 6.47 Cond 0.116, DO 4.42, Temp 11.0 DEP 0.3, Sal 0.00, TDS -0.073, ORP -118, Turbidity did not work because of the cold.
0430 - DTW 19.7, pH 6.29, Cond 0.120, DO 7.24 Temp 11.4, Dep 0.5, Sal 0.00, TDS 0.078, ORP 214 Very turbid
0440 pH 6.24 cond 0.121, DO 7.85, Temp 12.1, Dep 0.6, Sal 0.00, TDS 0.078, ORP 222, DTW 19.72. 0450 pH 6.24, Cond 0.129 DO 7.84, Temp 12.1, Dep 0.6, Sal 0.01, TDS 0.078, ORP 230, DTW 19.73. Sample GW-01 is collected, very silty.

Set up on MW-02, DTW-7.05' DTB-13.5', Slightly Silty. 1125 Started pumping at 0.1 GPM. pH 6.15, cond-0.141, DO 7.34 temp 9.2, dep 0.6 Sal 0.01, TDS 0.092, ORP 228, 1140 pH 6.03, cond 0.141, DO 3.05, Temp 9.4, Dep 0.4, Sal 0.01, TDS 0.092, ORP 212, Clear. 1150 - pH 6.02, cond 0.143, DO 2.84, temp 9.7, dep 0.6, Sal 0.01, TDS 0.094, ORP 204. 1155 pH 5.83, cond 0.147, DO 2.39 temp 11.0 dep 0.6, Sal 0.01, TDS 0.97, ORP 204 DTW 7.92, Very Clear. 1155 Samples GW02 & GW03 (Duplicate) are taken.

Set up on MW-04, DTW 2.86', DTB-26.5' 4" PVC w/ Steel outer casing. 1420 Purge started. Clear. pH-6.33, Cond

0.155, DO 4.55, temp 10.4, dep 0.8,
Sal 0.01, tds -0.101, ORP 221 Very Clear
1425 pH 6.20, Cond 0.155, DO 4.58,
temp 10.5, dep 0.8, Sal 0.01, tds -0.100,
ORP 208, Flow 0.2 GPM, DTW 2.69
1436 pH 6.68, Cond 0.155, DO 4.55, temp 10.4
dep 0.8, Sal 0.01, tds 0.100, ORP 210,
DTW 2.63. 1441 pH 6.15, Cond 0.155,
DO 4.56, temp 10.6, dep 0.9 Sal 0.01,
tds 0.101, ORP 214, DTW 2.74.

Setup MW-08 to take sample, DTW
5.38', DTB-22' 1545 purge begun.
pH 6.25, cond 0.149, DO 5.37, temp
7.5, DEP 0.3, Sal 0.01 TDS-0.097
ORP 262, Flow 0.2 GPM 1600 pH 6.14
cond 0.149, DO 2.87, temp 7.7, dep 0.4
Sal 0.01, TDS 0.097 ORP 233, DTW 5.54
1615 pH 6.11, cond 0.149 DO 2.73 temp 7.7,
Dep 0.4, Sal 0.01, TDS 0.097, ORP
216, DTW - 5.53.

Groundwater sampling effort
complete. GW-08 is collected @
1615. Pump was decomed between
each well location, same
procedure. All samples were processed
and shipped by SMO the day they
were collected.

1/29/01 - Residential

TB04 - Collected at 1030 by Harry Allen and Alison Sedlak

DW01 - 3 Beech Brook Lane. Filter system bypassed. pH 6-7 collected @ 1140 collected at kitchen tap

DW02 - 204 Meadow View Lane, pH ~5 collected at 1215 from treatment bypass valve located in basement

DW03 - 201 Meadow View Lane pH - 6-7 collected at 1250 from kitchen tap Unable to determine how to bypass treatment

DW10 - 10 Stillwaters Way; pH ~6 collected at 1435 from kitchen tap. No treatment or filter

3 Winters Drive - Access Denied

DW11 - 5 Winters Dr collected at 1525 from kitchen tap No treatment only sediment filter. pH 6-7

DW 12- 109 Mt. Lebanon Rd. No treatment or filter. Collected at kitchen tap at 1550 pH 5-6

DW13 - 20 SUNNY LANE - No treatment or filter. Collected at 1655 at kitchen tap pH 5-6

DW17 - 4 WINTERS DRIVE - No treatment or filter. Collected at 1720 from kitchen tap; pH ~ 6-7

DW-18- 1 WINTERS DRIVE - Softener. Collected at 1745 from spigot in basement to bypass softener. Collected at 1745. pH 6-7

1/29/01

DW04 and duplicate sample DW05 collected at 688 Woodglen residence, basement tap. Allen collected DW04 at 1150 and DW05 at 1200. The sample had a pH of 6-7. A carbon filter and softener were bypassed in order to collect the sample.

DW06 was collected at 661 Woodglen. The sample was collected by Sedlak at 1235; pH 6-7. A carbon filter and softener were bypassed during collection at kitchen sink.

DW07 was collected at 48 Anthony Road. The well had a softener but could not be bypassed. Allen collected the sample at 1430; pH 6-7. This water was heavily aerated and bubbles could not be avoided in one VOA vial.

DW08 was collected at 1515; pH 7, at 37 Anthony Road, kitchen sink. A carbon filter and softener were bypassed for collection.

DW09 was collected at 1545; pH 7, at 74 Anthony Road. Allen collected the sample from the kitchen sink. The well depth is thought to be 550'-600' below ground surface. 1/29/01 (HA)

DW14 was collected by Allen from an outside spigot at 73 Anthony Road. Sampling time was 1650; pH 6-7. (HA)

WESTON departed site 1730

[signature] 1/29/01

Allen
at
g time
(HA)

1-30-01 - Continue residential well sampling.

TB05 - Collected at 1010 by Harry Allen & Alison Sedlak

DW19 - 681 | ~~683~~ 679 (35) Woodglen Rd. Two residences share well. No filter or treatment system. Sample collected from kitchen tap at 1055 pH-6

DW20 - Diamond Aerosol facility. No filter of treatment. Sample collected at 1155 in facility bathroom. pH=6-7

DW21 - 680 Woodglen. No treatment or filter. Sample collected from kitchen tap at 1410. pH~6-7

DW22 - 68 Anthony Rd. No treatment or filter. Sample collected from kitchen tap at 1430. pH~5-6

DW28 - 671 WOODGLEN RD. No treatment or filter. Sample collected from kitchen tap at 1515 pH~6

[signature] 1/30/01

Weston collected DW15 at 1110; pH 6-7, from the kitchen sink of 34 Anthony Road. The well at this residence is untreated.

Allen collected DW16 at 1140; pH 6-7, from an outside spigot at 79 Anthony Road. This property is used as a auto shop and farm. One person works on the property. The well is untreated.

Sedlak collected DW23, pH 6-7, from a kitchen sink at 70 Anthony Road. The time of collection was 1225. The water is untreated.

Allen collected DW24 at 1420 from the kitchen sink at 47 Anthony Road. This well is untreated; pH 7.

Sedlak collected DW25 at 1450 from a kitchen sink at 40 Anthony Road. Purging began at 1435.

The well at 54 Anthony Road was sampled by Sedlak at 1515, DW26, pH 6-7. This well has a carbon filter and softener which were bypassed; however, a secondary carbon filter, could not be bypassed.

HA
1/30/01

The well at 86 Anthony Road was sampled by Allen from an out door spigot. DW27 was collected at 1615, purging began at 1600, pH 6-7.
Harry Allen 1/30/01

1-31-01 - Continue residential well sampling

TB06 - Collected by Harry Allen & Alison Sedlak at 1010

DW29 - 203 Meadow View - No treatment or filter. Sample collected from kitchen tap at 1055 pH ~ 6

DW32 - 1 Dimetra Drive. Sample collected from kitchen sink at 1110; pH 6-7. Well is treated with carbon filter and softener, could not be bypassed. Allen collected the sample.

DW30 - 76 Anthony Rd. No treatment sample collected in kitchen tap at 1535 pH - 6-7

DW31 - 205 MEADOWVIEW - 5 micron filter for iron. Sample collected at kitchen tap at 1740; pH ~ 6-7 unable to remove screen from tap

DW33 - 202 Meadow View. Filter and softener bypassed. Sample collected from kitchen tap at 1820; pH~

DW34 - 676 Woodglen RD. Sediment Filter only. Sample collected from kitchen tap at 1845. pH ~ 6-7

DW35 - 72 Anthony Road - Sample collected from kitchen tap at 1910; pH - 6-7 - No treatment or filter.

WESTON departed site at 2015

WI 1-31-01

2-1-01 - Continue residential well sampling.

TB37 collected by Henry Allen and Scott Snyder at 1010

DW36 - 5 South Broadway Rd. Tuxedo Filter. Sample collected from kitchen tap at 1040. pH ~ 6-7.

DW37 - 2 Winters Drive. Unable to bypass softener. Sample collected from kitchen tap at 1225. pH 6-7

WESTON DEPARTED SITE AT 1315

2-1-01

4-19-01 - Diamond Aerosol resampling of residential potable wells for CFCs.

0945 - Scott Snyder arrived on-site and obtained permission from Ralph Helmrich to take a sample from D.A. facility.

DW 210 - D.A. facility began purging at 0950; time of collection 1005 Collected from downstairs bathroom

DW 201/202 - Baumgartner - 68 Anthony Rd began purging at 1015; time of collection 1030 - ~~DW202 not~~ SS - Collected from kitchen tap.

DW 207 - Gayton - 70 Anthony Rd - began purging at ~~1040~~ SS 1045 - time of collection 1100 - Collected from back spigot

DW 203 - Dillelo 3 - Beach Brook La. began purging at 1115 - time of collection 1130 - Collected from kitchen tap.

DW 208 - Hildebrandt - 73 Anthony Rd purging began at 1140 - time of collection 1155 from outside spigot.

DW 205 - Monahan - 109 Mt. Lebanon purging began at ~~3:30~~ SS 1530 time of collection ~~3:45~~ SS 1545 at kitchen tap

DW209 Jackson - 72 Anthony Rd
purging began at 1600 sample collected
at 1615 from kitchen tap.

DW204 Papantonis - 54 Anthony Rd.
purging began at ~~1430~~ 1630 sample collected at
1645 from kitchen tap

DW206 - Tullo 10 Stillwaters Way
purging began at 1655 sample collected
at 1710 from kitchen tap.

Departed site at 1730

4-20-01

DW211 - Bruno - 688 Woodglen
purging began at 0930 sample collected
at 0945 from downstairs tap.

Departed Bruno residence at 0955

REFERENCE NO. 35

PROJECT NOTE		RAC V
To: Diamond Aerosol file	**Date:** 4/5/01	**Page**: 1 of 1
From: Scott Snyder		
Subject: Adjusted Qualified Data		
Reference: Using Qualified Data to Document an Observed Release and Observed Contamination, U.S. EPA, Office of Emergency and Remedial Response, November 1996.		

The attachment to this note documents U.S. EPA guidance on using qualified data to document an observed release and observed contamination by chemical analysis.. This document discusses the use of Contract Laboratory Program (CLP) data qualified with a "J" (estimated), "U" (non-detect) or "UJ" flag. This document provides specific adjustment factors for analytes, and soil and aqueous matrices that allow biased analytical data (i.e., estimated) to meet Hazard Ranking System (HRS) criteria for documenting and observed release and observed contamination by chemical analysis using analytical data that are of known and documented quality.

Based upon the analyte, whether the biased data is biased high, low, or an unknown bias, and whether the sample is a release or background sample, specific adjustment factors provided in the attached document are multiplied by or divided into the reported concentration. Application of these adjustment factors to the estimated data of samples collected at the Diamond Aerosol site during January 2001 are given in the attached spread sheet.

Because no adjustment factors are given for CFCs, the reported concentration for those parameters will be used. Application of an adjustment factor to the reported, estimated concentrations of acetone and bis(2-ethylhexyl)phthalate detected in sediment and soil samples indicates that background concentrations exceed those detected in waste source and release samples. Therefore, the acetone and bis(2-ethylhexyl)phthalate detected in sediment samples, are not attributable to the Diamond Aerosol site.

Snyder, Scott

From: Yang, Yunru
Sent: Tuesday, April 17, 2001 5:23 PM
To: Snyder, Scott
Subject: Diamond Aerosol Organic data - bias determination

Scott:

I went through the available information but could not determine the bias (high or low). The low bias for SD05 and SD06 are okay to stay in your table.

For all the samples in question, the bis(2-ethylhexyl)phthalate results were less than the CRQLs. To determine the bias, I need to know the calibration result (which is not available). The actual calibration curve will give us a better idea.

As for acetone results, most of them were qualified as estimate (J) because the percent difference (%D) between the initial and continuing calibrations exceeded the allowable QC limits. Unfortunately, the continuing calibration results were not included in the packages received from EPA; thus I could not determine how acetone responded in various continuing calibration checks. As a result, the bias could not be determined.

I guess you just have to leave the bias unknown as listed in your table. Let me know if you need more help.

Yunru Yang
Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Ave.
Edison, NJ 08837-3622
phone: (732) 417-5822
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TABLE - 1
ADJUSTED ESTIMATED CONCENTRATIONS
FOR SOIL AND SEDIMENT SAMPLES
DIAMOND AEROSOL CORPORATION
JANUARY 2001

Analyte	Sample Type	Sampling Matrix	Sample No.	Reported Concentration	Bias	Calculation (Soil Matrix)	Adjusted Concentration
Acetone	Release	Spruce Run Sediment	SD01	69 J	unknown	Divide by 10.0	6.9 J
Acetone	Release	Wetland Sediment	SD05	1,200 J	Low	use reported concentration	1,200 J
Acetone	Release	Wetland Sediment	SD06	480 J	Low	use reported concntration	480 J
Acetone	Background	Wetland Sediment	SD07	150 J	unknown	Multiple by 10.0	1,500 J
Acetone	Release	Tributary Sediment	SD08	140 J	unknown	Divide by 10.0	14 J
Acetone	Background	Surface Soil	S19	67 J	unknown	Multiply by 10.0	670 J
Acetone	Background	Subsurface Soil	SS18	8 J	unknown	Multiply by 10.0	80 J
Acetone	Release	Subsurface Soil	SS17	98 J	unknown	Divide by 10.0	9.8 J
Acetone	Release	Subsurface Soil	SS10	250 J	unknown	Divide by 10.0	25 J
Bis(2-ethylhexyl)phthalate	Background	Subsurface Soil	SS31	170 J	unknown	Multiply by 10.0	1,700 J
Bis(2-ethylhexyl)phthalate	Background	Spruce Run Sediment	SD03	88 J	unknown	Multiply by 10.0	880 J
Bis(2-ethylhexyl)phthalate	Release	Sprune Run Sediment	SD01	210 J	unknown	Divide by 10.0	21 J
Bis(2-ethylhexyl)phthalate	Background	Sediment	SD10	59 J	unknown	Multiply by 10.0	590 J
Bis(2-ethylhexyl)phthalate	Release	Tributary Sediment	SD08	64 J	unknown	Divide by 10.0	6.4 J
Bis(2-ethylhexyl)phthalate	Release	Wetland Sediment	SD04	190 J	unknown	Divide by 10.0	19 J
Bis(2-ethylhexyl)phthalate	Release	Wetland Sediment	SD05	170 J	Low	use reported concentration	170 J
Bis(2-ethylhexyl)phthalate	Release	Wetland Sediment	SD06	180 J	Low	use reported concentration	180 J

J = estimated concentration

Concentrations reported in micrograms per kilogram (ug/kg)

Ref. Nos. 31; 32, Att. F; 35.

Adjusted Background Concentration

United States Environmental Protection Agency

Solid Waste and Emergency Response

EPA 540-F-94-028
OSWER 9285.7-14FS
PB94-963311
November 1996

EPA

Using Qualified Data to Document an Observed Release and Observed Contamination

Office of Emergency and Remedial Response (5204G)

Quick Reference Fact Sheet

This fact sheet discusses the use of the U.S. Environmental Protection Agency's (EPA) Contract Laboratory Program (CLP) data and other sources of data qualified with a "J", "U", or "UJ" qualifier or flag. This guidance provides a management decision tool for the optional use of qualified data to document an observed release and observed contamination by chemical analysis under EPA's Hazard Ranking System (HRS). The analyte and sample matrix (i.e., soil or water) specific adjustment factors given in this fact sheet allow biased CLP and non-CLP data to be adjusted to meet the HRS criteria for documenting an observed release and observed contamination with data that are of known and documented quality. This fact sheet does not address using qualified data for identifying hazardous substances in a source.

INTRODUCTION

The EPA established the HRS to rank hazardous waste sites for National Priorities List (NPL) purposes under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). This fact sheet was developed in response to a need to determine the usability of qualified data for site assessment and HRS scoring purposes. This fact sheet illustrates that qualified data are often of sufficiently known and documented quality, and may be used in establishing an observed release and observed contamination. This fact sheet explains the rationale for why some qualified data may be used for HRS purposes; presents the background information needed to use qualified data with and without adjustment factors; provides examples of qualified data use; and discusses issues raised during the development of the adjustment factor approach.

Under the HRS, chemical analytical data are often used to demonstrate an observed release and observed contamination when the release sample concentration is three times the background concentration and background levels are greater than or equal to the appropriate detection limit; or if the release sample concentration is greater than or equal to the appropriate quantitation limit when background levels are below the appropriate detection limit. The release must also be at least partially attributable to the site under investigation (*Hazard Ranking System, Final Rule*, 40 CFR Part 300, App. A). The data used to establish the release must be of known and documented quality. (*Hazard Ranking System Guidance Manual*, Interim Final, November 1992, OSWER Directive 9345.1-07). Data that cannot be validated may not be of known and documented quality. For more information on observed release and observed contamination, refer to the fact sheets: *Establishing an Observed Release*, September 1995, PB94-963314; *Establishing Areas of Observed Contamination*, September 1995, PB94-963312; and *Establishing Background Levels*, September 1995, PB94-963313. The factor of three represents the minimum difference in sample results that demonstrate an increase in contaminant concentration above background levels, with reasonable confidence.

Although much of the analytical data used for identifying an observed release is generated under EPA's CLP, this fact sheet applies to all data regardless of the source of the data (non-CLP data). EPA procedures require that

CLP analytical data be reviewed, or validated by EPA or third party reviewers, to ensure the data are of known and documented quality and that the determination be discussed in a data validation report that accompanies the analytical results. Based on this data validation, CLP data are classified into three categories: (1) data for which all quality control (QC) requirements have passed contract-required acceptance criteria; (2) data for which at least one QC requirement has not met acceptance criteria; and (3) data for which most or all QC requirements have not met acceptance criteria. Data in the first category typically are not qualified. Data in the second category are often qualified with a "J" qualifier and, as discussed in this fact sheet, are usually usable for HRS purposes. Data in the third category are usually qualified by an "R" qualifier and are not usable for HRS purposes.

Whether data are placed into the second or third category is determined by the amount of bias associated with the analytical results. Data validation evaluates biases resulting from laboratory analytical deficiencies or sample matrices to determine whether the data are usable. Bias indicates that the reported concentration is either higher or lower than the true concentration, and the data validation report identifies the direction of the bias or if the bias is unknown.

The EPA CLP also sets minimum quantitation limits for all analytes; the Contract Required Quantitation Limit (CRQL) for organic analytes and the Contract Required Detection Limit (CRDL) for inorganic analytes. For HRS purposes and for this fact sheet, the term CRQL refers to both the contract required quantitation limit and the contract required detection limit. (40 CFR Part 300, App. A). The CRQLs are substance specific levels that a CLP laboratory must be able to routinely and reliably detect in specific sample matrices (i.e., soil, water, sediment). The CRQLs are usually set above most instrument detection limits (IDLs) and method detection limits (MDLs).

CONSIDERATIONS FOR NON-CLP DATA

Because various laboratories and analytical methods may be used to develop non-CLP data, the following list provides the general information sufficient for determining whether non-CLP data are usable for HRS purposes.

(1) Identification of the method used for analysis. Methods include RCRA methods, SW-846, EPA methods, etc.
(2) Quality control (QC) data. Check each method of analysis to determine if specific QC requirements are defined. If not, seek out another method.
(3) Instrument-generated data sheets for sample results. These data sheets would be the equivalent of Form I's in CLP data.
(4) MDLs and sample quantitation limits (SQLs). The analytical method should provide the MDL. The SQL is an adjusted MDL using sample specific measurements such as percent moisture and weight.
(5) Data validation report.

USE OF BIASED QUALIFIED DATA

In the past, all qualified data have been inappropriately perceived by some people as data of low confidence or poor quality and have not been used for HRS evaluation. With careful assessment of the nature of the analytical biases or QC deficiencies in the data on a case-by-case basis, qualified data can represent an additional resource of data for establishing an observed release. Further, the D.C. District Court of Appeals in 1996 upheld EPA's case-by-case approach to assess data quality. In reviewing the use of qualified data to identify an observed release, the Court stated that if there are deficiencies in the data, "...the appropriate response is to review the deficiencies on a 'case-by-case basis' to determine their impact on 'usability of the data.'" The Court also stated with regards to data quality that, "...EPA does not face a standard of absolute perfection....Rather, it is statutorily required to 'assure, to the maximum extent *feasible*,' that it 'accurately assesses the relative degree of risk' posed by sites" [*Board of Regents of the University of Washington, et al., v. EPA*, No. 95-1324, slip op. at 8-10 (D.C. Cir. June 25, 1996).]

As discussed in this fact sheet, the application of adjustment factors to "J" qualified data can serve as a management decision tool to "adjust," or take into account, the analytical uncertainty in the data indicated by the qualifier, thereby making qualified data usable for HRS evaluation. The use of adjustment factors to account for the larger uncertainty in "J" qualified data is a conservative approach enabling a quantitative comparison of the data for use in documenting an observed release. It should be noted that the use of

adjustment factors only addresses analytical variability and does not take into account variabilities which may be introduced during field sampling. Some guidelines for using the adjustment factor approach are discussed in Exhibit 1.

CLP QA/QC PROCEDURES

CLP qualifiers are applied to analytical data based on the results of various Quality Assurance/Quality Control (QA/QC) procedures used at the laboratory. EPA analytical methods use a number of QA/QC mechanisms during sample analysis in order to assess qualitative and quantitative accuracy (*Contract Laboratory Program Statement of Work for Inorganic Analyses*, Document No. ILM02.0; *Contract Laboratory Program Statement of Work for Organic Analyses*, Document No. OLM1.8; *Quality Assurance/Quality Control Samples*, Environmental Response Team Quality Assurance Technical Information Bulletin; *Test Methods for Evaluating Solid Waste (SW-846): Physical and Chemical Methods*, Document No. SW-846). To assess data quality, the laboratory uses matrix spikes, matrix spike duplicates, laboratory control samples, surrogates, blanks, laboratory duplicates, and quarterly blind performance evaluation (PE) samples. The Agency assumes that if biases are found in the QA/QC samples, the field sample concentrations may also be biased.

Surrogates are chemically similar to the analytes of interest. They are added or "spiked" at a known concentration into the field samples before analysis. Also, selected target analytes are "spiked" into samples at a specified frequency to assess potential interferences from the sample matrix. These samples are called matrix spikes. Comparison of the known concentration of the surrogates and matrix spikes with their actual analytical results reflects the analytical accuracy. Because the surrogates are expected to behave similarly to the target analytes, they may indicate bias caused by interferences from the sample matrices. These types of interferences from the sample matrix are known as matrix effects (*CLP National Functional Guidelines for Inorganic Data Review*, Publication 9240.1-05-01; *CLP National Functional Guidelines for Organic Data Review*, Publication 9240.1-05; *Test Methods for Evaluating Solid Waste (SW-846): Physical and Chemical Methods*, Document No. SW-846).

Laboratory control samples are zero blind samples which contain known concentrations of specific analytes and are analyzed in the same batch as field samples. Their results are used to measure laboratory accuracy. Blanks are analyzed to detect any extraneous contamination introduced either in the field or in the laboratory.

Laboratory duplicates are created when one sample undergoes two separate analyses. The duplicate results are compared to determine laboratory precision. Quarterly blind PE samples are single blind samples that evaluate the laboratory's capability of performing the specified analytical protocol.

CLP and other EPA analytical methods include specifications for acceptable analyte identification, target analytes, and minimum and maximum percent recovery of the QA/QC compounds. Data are validated according to guidelines which set performance criteria for instrument calibration, analyte identification, and identification and recovery of QA/QC compounds (*CLP Statement of Work and SW-846*). The *National Functional Guidelines for Data Review*, used in EPA validation, was designed for the assessment of data generated under the CLP organic and inorganic analytical protocols (*CLP Statement of Work; National Functional Guidelines for Data Review*). The guidelines do not preclude the validation of field and other non-CLP data. Thus, many EPA Regions have also adapted the *National Functional Guidelines for Data Review* to validate non-CLP data. Data which do not meet the guidelines' performance criteria are qualified to indicate bias or QA/QC deficiencies. The data validation report usually explains why the data were qualified and indicates the bias direction when it can be determined. Validated data that are not qualified are considered unbiased and can be used at their reported numerical value for HRS evaluation.

QUALIFIER DEFINITIONS

Most EPA validation guidelines use the data qualifiers presented in Exhibit 2 (*CLP National Functional Guidelines for Data Review*). Other qualifiers besides these may be used; the validation report should always be checked for the exact list of qualifiers and their meanings.

It should be emphasized that not meeting one or some of the contract required QA/QC acceptance criteria is often an indication that the sample was difficult to analyze, not that there is low confidence in the analysis (i.e., the

EXHIBIT 1 GUIDELINES FOR THE USE OF ADJUSTMENT FACTORS
• The use of adjustment factors identified in this fact sheet is a management tool for the optional use of "J" qualified data generated under CLP or other sources of data to document an observed release.
• Adjusted qualified data should be used with non-qualified data whenever possible.
• EPA maintains a "worst sites first" policy for placing sites on the NPL (*Additional Guidance on "Worst Sites" and "NPL Caliber Sites" to assist in SACM Implementation*, OSWER Directive 9320.2-07).
• EPA Regions should use adjustment factors with discretion on a case-by-case basis and should always carefully consider the use of qualified data in borderline cases.
• Resampling and/or reanalysis may be warranted if qualified data do not appear adequate to document an observed release.
• EPA Regions may substitute higher adjustment factors based on documented, justifiable reasons but may never use a lower adjustment factor value.
• The adjustment factors should only be applied to analytes listed in the tables. These adjustment factors should not be interpolated or extrapolated to develop factors for analytes not listed in the tables.
• The adjustment factors apply only to "J" qualified data above the CRQL.
• Detection below the CRQL is treated as non-quantifiable for HRS purposes.
• "UJ" data may be used under strict circumstances as explained in this fact sheet.
• The adjustment factors only apply to biased "J" qualified data, not to other "J" qualified data.
• The adjustment factors do not apply to "N", "NJ", or "R" qualified data. These data can not be used to document an observed release for HRS purposes.

analysis is "under control" and can be adequate for HRS decision making). Often "J", "U", and "UJ" qualified data fall into this category.

There are instances when qualified data cannot be used since the uncertainty of the results is unknown. For example, violations of laboratory instrument calibration and tuning requirements, and gross violations of holding times reflect the possibility that the results are of unknown quality (i.e., the analysis is "out of control"). Most often these data would be qualified with an "R" or an "N" (not usable for HRS purposes).

USING "U" QUALIFIED DATA

The "U" qualifier simply means that the reported concentration of the analyte was at or below the CRQL—there can be confidence that the true concentration is at or below the quantitation limit. Therefore, "U" qualified data can be used for establishing background levels. If the release sample concentration is above this level, as specified in the HRS, an observed release can be established. The quantitation limit for that analyte could be used as a maximum background concentration if a more conservative background level seems appropriate.

USING "J" QUALIFIED DATA

As discussed previously, some "J" qualified data can be used in establishing an observed release if the uncertainty in the reported values is documented. Qualified data should always be carefully examined by the Regions to determine the reasons for qualification before use in HRS evaluation. Resampling and/or reanalysis may be warranted if qualified data only marginally document an observed release. Whenever possible, qualified data should be used in conjunction with non-qualified data.

As described in Exhibit 2, "J" qualified data indicates that bias has been detected in the sample analysis and although the analyte is definitively present, the reported concentration is an estimate. Depending on the reasons and the direction of bias, with the use of adjustment factors, "J" qualified data can represent data of known and documented quality sufficient for use in establishing an observed release and observed contamination under the HRS.

USING "UJ" QUALIFIED DATA

A combination of the "U" and "J" qualifiers indicates that the reported value may not accurately represent the concentration necessary to positively detect the analyte in the sample. Under limited conditions, "UJ" qualified data can be used to represent background concentrations for establishing an observed release. These conditions are: instances when there is confidence that the background concentration is not detectable above the CRQL, the background concentration is biased high, and the sample measurement establishing the observed release equals or exceeds the CRQL.

DIRECTION OF BIAS IN "J" QUALIFIED DATA

It is important to understand the direction of bias associated with "J" qualified data before using the data to document an observed release. Qualified data may have high, low, or unknown bias. A low bias means that the reported concentration is likely an underestimate of the true concentration. For example, data may be biased low when sample holding times for volatile organic compounds (VOCs) are moderately exceeded or when recovery of QA/QC compounds is significantly less than the amount introduced into the sample. Low surrogate recovery would also indicate a low bias. A high bias means the reported concentration is likely an overestimate of the true concentration. For example, data may be biased high when recovery of QA/QC compounds is significantly higher than the amount in the sample. A bias is unknown when it is impossible to ascertain whether the concentration is an overestimate or an underestimate. For example, an unknown bias could result when surrogate recoveries exceed method recovery criteria and matrix spike/matrix spike duplicate compounds below method recovery criteria fail the relative percent difference (RPD) criteria in the same sample.

Despite the bias, certain qualified data may be used without application of adjustment factors for determining an observed release under certain circumstances. The following are examples of using "J" qualified data without adjustment factors:

- Low bias release samples are likely to be underestimates of true concentrations. If the reported concentration of a low bias release sample is three times above unbiased background levels, these release samples would still meet the HRS criteria. The true concentrations would still be three times above the background level.

- High bias background samples are likely to be overestimates of true concentrations. If the reported concentration of unbiased release samples are three times above the reported background concentration, they would still meet the HRS observed release criteria because they would still be three times above the true background concentration.

The above examples show that both low bias "J" qualified release samples at their reported concentrations and high bias "J" qualified background samples may be used at their reported concentrations in these situations.

High bias release samples may not be used at their reported concentrations because they are an overestimate of true concentrations in this situation; resampling and/or re-analysis of the release samples should be considered. The true difference in the background and release concentrations may be less than the HRS criteria for establishing an observed release. The reported concentration for low bias background concentrations may not be compared to release samples because it is most likely an underestimate of background level; the release sample concentration may not significantly exceed the true background concentration. However, in lieu of re-sampling and/or re-analysis, high bias release data and low bias background data may be used with adjustment factors which compensate for the probable uncertainty in the analyses.

ADJUSTMENT FACTORS FOR BIASED "J" QUALIFIED DATA

Applying adjustment factors to "J" qualified data will enable EPA to be more confident that the increase in contaminant concentrations between the background and

EXHIBIT 2 EPA CLP DATA QUALIFIERS AND THEIR USABILITY FOR DOCUMENTING AN OBSERVED RELEASE	
Usable*	**Not Usable**
"U" The substance or analyte was analyzed for, but no quantifiable concentration was found at or above the CRQL (*CLP National Functional Guidelines for Data Review*).	"N" The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification" (*CLP National Functional Guidelines for Data Review*).
"J" The analyte was positively identified--the associated numerical value is the approximate concentration of the analyte in the sample. The "J" qualifier indicates that one or more QA/QC requirements have not met contract required acceptance criteria, but the instrumentation was functioning properly during the analysis. For example, a "J" qualifier may indicate that the sample was difficult to analyze or that the value may lay near the low end of the linear range of the instrument. "J" data are considered biased, but provide definitive analyte identification (*CLP National Functional Guidelines for Data Review*).	"R" The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte can not be verified and the result has been rejected. A sample result may be qualified with an "R" qualifier when the instrument did not remain "in control" or the stability or sensitivity of the instrument were not maintained during the analysis (*CLP National Functional Guidelines for Data Review*).
"UJ" The analyte was not quantifiable at or above the CRQL. In addition to not being quantifiable, one or more QA/QC requirements have not met contract acceptance criteria (*CLP National Functional Guidelines for Data Review*).	"NJ" The analysis indicates the presence of the analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration (*CLP National Functional Guidelines for Data Review*).

* Usable under certain circumstances as explained in this fact sheet.

release samples is due to a release. The adjustment factors are applied as "safety factors" to compensate for analytical uncertainty, allowing biased data to be used for determining an observed release. Dividing the high bias result by an adjustment factor deflates it from the high end of the acceptable range towards a low bias value. Multiplying a low bias concentration by an adjustment factor inflates it to the high end of the acceptable range.

Tables 1 through 4 (pages 11 - 18) present analyte and matrix-specific adjustment factors to address the analytical uncertainty when determining an observed release using high bias release samples and low bias background data. The factors are derived from percent recoveries of matrix spikes, surrogates, and laboratory control samples in the CLP Analytical Results Database (CARD) from January 1991 to March 1996. A total of 32,447 samples were reviewed for volatile organic analytes; 32,913 samples for semivolatile organic analytes; 59,508 samples for pesticides/PCB analytes; and 5,954 samples for inorganic analytes.

The range of CARD data for each analyte includes 97 percent of all percent recoveries in the database, discarding outliers. The adjustment factors are ratios of percent recovery values at the 98.5 and 1.5 percentiles. The ratios generally show a consistent pattern.

Adjustment factors have been determined for all analytes in the CLP Target Compound List (organic analytes) and Target Analyte List (inorganic analytes). A tiered approach was used to derive the organic adjustment factors. Percent recoveries for surrogates were

examined first, followed by matrix spike recoveries. When both matrix spike and surrogate data were available for the same analyte, the larger adjustment factor (representing more extreme high and low percent recoveries) was used. Laboratory control samples were used to calculate the inorganic adjustment factors. Quarterly blind sample data were not used to determine adjustment factors because of the small data set available. A default adjustment factor of 10 was used for analytes when percent recovery data were unavailable.

Adjustment factors do not correct the biased sample concentration to its true value, as such "correction" is not possible. CARD data do not differentiate and quantify individual sources of variation. Instead, the ratio of percentile used to develop adjustment factors represents a "worst-case" scenario. Adjustment factors either inflate background values to the high end of the range or deflate release data to the low end. Therefore, adjustment factors compensate or adjust for the apparent analytical variability when comparing a high bias value to a low bias value (see Exhibit 3).

USING THE ADJUSTMENT FACTORS

This section of the fact sheet demonstrates how adjustment factors can be used with "J" qualified data for HRS scoring purposes, including documentation and detection limit issues.

Documentation Requirements for Using Qualified Data

In using "J" qualified data to determine an observed release, include a discussion of "J" qualifiers from the data validation report and cite it as a reference in the site assessment report or HRS documentation record. If adjustment factors are applied to "J" qualified data, reference and cite this fact sheet. These steps will ensure that the direction of bias is documented and will demonstrate how biases have been adjusted.

Detection Limit Restrictions

Adjustment factors may only be applied to "J" qualified data with concentrations above the CLP CRQL for organics or CRDL for inorganics. "J" qualified data with concentrations below the CRQL can not be used to document an observed release except as specified in the previous section entitled "Using "UJ" Qualified Data."

Application of Factors

Exhibit 3 shows how to apply the factors to "J" qualified data. Multiply low bias background sample results by the analyte-specific adjustment factor or the default factor of 10 when an analyte-specific adjustment factor is not available. The resulting new background value effectively becomes a high bias value that may be used to determine an observed release. Divide high bias release sample data by the analyte-specific adjustment factor or the default factor of 10 when an analyte-specific adjustment factor is not available. The resulting new release sample value effectively becomes a low bias value that may be used to determine an observed release.

Note: High bias background data, low bias release data, and unbiased data may be used at their reported concentrations.

Note: Adjusted release and background values must still meet HRS criteria (e.g., release concentration must be at least three times above background level) to determine an observed release.

Examples Using Trichloroethene in Soil and Water

1. *Release water sample is unbiased, background water sample is unbiased but all data are qualified with a "J" due to an contractual laboratory error not analytical error.*

Background sample value: 12 µg/L (J) *no bias*
Release sample value: 40 µg/L (J) *no bias*

The CRQL for trichloroethene is 10 µg/Kg for soil and 10 µg/L for water.

In this example, the qualification of the data is not related to bias in the reported concentrations. Thus, using adjustment factors is not needed and an observed release is established if all other criteria are met.

2. *Release soil sample data is biased low, background soil sample data is biased high.*

Background sample value: 12 µg/Kg (J) *high bias*
Release sample value: 40 µg/Kg (J) *low bias*

In this example, the direction of bias indicates that the true release value may be higher and the true background value may be lower than reported values. The release sample concentration still exceeds background by more than three times, so an observed release is established, provided all other HRS criteria are met. Using adjustment factors is not needed.

EXHIBIT 3 USE OF ADJUSTMENT FACTORS FOR "J" QUALIFIED DATA		
Type of Sample	Type of Bias	Action Required
Background Sample	No Bias	None: Use concentration without factor
	Low Bias	Multiply concentration by factor
	High Bias	None: Use concentration without factor
	Unknown Bias	Multiply concentration by factor
Release Sample	No Bias	None: Use concentration without factor
	Low Bias	None: Use concentration without factor
	High Bias	Divide concentration by factor
	Unknown Bias	Divide concentration by factor

3. *Release soil sample data is unbiased, background soil sample is biased low.*

Background sample value: 12 μg/Kg (J) *low bias*
Release sample value: 30 μg/Kg *no bias*

In this example, the true background value is assumed to be less than the reported value; however, an observed release may still be possible. To use the data to establish an observed release, multiply the background sample data value by the adjustment factor given for trichloroethene in soil (2.11). No adjustment factor is needed for the release sample.

New background sample value:
(12 μg/Kg) x (2.11) = 25.32 μg/Kg (J) *high bias*

The release sample concentration does not meet or exceed the new background level by three times, so an observed release is not established.

4. *Release water sample data is biased high, background water sample data is unbiased.*

Background sample value: 15 μg/L *no bias*
Release sample value: 70 μg/L (J) *high bias*

In this example, the true release value may be lower than the reported value; however, an observed release may still be possible. To use the data to establish an observed release, divide the release sample by the adjustment factor for trichloroethene in water (1.66). No adjustment factor is needed for the background sample.

New release sample value:
(70 μg/L) ÷ (1.66) = 42.17 μg/L (J) *low bias*

The new release sample concentration does not meet or exceed the background level by three times, so an observed release is not established.

5. *Release soil sample data has unknown bias; background soil sample data has unknown bias.*

The following example is the most conservative approach to using adjustment factors with qualified data.

Background sample value: 20 μg/Kg (J) *unknown bias*
Release sample value: 325 μg/Kg (J) *unknown bias*

In this example, it is not possible to determine from the reported values if an observed release is possible. To use the data to establish an observed release, divide the release sample value and multiply the background sample value by the adjustment factor given for trichloroethene in soil (2.11).

New release sample value:
(325 μg/Kg) ÷ (2.11) = 154.03 μg/Kg (J) *low bias*

New background sample value:
(20 μg/Kg) x (2.11) = 42.2 μg/Kg (J) *high bias*

The new release sample is at least three times the new background concentration, so an observed release is established, provided all other HRS criteria are met.

ISSUES WITH USING ADJUSTMENT FACTOR APPROACH

Some issues were raised regarding the application of adjustment factors to qualified data during the Agency's internal review process.

One issue is that "J" qualifiers are added to analytical results for many reasons that may or may not affect the accuracy and precision of the analytical result. The application of an adjustment factor to "J" qualified data in which bias is not affected could be considered overly conservative.

All qualified data should be carefully evaluated to determine if the data are biased. Based on the reasons for bias, the use of an adjustment factor should only be considered as a management tool that provides a quick screening of the data for site assessment, not a means for correcting the biased value to a true value. Application of adjustment factors are intended for use with qualified data reported at or above the CRQL and may not be applicable to data which are qualified but technically sound. As stated previously, qualified data should always be carefully reviewed on a case-by-case basis prior to use in HRS evaluation.

Another issue is the validity of "10" as a default adjustment factor. A default adjustment factor of 10 was a policy decision based on the range of adjustment factors and an industry approach. The default was chosen in order to account for the maximum variability regardless of the direction of the bias. Therefore, the default value of 10 is generally considered to be a conservative adjustment factor. EPA reviewed the use of the default value of 10 and determined that this value was conservative.

Even if using adjustment factors is sometimes overly conservative, this approach is preferable to not using the data at all. EPA maintains a "worst sites first" policy that only the sites considered most harmful to human health and/or the environment should be listed. EPA considers the use of adjustment factors appropriate as a management decision tool. However, discretion is needed when applying adjustment factors. The use of adjustment factors may not be appropriate in all cases.

USE OF OTHER ADJUSTMENT FACTORS

EPA Regions may substitute higher, but never lower, adjustment factor values for the ones listed in this fact sheet on a case-by-case basis when technically justified. For example, other adjustment factors may be applied to conform with site-specific Data Quality Objectives (DQOs) or with Regional Standard Operating Procedures (SOPs) (*Data Quality Objectives Process for Superfund*, Publication 9355.9-01).

SUMMARY

For site assessment purposes, EPA Regions should not automatically discard "J" qualified data. However, site-specific data usability determinations may result in the data's not being used.

Data qualified under the EPA's CLP or from other sources of validated data may be used to demonstrate an observed release if certain measures are taken to ensure that the bias of the data qualifier is adjusted using the factor approach specified in this fact sheet. (This fact sheet provides a management decision tool for making qualified data usable for documenting an observed release.) The analyte and matrix-specific adjustment factors provided in Tables 1 through 4 of this fact sheet present these adjustment factors.

The scope of this fact sheet is limited to the situations described in Exhibit 1. The use of qualified analytical data without the adjustment factors presented in this fact sheet is limited. Higher adjustment factors may be substituted by EPA Regions on a case-by-case basis when technically justified by site-specific DQOs or SOPs.

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TABLE 1
FACTORS FOR VOLATILE ORGANIC ANALYTES

VOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
1,1,1-TRICHLOROETHANE	—	10.0	—	10.0
1,1,2,2-TETRACHLOROETHANE	—	10.0	—	10.0
1,1,2-TRICHLOROETHANE	—	10.0	—	10.0
1,1-DICHLOROETHANE	—	10.0	—	10.0
1,1-DICHLOROETHENE	7,031	2.71	5,015	2.35
1,2-DICHLOROETHANE-D4	32,446	1.52	25,516	1.38
1,2-DICHLOROETHENE (TOTAL)	—	10.0	—	10.0
1,2-DICHLOROPROPANE	—	10.0	—	10.0
2-BUTANONE	—	10.0	—	10.0
2-HEXANONE	—	10.0	—	10.0
4-METHYL-2-PENTANONE	—	10.0	—	10.0
ACETONE	—	10.0	—	10.0
BENZENE	7,024	1.97	5,001	1.64
BROMODICHLOROMETHANE	—	10.0	—	10.0
BROMOFORM	—	10.0	—	10.0
BROMOFLUOROBENZENE	32,444	1.7	25,518	1.26
BROMOMETHANE	—	10.0	—	10.0
CARBON DISULFIDE	—	10.0	—	10.0

TABLE 1
FACTORS FOR VOLATILE ORGANIC ANALYTES

VOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
CARBON TETRACHLORIDE	—	10.0	—	10.0
CHLOROBENZENE	7,018	2.0	5,015	1.54
CHLOROETHANE	—	10.0	—	10.0
CHLOROFORM	—	10.0	—	10.0
CHLOROMETHANE	—	10.0	—	10.0
CIS-1,3-DICHLOROPROPENE	—	10.0	—	10.0
DIBROMOCHLOROMETHANE	—	10.0	—	10.0
ETHYLBENZENE	—	10.0	—	10.0
METHYLENE CHLORIDE	—	10.0	—	10.0
STYRENE	—	10.0	—	10.0
TETRACHLOROETHENE	—	10.0	—	10.0
TOLUENE-D8	32,447	1.63	25,526	1.21
TRANS-1,3-DICHLOROPROPENE	—	10.0	—	10.0
TRICHLOROETHENE	6,988	2.11	4,938	1.66
VINYL CHLORIDE	—	10.0	—	10.0
XYLENE (TOTAL)	—	10.0	—	10.0

TABLE 2
FACTORS FOR SEMIVOLATILE ORGANIC ANALYTES

SEMIVOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
1,2,4-TRICHLOROBENZENE	6,792	4.83	4,605	3.71
1,2-DICHLOROBENZENE-D4	32,848	4.22	21,506	3.0
1,3-DICHLOROBENZENE	—	10.0	—	10.0
1,4-DICHLOROBENZENE	6,796	6.0	4,599	3.85
2,2'-OXYBIS(1-CHLOROPROPANE)	—	10.0	—	10.0
2,4,6-TRIBROMOPHENOL	32,605	9.38	21,509	3.57
2,4,5-TRICHLOROPHENOL	—	10.0	—	10.0
2,4,6-TRICHLOROPHENOL	—	10.0	—	10.0
2,4-DICHLOROPHENOL	—	10.0	—	10.0
2,4-DIMETHYLPHENOL	—	10.0	—	10.0
2,4-DINITROPHENOL	—	10.0	—	10.0
2,4-DINITROTOLUENE	6,798	4.88	4,623	3.52
2,6-DINITROTOLUENE	—	10.0	—	10.0
2-CHLORONAPHTHALENE	—	10.0	—	10.0
2-CHLOROPHENOL-D4	32,798	4.08	21,506	2.92
2-FLUOROBIPHENYL	32,913	3.38	21,532	2.84
2-FLUORPHENOL	32,781	5.05	21,511	3.34
2-METHYLNAPHTHALENE	—	10.0	—	10.0
2-METHYLPHENOL	—	10.0	—	10.0
2-NITROANILINE	—	10.0	—	10.0
2-NITROPHENOL	—	10.0	—	10.0
3,3'-DICHLOROBENZIDINE	—	10.0	—	10.0
3-NITROANILINE	—	10.0	—	10.0
4,6-DINITRO-2-METHYLPHENOL	—	10.0	—	10.0
4-BROMOPHENYL-PHENYLETHER	—	10.0	—	10.0

TABLE 2
FACTORS FOR SEMIVOLATILE ORGANIC ANALYTES

SEMIVOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
4-CHLORO-3-METHYLPHENOL	6,715	6.26	4,609	4.46
4-CHLOROANILINE	—	10.0	—	10.0
4-CHLOROPHENYL-PHENYLETHER	—	10.0	—	10.0
4-METHYLPHENOL	—	10.0	—	10.0
4-NITROANILINE	—	10.0	—	10.0
4-NITROPHENOL	6,627	9.33	4,586	5.96
ACENAPHTHENE	6,773	4.68	4,600	3.63
ACENAPHTHYLENE	—	10.0	—	10.0
ANTHRACENE	—	10.0	—	10.0
BENZO(A)ANTHRACENE	—	10.0	—	10.0
BENZO(A)PYRENE	—	10.0	—	10.0
BENZO(B)FLUORANTHENE	—	10.0	—	10.0
BENZO(G,H,I)PERYLENE	—	10.0	—	10.0
BENZO(K)FLUORANTHENE	—	10.0	—	10.0
BIS(2-CHLOROETHOXY)METHANE	—	10.0	—	10.0
BIS(2-CHLOROETHYL)ETHER	—	10.0	—	10.0
BIS(2-ETHYLHEXYL)PHTHALATE	—	10.0	—	10.0
BUTYLBENZYLPHTHALATE	—	10.0	—	10.0
CARBAZOLE	—	10.0	—	10.0
CHRYSENE	—	10.0	—	10.0
DI-N-BUTYLPHTHALATE	—	10.0	—	10.0
DI-N-OCTYLPHTHALATE	—	10.0	—	10.0
DIBENZ(A,H)ANTHRACENE	—	10.0	—	10.0
DIBENZOFURAN	—	10.0	—	10.0
DIETHYLPHTHALATE	—	10.0	—	10.0

TABLE 2
FACTORS FOR SEMIVOLATILE ORGANIC ANALYTES

SEMIVOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
DIMETHYLPHTHALATE	—	10.0	—	10.0
FLUORANTHENE	—	10.0	—	10.0
FLUORENE	—	10.0	—	10.0
HEXACHLOROBENZENE	—	10.0	—	10.0
HEXACHLOROBUTADIENE	—	10.0	—	10.0
HEXACHLOROCYCLOPENTADIENE	—	10.0	—	10.0
HEXACHLOROETHANE	—	10.0	—	10.0
INDENO(1,2,3-CD)PYRENE	—	10.0	—	10.0
ISOPHORONE	—	10.0	—	10.0
N-NITROSO-DI-N-PROPYLAMINE	6,725	4.92	4,513	4.0
N-NITROSODIPHENYLAMINE(1)	—	10.0	—	10.0
NAPHTHALENE	—	10.0	—	10.0
NITROBENZENE-D5	32,867	3.96	21,533	2.73
PENTACHLOROPHENOL	6,597	72.5	4,550	10.12
PHENANTHRENE	—	10.0	—	10.0
PHENOL-D5	32,855	3.85	21,489	3.53
PYRENE	6,543	11.86	4,612	5.67
TERPHENYL-D14	32,899	4.35	21,541	6.32

TABLE 3
FACTORS FOR PESTICIDES/PCB ANALYTES

VOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
4,4'-DDD	—	10.0	—	10.0
4,4'-DDE	—	10.0	—	10.0
4,4'-DDT	5,343	12.82	3,850	7.14
ALDRIN	5,526	14.26	3,829	6.63
ALPHA-BHC	—	10.0	—	10.0
ALPHA-CHLORDANE	—	10.0	—	10.0
AROCLOR-1016	—	10.0	—	10.0
AROCLOR-1221	—	10.0	—	10.0
AROCLOR-1232	—	10.0	—	10.0
AROCLOR-1242	—	10.0	—	10.0
AROCLOR-1248	—	10.0	—	10.0
AROCLOR-1254	—	10.0	—	10.0
AROCLOR-1260	—	10.0	—	10.0
BETA-BHC	—	10.0	—	10.0
DECACHLOROBIPHENYL	57,315	17.79	33,592	10.0
DELTA-BHC	—	10.0	—	10.0
DIELDRIN	5,539	11.93	3,861	4.87

TABLE 3
FACTORS FOR PESTICIDES/PCB ANALYTES

VOLATILE ORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
ENDOSULFAN I	—	10.0	—	10.0
ENDOSULFAN II	—	10.0	—	10.0
ENDOSULFAN SULFATE	—	10.0	—	10.0
ENDRIN	5,521	14.13	3,850	5.33
ENDRIN ALDEHYDE	—	10.0	—	10.0
ENDRIN KETONE	—	10.0	—	10.0
GAMMA-BHC (LINDANE)	5,545	11.79	3,832	10.0
GAMMA-CHLORDANE	—	10.0	—	10.0
HEPTACHLOR	5,548	7.88	3,836	5.26
HEPTACHLOR EPOXIDE	—	10.0	—	10.0
METHOXYCHLOR	—	10.0	—	10.0
TETRACHLORO-M-XYLENE	59,508	8.5	33,787	5.29
TOXAPHENE	—	10.0	—	10.0

TABLE 4
FACTORS FOR INORGANIC ANALYTES

INORGANIC ANALYTES	SOIL MATRIX		WATER MATRIX	
	Number of CARD Samples Reviewed	Factor	Number of CARD Samples Reviewed	Factor
ALUMINUM	5387	1.66	6208	1.30
ANTIMONY	5392	1.98	6170	1.27
ARSENIC	5675	1.74	6303	1.35
BARIUM	5360	3.99	6201	1.25
BERYLLIUM	5399	1.28	6208	1.25
CADMIUM	5385	1.41	6166	1.29
CALCIUM	5383	1.28	6201	1.24
CHROMIUM	5389	1.29	6210	1.30
COBALT	5392	1.25	6212	1.27
COPPER	5394	1.22	6205	1.25
CYANIDE	3281	1.55	225	1.36
IRON	5391	1.34	6216	1.27
LEAD	5982	1.44	6384	1.31
MAGNESIUM	5397	1.23	6210	1.24
MANGANESE	5395	1.24	6214	1.28
MERCURY	5954	1.83	256	1.50
NICKEL	5400	1.35	6210	1.29
POTASSIUM	3874	17.49	6175	1.24
SELENIUM	5620	2.38	6278	1.41
SILVER	5392	1.74	6215	1.42
SODIUM	5024	25.43	6195	1.26
THALLIUM	5621	1.86	6253	1.37
VANADIUM	5393	1.34	6212	1.25
ZINC	5404	1.50	6224	1.29

REFERENCE NO. 36

SEVERN TRENT SERVICES

STL Edison
777 New Durham Road
Edison, NJ 08817

Tel: 732-549-3900
Fax: 732-549-3679
www.stl-inc.com

May 03, 2001

Roy F. Weston, Inc.
Raritan Plaza III, Suite 2B
101 Fieldcrest Ave.
Edison, NJ 08837-3616

Attention: Mr. Scott Snyder

Re: K055 - Diamond Aerosol

Dear Mr. Snyder:

Enclosed are the results you requested for the following sample(s) received at our laboratory on April 20, 2001:

Lab No.	Client ID	Analysis Required
269721	DW-210	CFCs
269722	DW-201	CFCs
269723	DW-202	CFCs
269724	DW-207	CFCs
269725	DW-203	CFCs
269726	DW-208	CFCs
269727	DW-205	CFCs

SEVERN TRENT SERVICES

Lab No.	Client ID	Analysis Required
269728	DW-209	CFCs
269729	DW-204	CFCs
269730	DW-206	CFCs
269731	DW-211	CFCs
269732	Trip_Blank	CFCs

If you have any questions please contact your Project Manager, Dan Glenn, at (732) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

SEVERN TRENT SERVICES

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SEVERN TRENT SERVICES

Client ID: **DW-210**
Site: Diamond Aerosol

Lab Sample No: **269721**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23206.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-201**
Site: Diamond Aerosol

Lab Sample No: **269722**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23207.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-202**
Site: Diamond Aerosol

Lab Sample No: **269723**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23208.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-207**
Site: Diamond Aerosol

Lab Sample No: **269724**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23209.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-203**
Site: Diamond Aerosol

Lab Sample No: **269725**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23210.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-208**
Site: Diamond Aerosol

Lab Sample No: **269726**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23211.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-205**
Site: Diamond Aerosol

Lab Sample No: **269727**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23212.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-209**
Site: Diamond Aerosol

Lab Sample No: **269728**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23213.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

TRENT SERVICES

Client ID: **DW-204**
Site: Diamond Aerosol

Lab Sample No: **269729**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23214.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-206**
Site: Diamond Aerosol

Lab Sample No: **269730**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23215.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

SEVERN TRENT SERVICES

Client ID: **DW-211**
Site: Diamond Aerosol

Lab Sample No: **269731**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23216.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

TRENT SERVICES

Client ID: **Trip_Blank**
Site: Diamond Aerosol

Lab Sample No: **269732**
Lab Job No: K055

Date Sampled: 04/17/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23217.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

STL EDISON
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Scott Snyder	Samplers Name (Printed): Scott Snyder	Site/Project Identification: Diamond Aerosol Corp.
Company: Roy F. Weston, Inc.	P.O. #: 20004-052-100-1042	State (Location of site): NJ: [X] NY: [ ] Other:
		Regulatory Program: Superfund
Address: 101 Fieldcrest Ave	Analysis Turnaround Time: Standard [X]	
City: Edison State: NJ	Rush Charges Authorized For: 2 Week [ ] 1 Week [ ] Other [ ]	
Phone: 417-5812 Fax: 417-5801		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: K055

Sample Identification	Date	Time	Matrix	No. of. Cont.	CFU's											Sample Numbers
DW 210	4/19/01	1005	Water	3	X											269721
DW 201	4/19/01	1030	Water	3	X											269722
DW 202	4/19/01	1030	Water	3	X											269723
DW 207	4/19/01	1100	Water	3	X											269724
DW 203	4/19/01	1130	Water	3	X											269725
DW 208	4/19/01	1150	Water	3	X											269726
DW 205	4/19/01	1515	Water	3	X											269727
DW 209	4/19/01	1615	Water	3	X											269728
DW 204	4/19/01	1645	Water	3	X											269729
DW 206	4/19/01	1710	WATER	3	X											269730
Preservation Used (1) = ICE, (2) = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH; 6 = Other _____, 7 = Other _____					Soil:											
					Water:											

Special Instructions _____ Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) [signature]	WESTON	4/20/01 1040	1) [signature]	STL Edison Howard Schulze
2)		/	2)	
3)		/	3)	
4)		/	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (15

S[illegible] EDISON
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Scott Snyder	Samplers Name (Printed): Scott Snyder	Site/Project Identification: Diamond Aerosol Corp.
Company: Roy F. Weston, Inc.	P.O. # 20041-052-100-4042	State (Location of site): NJ: [X] NY: [ ] Other:
Address: 100 Fieldcrest Ave	Analysis Turnaround Time: Standard [X]	Regulatory Program: Superfund
City: Edison State: NJ	Rush Charges Authorized For: 2 Week [ ] 1 Week [ ] Other [ ]	
Phone: 417-5812 Fax: 417-5801		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: K055

Sample Identification	Date	Time	Matrix	No. of. Cont.	VOC									Sample Numbers
DW 211	4/20/01	0943	water	3	X									269731
TRIP BLANK	4-17-01		WATER	2	✓	Analyze Trip blank as per Scott Snyder 4/23/01								269732
	mm													

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other _____, 7 = Other _____

Soil:
Water:

Special Instructions

Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) [signature]	WESTON	4/20/01 1040	1) [signature]	SIL Edison Howard Schulze
2)		/	2)	
3)		/	3)	
4)		/	4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Edison

777 New Durham Road, Edison, New Jersey
08817

Job No: K055 **Site:** Diamond Aerosol

Client: Roy F. Weston, Inc.

VOAMS

WATER - 624

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
269732	4/17/2001	4/20/2001			4/25/01	DRL	4917
269721	4/19/2001	4/20/2001					
269722	4/19/2001	4/20/2001					
269723	4/19/2001	4/20/2001					
269724	4/19/2001	4/20/2001					
269725	4/19/2001	4/20/2001					
269726	4/19/2001	4/20/2001					
269727	4/19/2001	4/20/2001					
269728	4/19/2001	4/20/2001					
269729	4/19/2001	4/20/2001					
269730	4/19/2001	4/20/2001					
269731	4/19/2001	4/20/2001					

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

	Water Test Method		Solid Test Method	
Element	Flame	Furnace	Flame	Furnace
Aluminum	202.1	202.2	7020	--
Antimony	204.1	204.2	7040	7041
Arsenic	--	206.2	--	7060
Barium	208.1	--	7080	--
Beryllium	210.1	210.2	7090	7091
Cadmium	213.1	213.2	7130	7131
Calcium	215.1	--	7140	--
Chromium, Total	218.1	218.2	7190	7191
Chromium, (+6)	218.4	218.5	7197	7195
Cobalt	219.1	219.2	7200	7201
Copper	220.1	220.2	7210	--
Iron	236.1	236.2	7380	--
Lead	239.1	239.2	7420	7421
Magnesium	242.1	--	7450	--
Manganese	243.1	243.2	7460	--
Nickel	249.1	249.2	7520	--
Potassium	258.1	--	7610	--
Selenium	--	270.2	--	7740
Silver	272.1	272.2	7760	--
Sodium	273.1	--	7770	--
Tin	283.1	283.2	7870	--
Thallium	279.1	279.2	7840	7841
Vanadium	286.1	286.2	7910	7911
Zinc	289.1	289.2	7950	--

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability	- Method 1020A
Corrosivity	- Water pH Method 9040B Soil pH Method 9045C
Reactivity	- Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release
Toxicity	- TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NON-CONFORMANCE SUMMARY

STL Edison Job Number: K055

Volatile Organics Analysis:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

Base/Neutral and/or Acid Extractable Organics:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

PCBs and/or Organochlorine Pesticides:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

Non-conformance Summary, Page 2 of 2
STL Edison Job Number: 16055

Metals Analysis:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

_____

See continuation page if checked ( )

Total Petroleum Hydrocarbons:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

General Chemistry/Disposal Parameters:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

Signature of
Laboratory Manager: _____ Date: 5-4-01

Client ID: **DW-210**
Site: Diamond Aerosol

Lab Sample No: **269721**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23206.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23206.d
Report Date: 25-Apr-2001 17:34

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23206.d
Lab Smp Id: 269721 Client Smp ID: DW-210
Inj Date : 25-APR-2001 13:53
Operator : VOAMS 6 Inst ID: VOAMS6.i
Smp Info : 269721;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIA.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

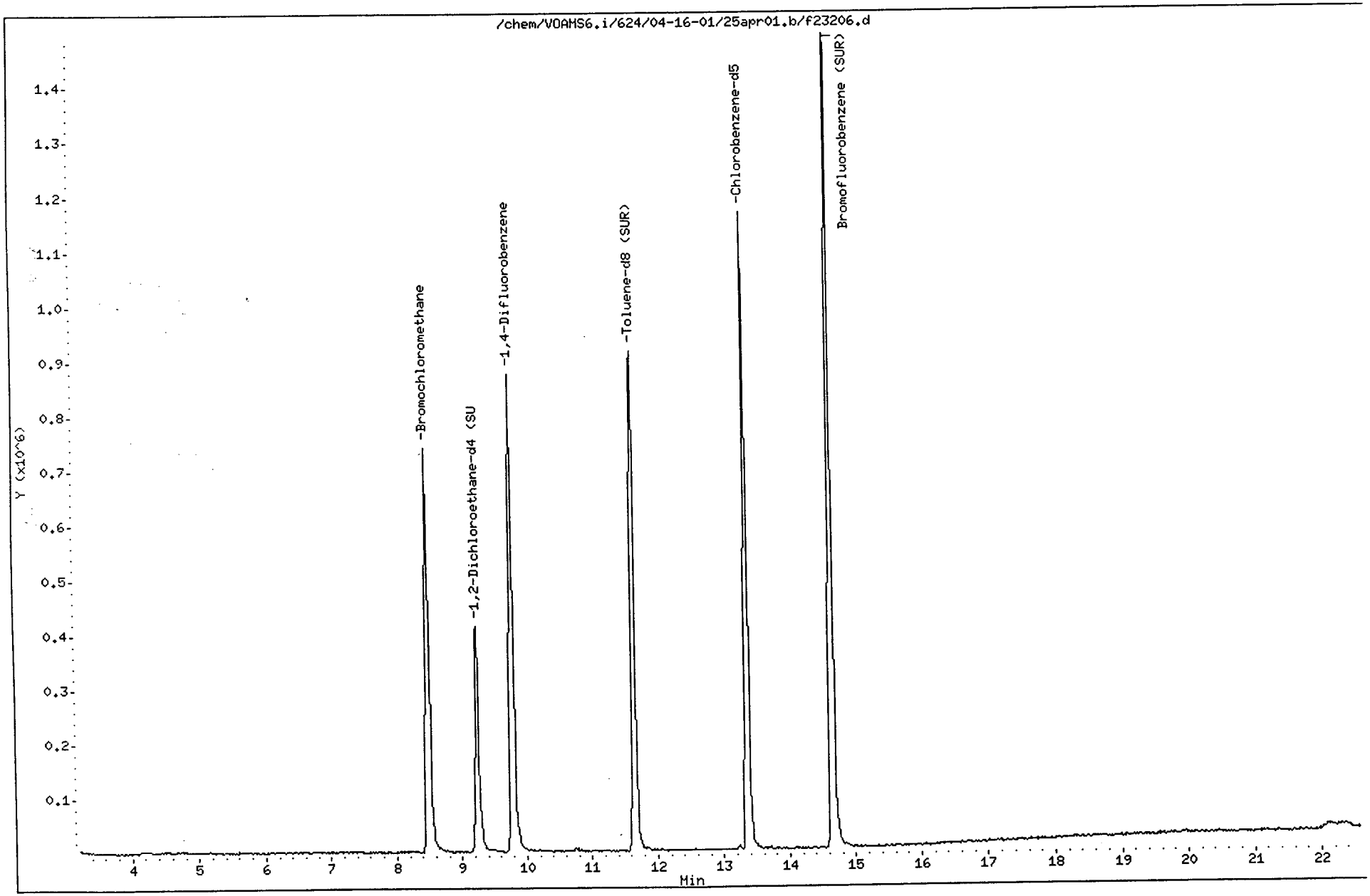
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.485	8.502	(1.000)	528327	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.224	9.256	(0.943)	104412	30.7004	31
* 19 1,4-Difluorobenzene	114	9.786	9.803	(1.000)	1661102	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.649	11.666	(0.873)	1301361	28.6030	29
* 32 Chlorobenzene-d5	117	13.350	13.381	(1.000)	1395214	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.651	14.668	(1.097)	1009941	30.2438	30

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23206.d
Date : 25-APR-2001 13:53
Client ID: DW-210
Sample Info: 269721;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-201**
Site: Diamond Aerosol

Lab Sample No: **269722**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23207.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23207.d
Report Date: 25-Apr-2001 17:34

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23207.d
Lab Smp Id: 269722 — Client Smp ID: DW-201
Inj Date : 25-APR-2001 14:21 — Inst ID: VOAMS6.i
Operator : VOAMS 6
Smp Info : 269722;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl — Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 — Cal File: f22840.d
Als bottle: 2
Dil Factor: 1.00000 — Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

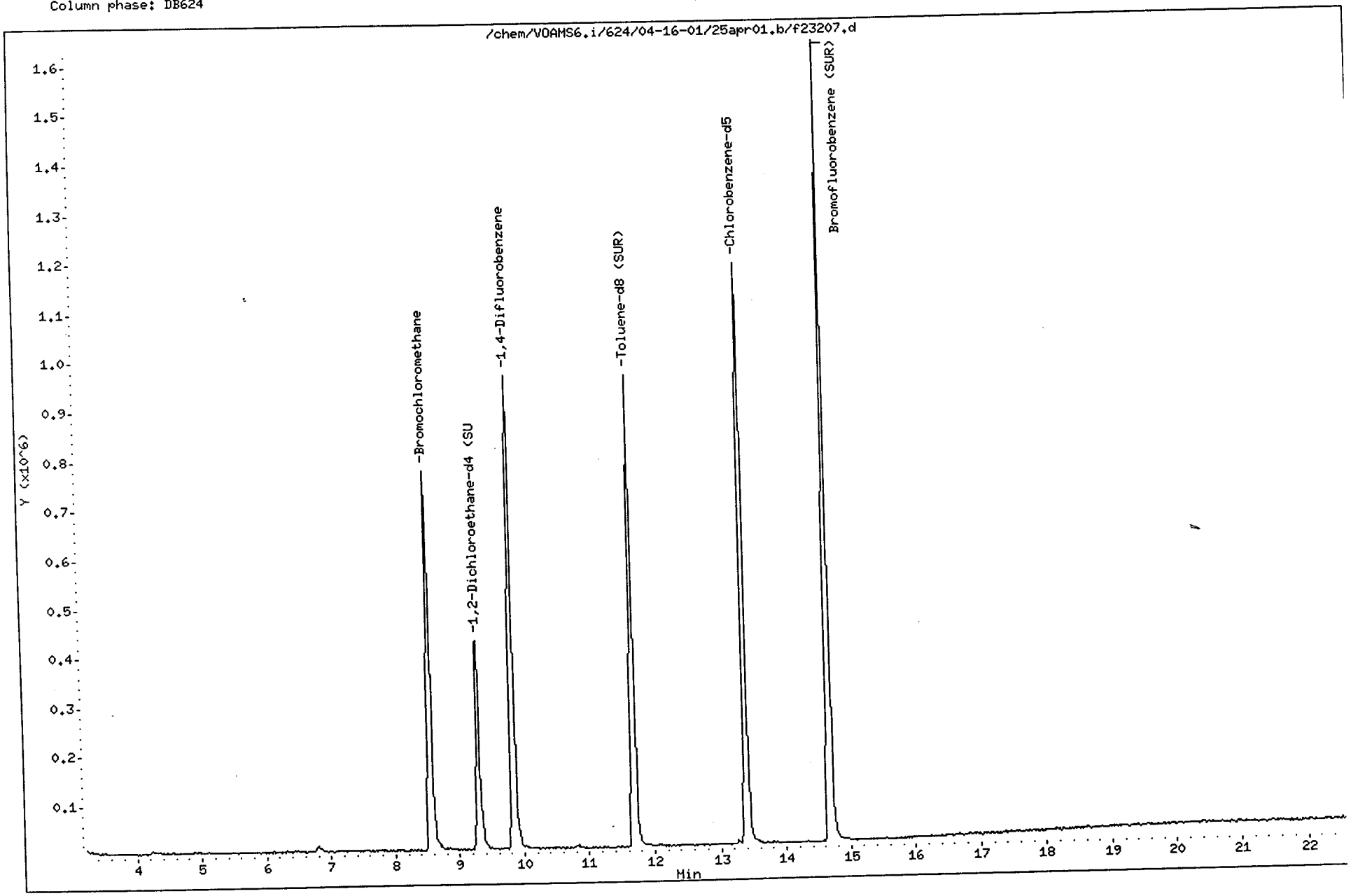
Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.548	8.502	(1.000)	532555	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.302	9.256	(0.946)	101742	29.1929	29
* 19 1,4-Difluorobenzene	114	9.834	9.803	(1.000)	1702210	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.682	11.666	(0.873)	1324738	28.4294	28
* 32 Chlorobenzene-d5	117	13.383	13.381	(1.000)	1428950	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.669	14.668	(1.096)	1047346	30.6234	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23207.d
Date : 25-APR-2001 14:21
Client ID: DW-201
Sample Info: 269722;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-202**
Site: Diamond Aerosol

Lab Sample No: **269723**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23208.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23208.d
Report Date: 25-Apr-2001 17:34

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23208.d
Lab Smp Id: 269723 Client Smp ID: DW-202
Inj Date : 25-APR-2001 14:49 Inst ID: VOAMS6.i
Operator : VOAMS 6
Smp Info : 269723;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 3
Dil Factor: 1.00000 Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

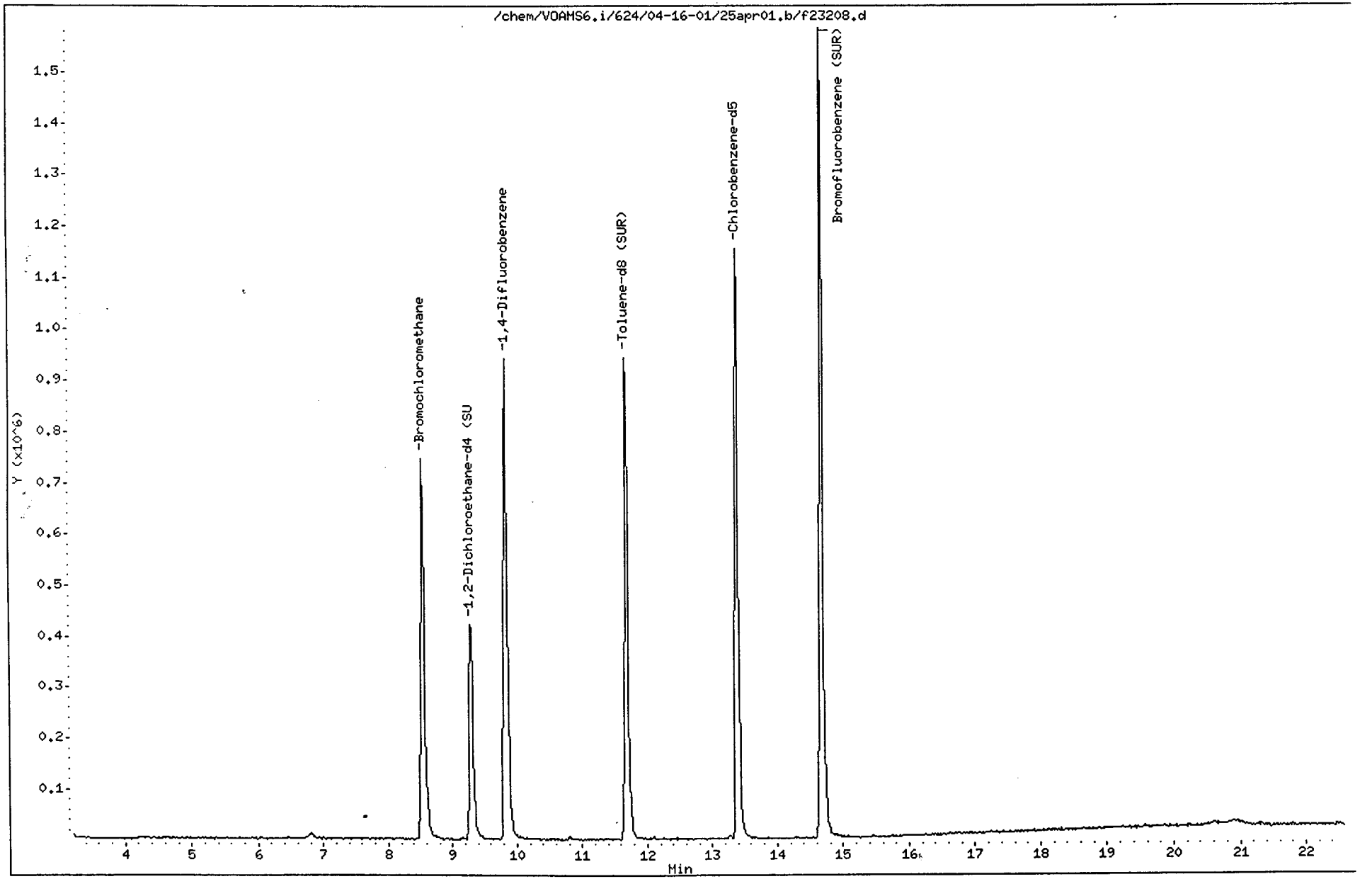
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.545	8.502	(1.000)	516855	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.299	9.256	(0.946)	102056	29.8146	30
* 19 1,4-Difluorobenzene	114	9.831	9.803	(1.000)	1671854	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.680	11.666	(0.873)	1309429	28.7014	29
* 32 Chlorobenzene-d5	117	13.380	13.381	(1.000)	1399050	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.666	14.668	(1.096)	1034243	30.8866	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23208.d
Date : 25-APR-2001 14:49
Client ID: DW-202
Sample Info: 269723;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



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Client ID: **DW-207**
Site: Diamond Aerosol

Lab Sample No: **269724**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23209.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23209.d
Report Date: 25-Apr-2001 17:34

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23209.d
Lab Smp Id: 269724 — Client Smp ID: DW-207
Inj Date : 25-APR-2001 15:18
Operator : VOAMS 6 — Inst ID: VOAMS6.i
Smp Info : 269724;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl — Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 — Cal File: f22840.d
Als bottle: 4
Dil Factor: 1.00000 — Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

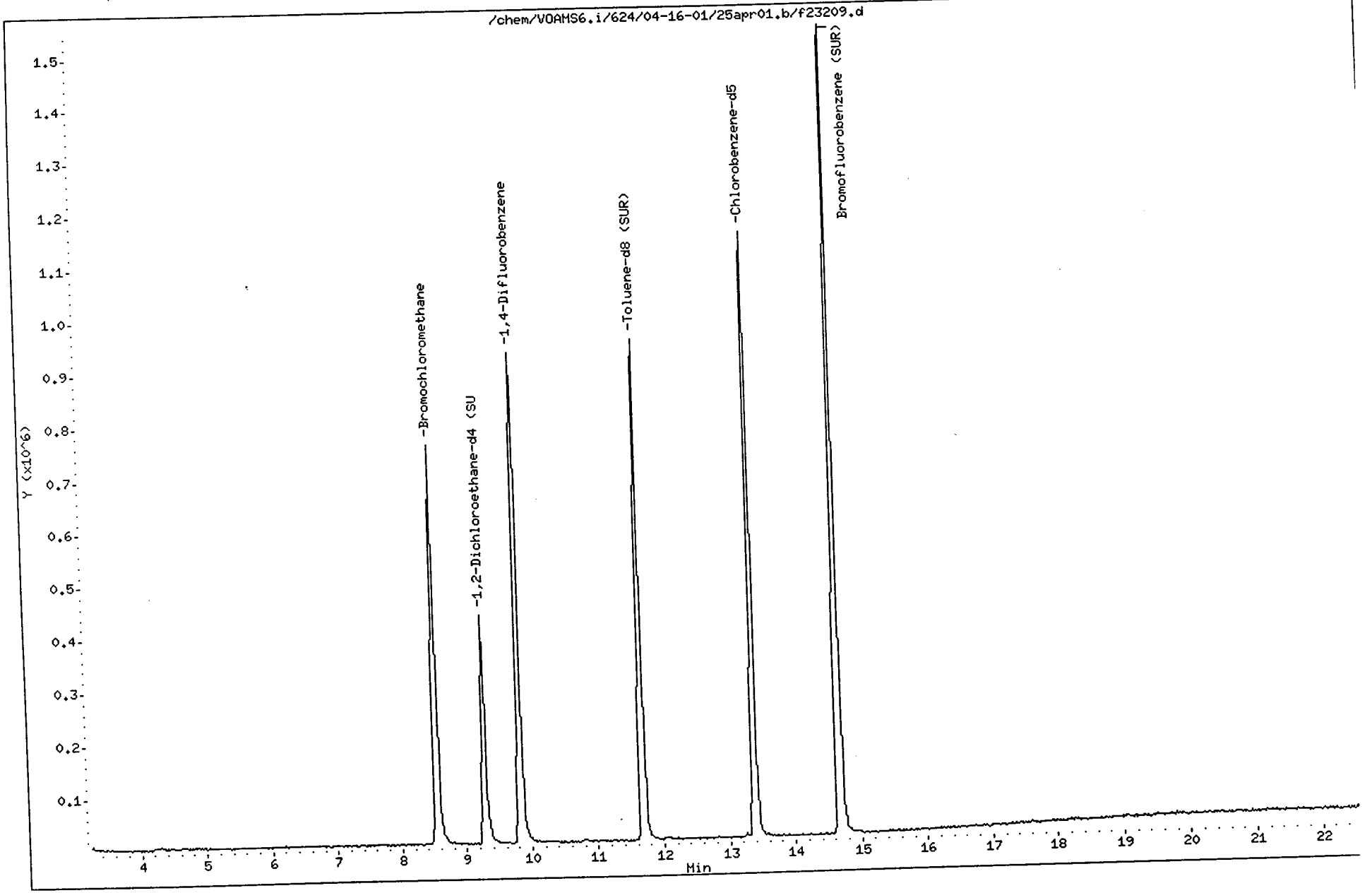
Cpnd Variable — Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.533	8.502	(1.000)	531611	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.287	9.256	(0.946)	101627	29.4078	29
* 19 1,4-Difluorobenzene	114	9.819	9.803	(1.000)	1687860	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.682	11.666	(0.873)	1322319	28.5370	28
* 32 Chlorobenzene-d5	117	13.383	13.381	(1.000)	1420958	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.669	14.668	(1.096)	1049867	30.8698	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23209.d
Date : 25-APR-2001 15:18
Client ID: DW-207
Sample Info: 269724;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-203**
Site: Diamond Aerosol

Lab Sample No: **269725**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23210.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23210.d
Report Date: 25-Apr-2001 17:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23210.d
Lab Smp Id: 269725 — Client Smp ID: DW-203
Inj Date : 25-APR-2001 15:46 — Inst ID: VOAMS6.i
Operator : VOAMS 6
Smp Info : 269725;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl — Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 — Cal File: f22840.d
Als bottle: 5
Dil Factor: 1.00000 — Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

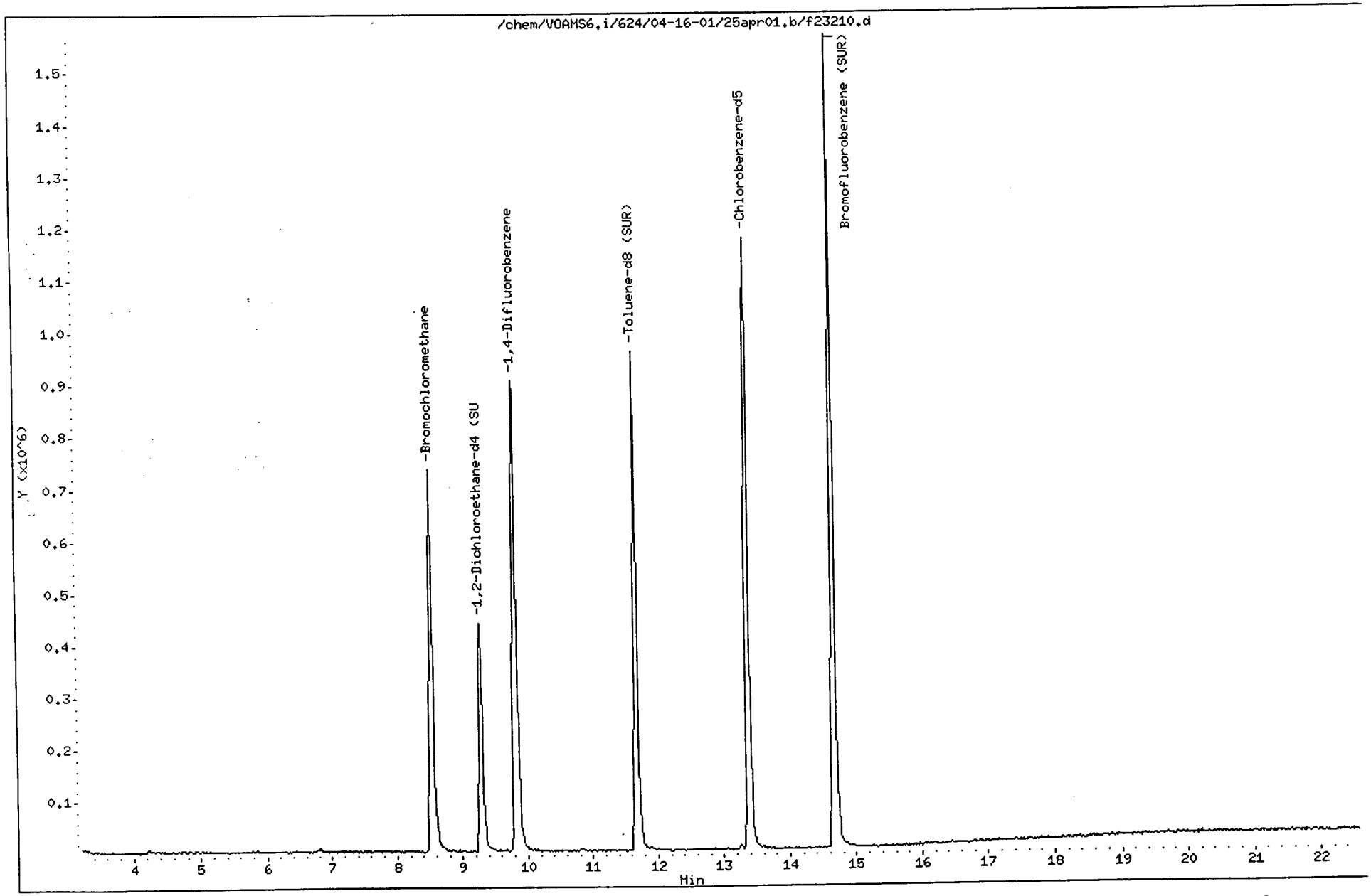
Cpnd Variable — Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.530	8.502	(1.000)	529746	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.284	9.256	(0.946)	101244	29.6586	30
* 19 1,4-Difluorobenzene	114	9.816	9.803	(1.000)	1667281	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.679	11.666	(0.873)	1313610	28.4923	28
* 32 Chlorobenzene-d5	117	13.379	13.381	(1.000)	1413816	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.666	14.668	(1.096)	1034384	30.5682	30

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23210.d
Date : 25-APR-2001 15:46
Client ID: DW-203
Sample Info: 269725;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-208**
Site: Diamond Aerosol

Lab Sample No: **269726**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23211.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23211.d
Report Date: 25-Apr-2001 17:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23211.d
Lab Smp Id: 269726 Client Smp ID: DW-208
Inj Date : 25-APR-2001 16:15
Operator : VOAMS 6 Inst ID: VOAMS6.i
Smp Info : 269726;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIA.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

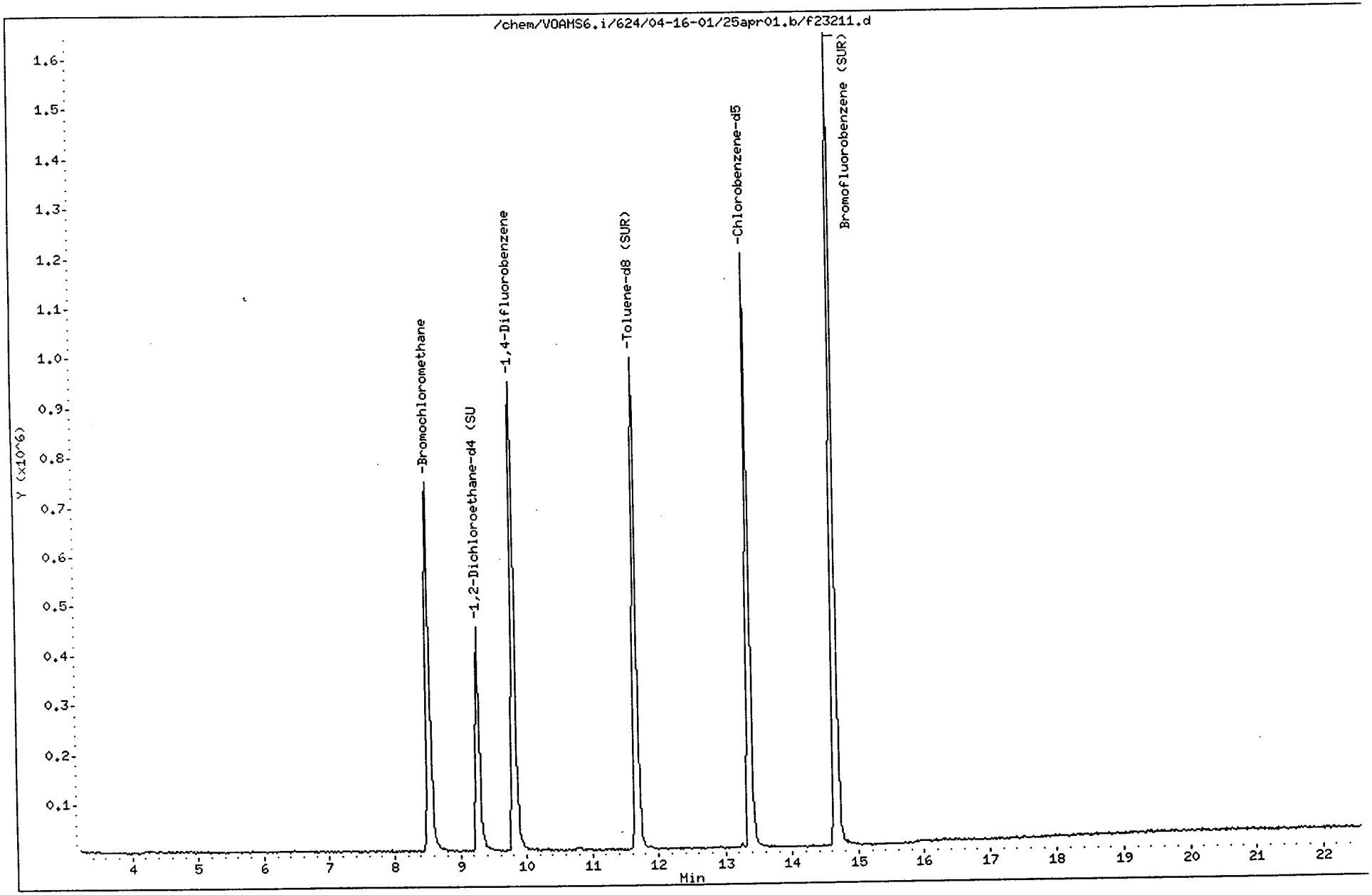
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.531	8.502	(1.000)	539154	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.270	9.256	(0.944)	101871	29.2114	29
* 19 1,4-Difluorobenzene	114	9.817	9.803	(1.000)	1703286	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.665	11.666	(0.873)	1335663	28.2825	28
* 32 Chlorobenzene-d5	117	13.366	13.381	(1.000)	1448215	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.652	14.668	(1.096)	1047936	30.2331	30

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23211.d
Date : 25-APR-2001 16:15
Client ID: DW-208
Sample Info: 269726;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-205**
Site: Diamond Aerosol

Lab Sample No: **269727**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23212.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23212.d
Report Date: 25-Apr-2001 17:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23212.d
Lab Smp Id: 269727 Client Smp ID: DW-205
Inj Date : 25-APR-2001 16:44
Operator : VOAMS 6 Inst ID: VOAMS6.i
Smp Info : 269727;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIA.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

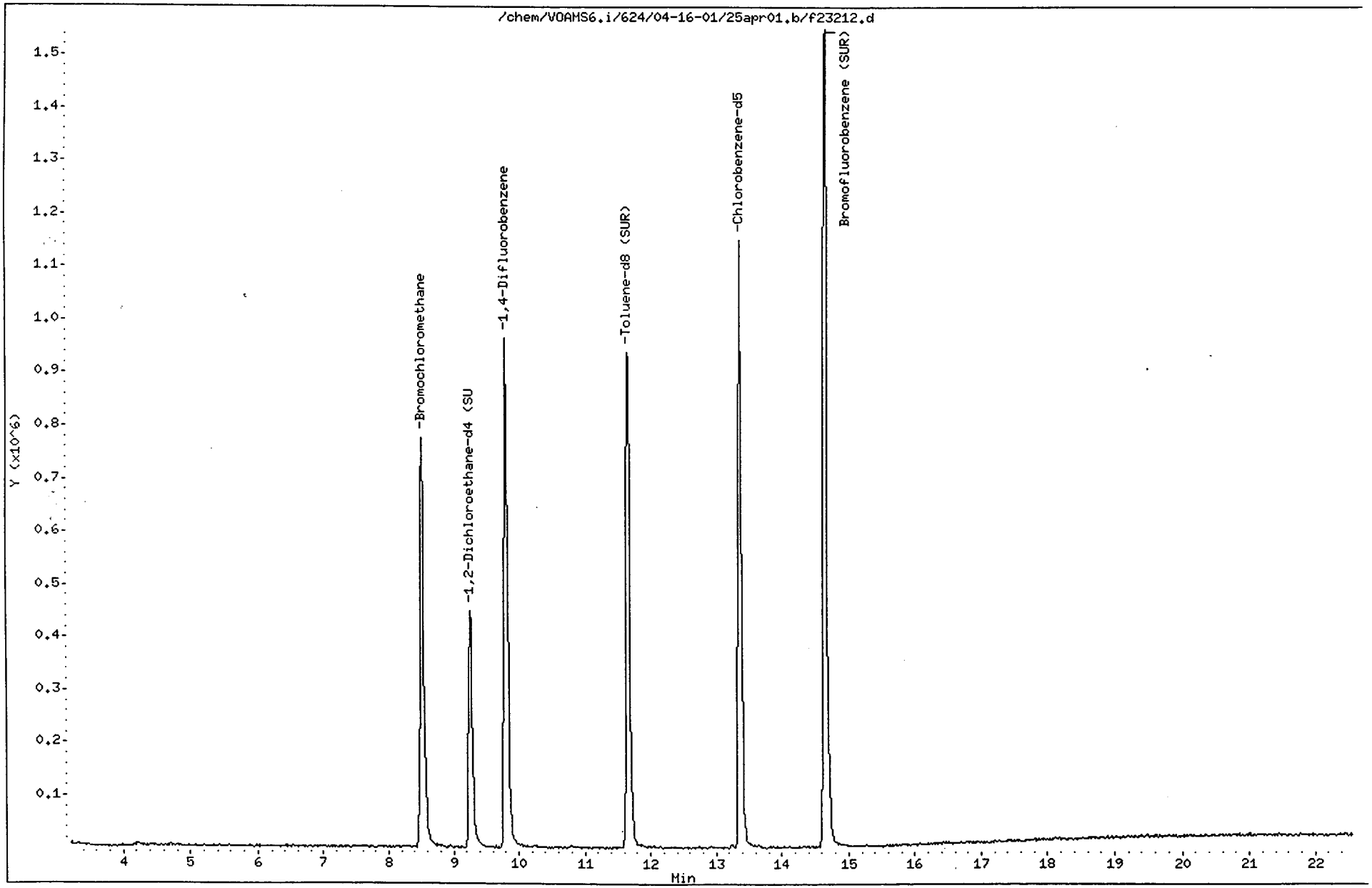
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.516	8.502	(1.000)	546900	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.270	9.256	(0.946)	103513	29.1884	29
* 19 1,4-Difluorobenzene	114	9.802	9.803	(1.000)	1732107	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.651	11.666	(0.872)	1357596	28.3396	28
* 32 Chlorobenzene-d5	117	13.366	13.381	(1.000)	1469031	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.652	14.668	(1.096)	1058944	30.1178	30

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23212.d
Date : 25-APR-2001 16:44
Client ID: DW-205
Sample Info: 269727;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-209**
Site: Diamond Aerosol

Lab Sample No: **269728**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23213.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23213.d
Report Date: 25-Apr-2001 17:35

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23213.d
Lab Smp Id: 269728 Client Smp ID: DW-209
Inj Date : 25-APR-2001 17:13
Operator : VOAMS 6 Inst ID: VOAMS6.i
Smp Info : 269728;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 17:34 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIA.sub
Target Version: 3.50
Processing Host: hpd2

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

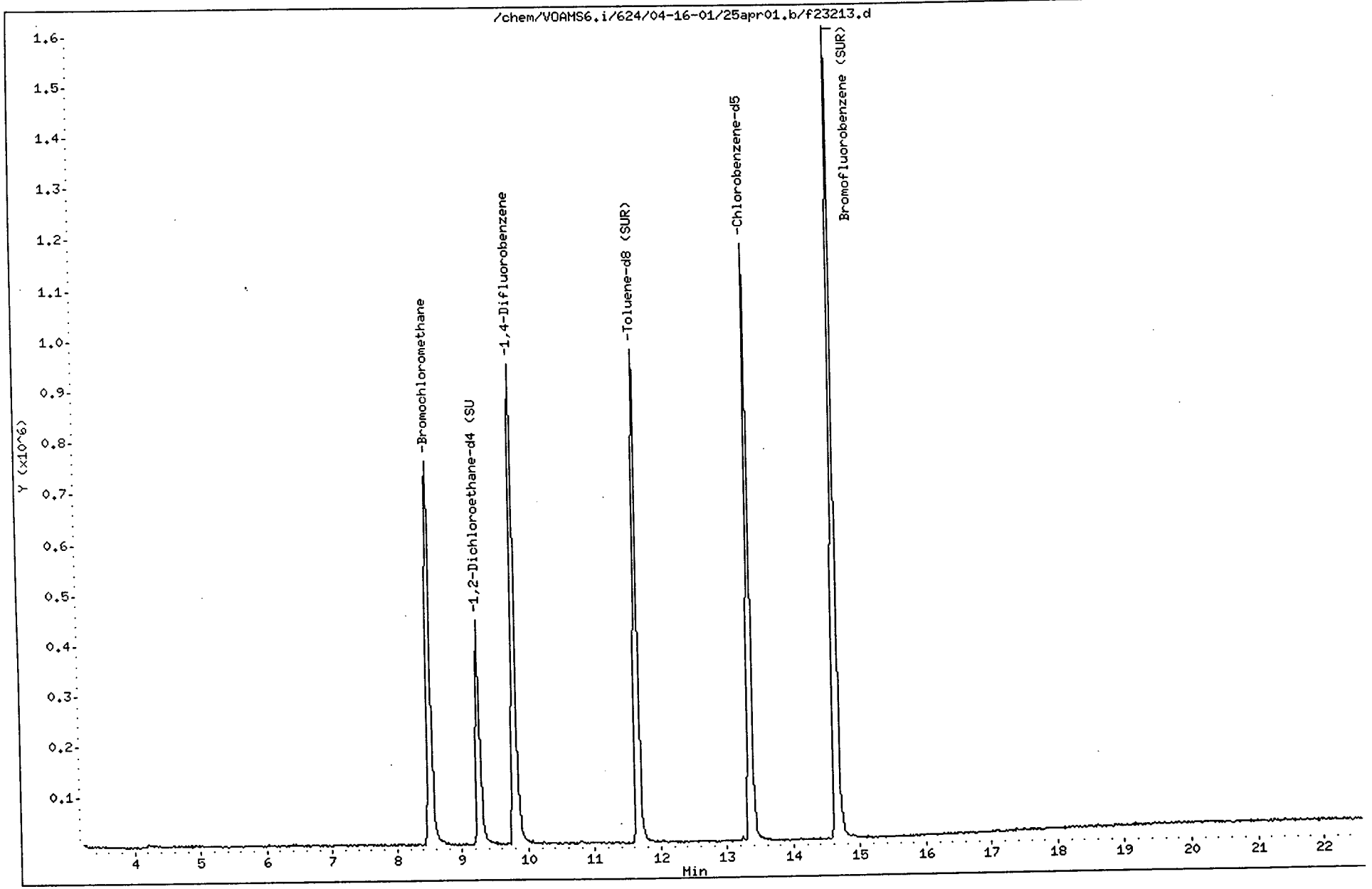
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.515	8.502	(1.000)	534971	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.255	9.256	(0.944)	100859	28.8913	29
* 19 1,4-Difluorobenzene	114	9.802	9.803	(1.000)	1705054	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.650	11.666	(0.873)	1347539	28.6907	29
* 32 Chlorobenzene-d5	117	13.350	13.381	(1.000)	1440305	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.651	14.668	(1.097)	1066543	30.9389	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23213.d
Date : 25-APR-2001 17:13
Client ID: DW-209
Sample Info: 269728;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-204**
Site: Diamond Aerosol

Lab Sample No: **269729**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23214.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23214.d
Report Date: 26-Apr-2001 07:52

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23214.d
Lab Smp Id: 269729 Client Smp ID: DW-204
Inj Date : 25-APR-2001 17:42 Inst ID: VOAMS6.i
Operator : VOAMS 6
Smp Info : 269729;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 26-Apr-2001 07:30 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 9
Dil Factor: 1.00000 Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

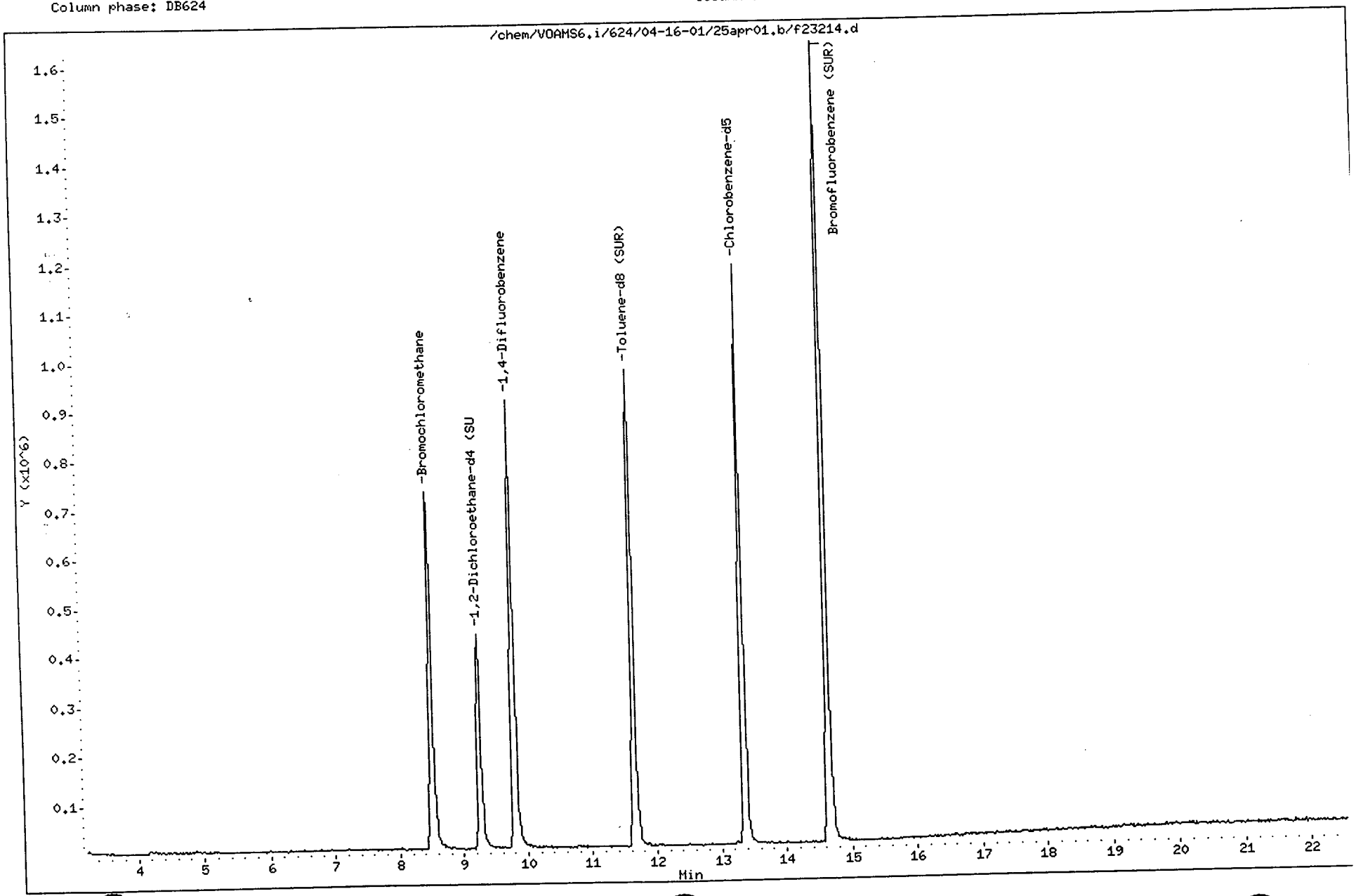
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
* 2 Bromochloromethane	128	8.504	8.502	(1.000)	520783	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.258	9.256	(0.944)	100595	28.8167	29
* 19 1,4-Difluorobenzene	114	9.805	9.803	(1.000)	1705004	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.653	11.666	(0.873)	1333331	28.7827	29
* 32 Chlorobenzene-d5	117	13.353	13.381	(1.000)	1420561	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.640	14.668	(1.096)	1044256	30.7134	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23214.d
Date : 25-APR-2001 17:42
Client ID: DW-204
Sample Info: 269729;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-206**
Site: Diamond Aerosol

Lab Sample No: **269730**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23215.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23215.d
Report Date: 26-Apr-2001 07:52

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23215.d
Lab Smp Id: 269730 — Client Smp ID: DW-206
Inj Date : 25-APR-2001 18:11
Operator : VOAMS 6 — Inst ID: VOAMS6.i
Smp Info : 269730;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 26-Apr-2001 07:30 davidl — Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 — Cal File: f22840.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: DIA.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

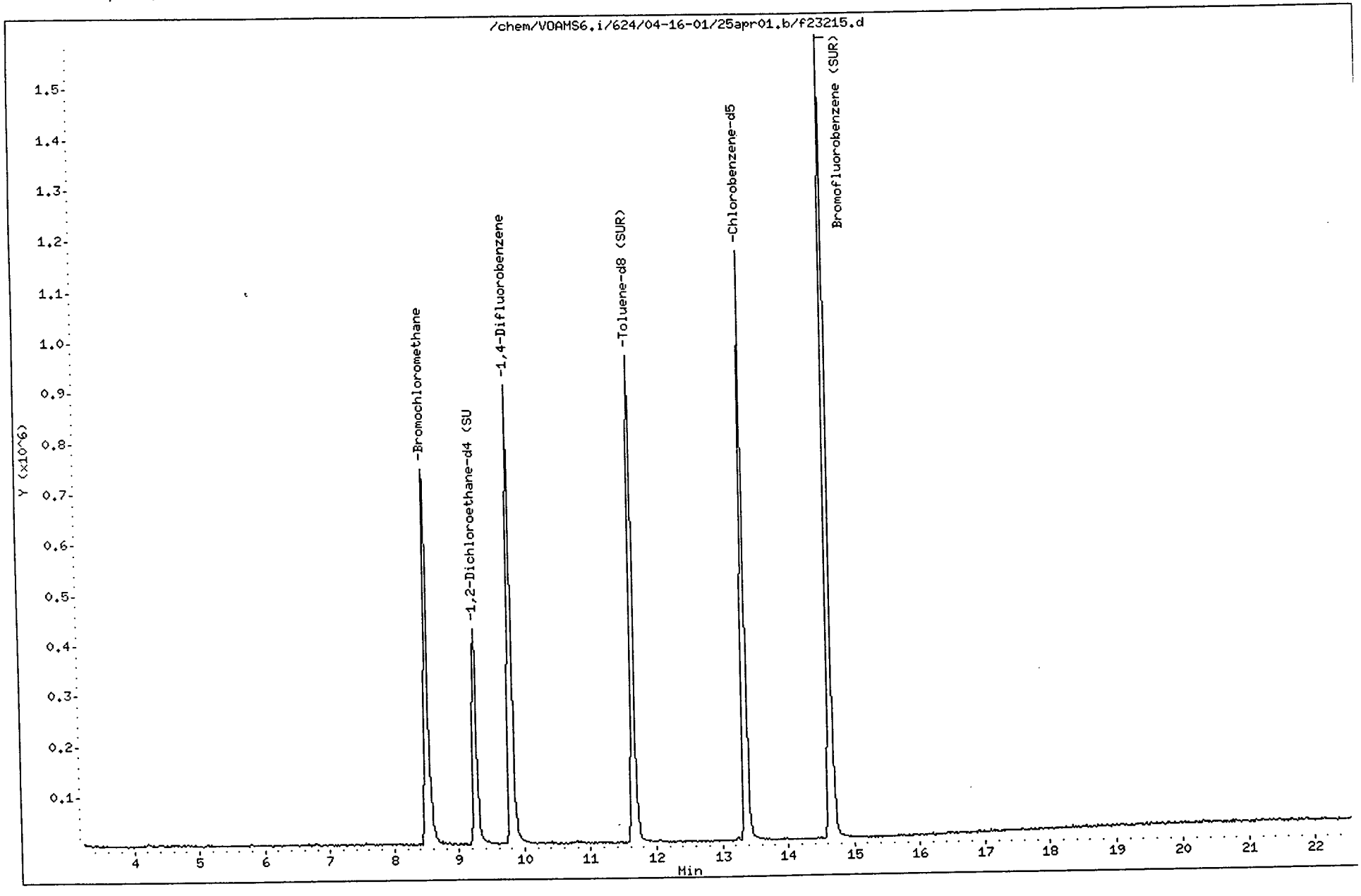
Cpnd Variable — Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.518	8.502	(1.000)	526427	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.258	9.256	(0.944)	101877	29.7776	30
* 19 1,4-Difluorobenzene	114	9.805	9.803	(1.000)	1671011	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.653	11.666	(0.873)	1309323	28.5455	28
* 32 Chlorobenzene-d5	117	13.353	13.381	(1.000)	1406573	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.640	14.668	(1.096)	1030276	30.6036	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23215.d
Date : 25-APR-2001 18:11
Client ID: DW-206
Sample Info: 269730;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **DW-211**
Site: Diamond Aerosol

Lab Sample No: **269731**
Lab Job No: K055

Date Sampled: 04/19/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23216.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23216.d
Report Date: 26-Apr-2001 07:52

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23216.d
Lab Smp Id: 269731 Client Smp ID: DW-211
Inj Date : 25-APR-2001 18:40 Inst ID: VOAMS6.i
Operator : VOAMS 6
Smp Info : 269731;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 26-Apr-2001 07:30 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 11
Dil Factor: 1.00000 Compound Sublist: DIA.sub
Integrator: HP RTE
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

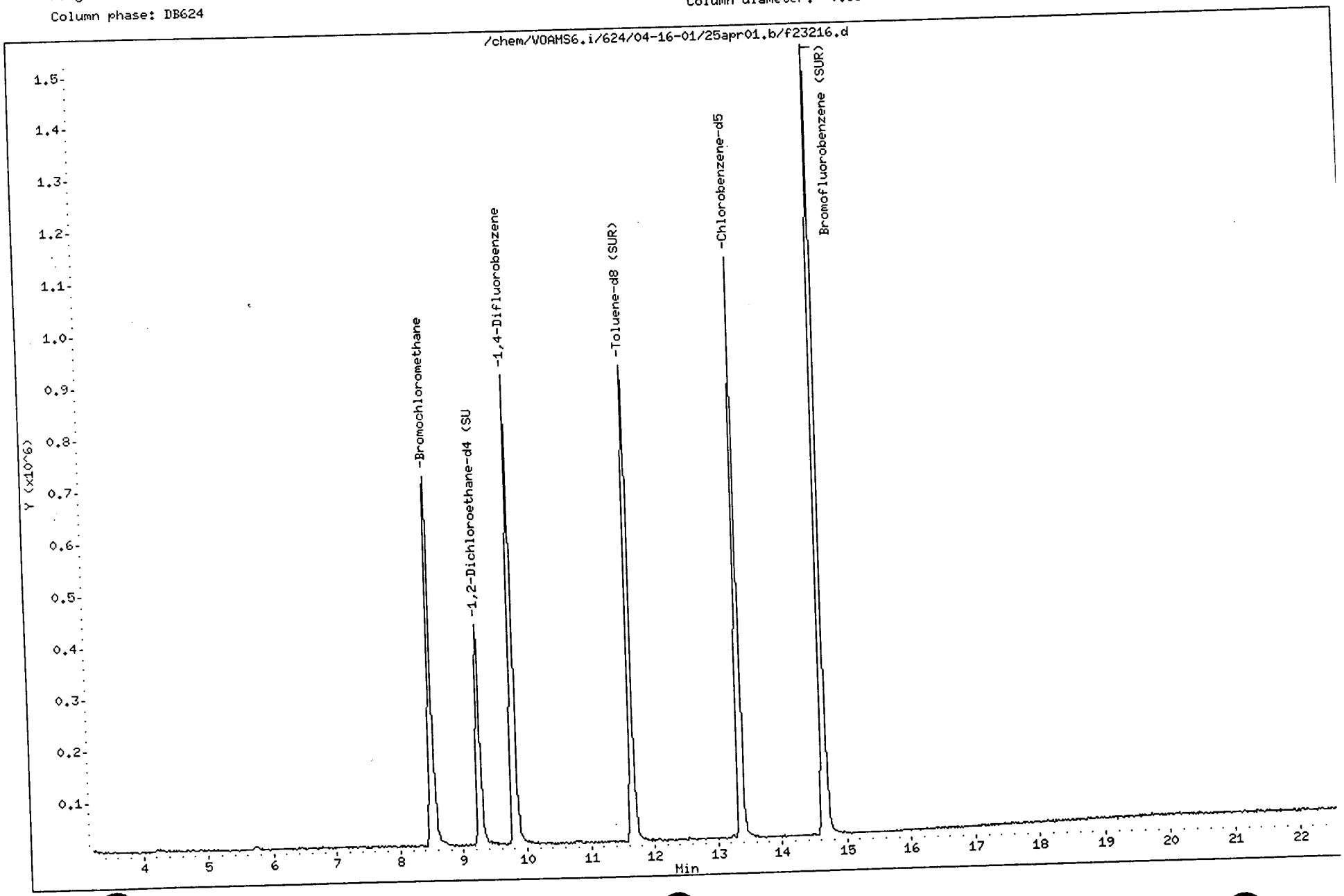
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.518	8.502	(1.000)	521700	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.257	9.256	(0.944)	96879	28.7784	29
* 19 1,4-Difluorobenzene	114	9.805	9.803	(1.000)	1644201	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.653	11.666	(0.873)	1296291	28.7885	29
* 32 Chlorobenzene-d5	117	13.353	13.381	(1.000)	1380819	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.654	14.668	(1.097)	1013888	30.6785	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23216.d
Date : 25-APR-2001 18:40
Client ID: DW-211
Sample Info: 269731;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



Client ID: **Trip_Blank**
Site: Diamond Aerosol

Lab Sample No: **269732**
Lab Job No: K055

Date Sampled: 04/17/01
Date Received: 04/20/01
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23217.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Trichlorofluoromethane	ND	0.4
Freon TF	ND	0.3
Dichlorodifluoromethane	ND	0.5

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23217.d
Report Date: 26-Apr-2001 07:52

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23217.d
Lab Smp Id: 269732 Client Smp ID: Trip_Blank
Inj Date : 25-APR-2001 19:08
Operator : VOAMS 6 Inst ID: VOAMS6.i
Smp Info : 269732;
Misc Info : K055;4917;;DRL
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 26-Apr-2001 07:30 davidl Quant Type: ISTD
Cal Date : 16-APR-2001 14:28 Cal File: f22840.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DIA.sub
Target Version: 3.50

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

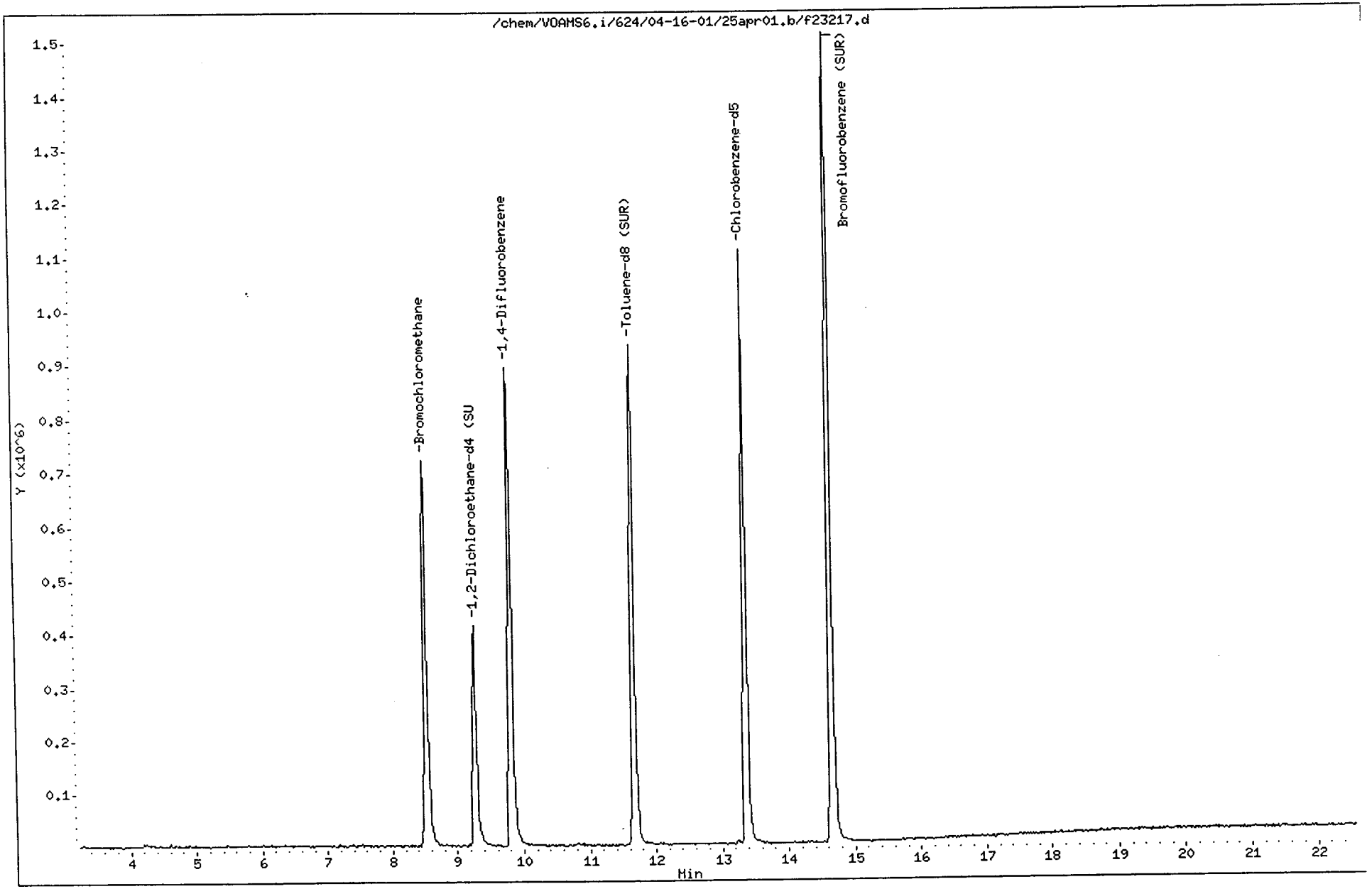
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.518	8.502	(1.000)	508090	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.272	9.256	(0.946)	96400	28.9625	29
* 19 1,4-Difluorobenzene	114	9.805	9.803	(1.000)	1625668	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.668	11.666	(0.873)	1281539	28.8181	29
* 32 Chlorobenzene-d5	117	13.368	13.381	(1.000)	1363704	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.654	14.668	(1.096)	1000922	30.6663	31

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23217.d
Date : 25-APR-2001 19:08
Client ID: Trip_Blank
Sample Info: 269732;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i

Operator: VOAMS 6
Column diameter: 0.53



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: F22834

BFB Injection Date: 04/16/01

Instrument ID: VOAMS6

BFB Injection Time: 1041

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	88.2
175	5.0 - 9.0% of mass 174	6.2 (7.0)1
176	95.0 - 101.0% of mass 174	85.6 (97.0)1
177	5.0 - 9.0% of mass 176	5.4 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FSTD020	FSTD020	F22837	04/16/01	1233
02	FSTD010	FSTD010	F22838	04/16/01	1331
03	FSTD005	FSTD005	F22840	04/16/01	1428
04	FSTD050	FSTD050	F22841	04/16/01	1456
05	FSTD200	FSTD200	F22842	04/16/01	1525
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/VOAMS6.i/624/04-16-01/16apr01.b/f22834.d

Date : 16-APR-2001 10:41

Client ID:

Instrument: VOAMS6.i

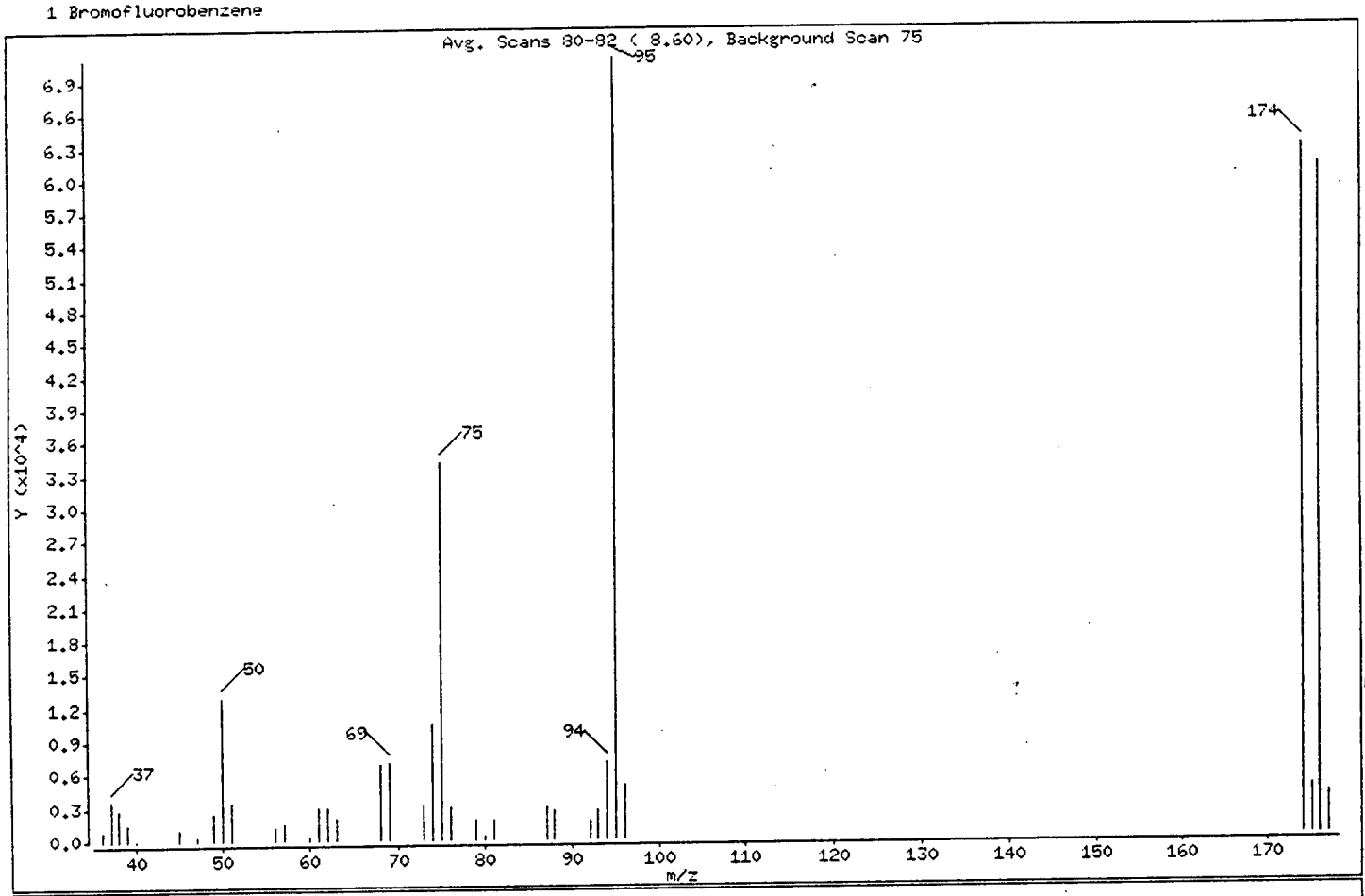
Sample Info: FBFB106 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.20
75	30.00 - 60.00% of mass 95	47.89
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	88.23
175	5.00 - 9.00% of mass 174	6.18 (7.00)
176	95.00 - 101.00% of mass 174	85.62 (97.04)
177	5.00 - 9.00% of mass 176	5.37 (6.28)

Data File: /chem/VOAMS6.i/624/04-16-01/16apr01.b/f22834.d

Date : 16-APR-2001 10:41

Client ID:

Instrument: VOAMS6.i

Sample Info: FBFB106 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: f22834.d

Spectrum: Avg. Scans 80-82 (3.60), Background Scan 75

Location of Maximum: 95.00

Number of points: 36

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	764	56.00	1122	75.00	34048	95.00	71112
37.00	3636	57.00	1475	76.00	2956	96.00	4901
38.00	2820	60.00	330	79.00	1760	174.00	62744
39.00	1404	61.00	2930	80.00	273	175.00	4395
40.00	60	62.00	2893	81.00	1736	176.00	60888
45.00	917	63.00	1901	87.00	2952	177.00	3821
47.00	374	68.00	6923	88.00	2630		
49.00	2410	69.00	7078	92.00	1674		
50.00	12941	73.00	3039	93.00	2647		
51.00	3504	74.00	10535	94.00	7028		

Data File: /chem/VOAMS6.i/624/04-16-01/16apr01.b/f22834.d

Date : 16-APR-2001 10:41

Client ID:

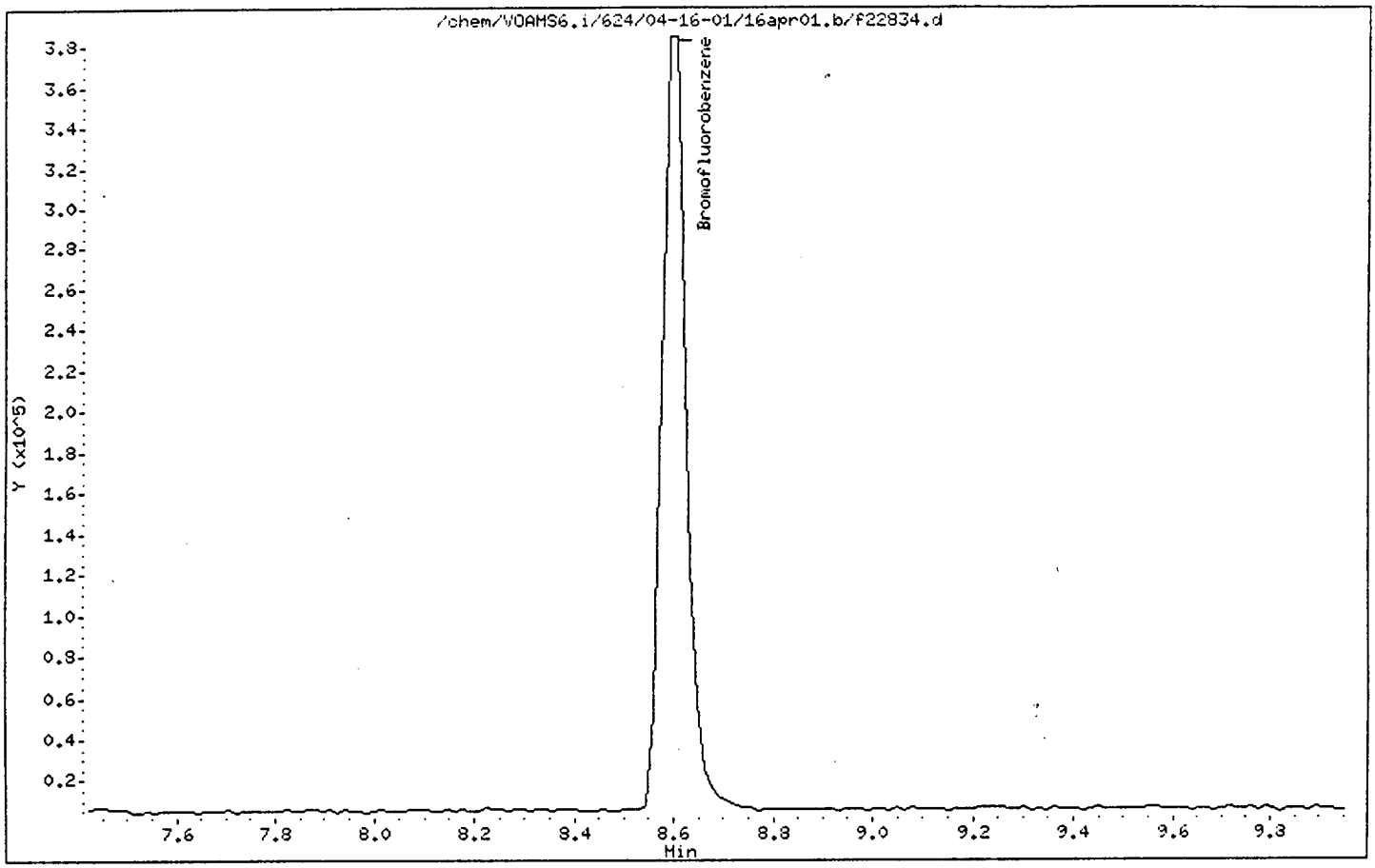
Instrument: VOAMS6.i

Sample Info: FBFB106 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: F23200

BFB Injection Date: 04/25/01

Instrument ID: VOAMS6

BFB Injection Time: 1039

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	48.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	89.4
175	5.0 - 9.0% of mass 174	6.5 (7.3)1
176	95.0 - 101.0% of mass 174	86.8 (97.0)1
177	5.0 - 9.0% of mass 176	5.3 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FSTD115	FSTD115	F23201	04/25/01	1113
02	FV115A	FV115A	F23205	04/25/01	1312
03	DW-210	269721	F23206	04/25/01	1353
04	DW-201	269722	F23207	04/25/01	1421
05	DW-202	269723	F23208	04/25/01	1449
06	DW-207	269724	F23209	04/25/01	1518
07	DW-203	269725	F23210	04/25/01	1546
08	DW-208	269726	F23211	04/25/01	1615
09	DW-205	269727	F23212	04/25/01	1644
10	DW-209	269728	F23213	04/25/01	1713
11	DW-204	269729	F23214	04/25/01	1742
12	DW-206	269730	F23215	04/25/01	1811
13	DW-211	269731	F23216	04/25/01	1840
14	TRIP_BLANK	269732	F23217	04/25/01	1908
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23200.d

Date : 25-APR-2001 10:39

Client ID: FBFB115 50ng

Sample Info: FBFB115 50ng

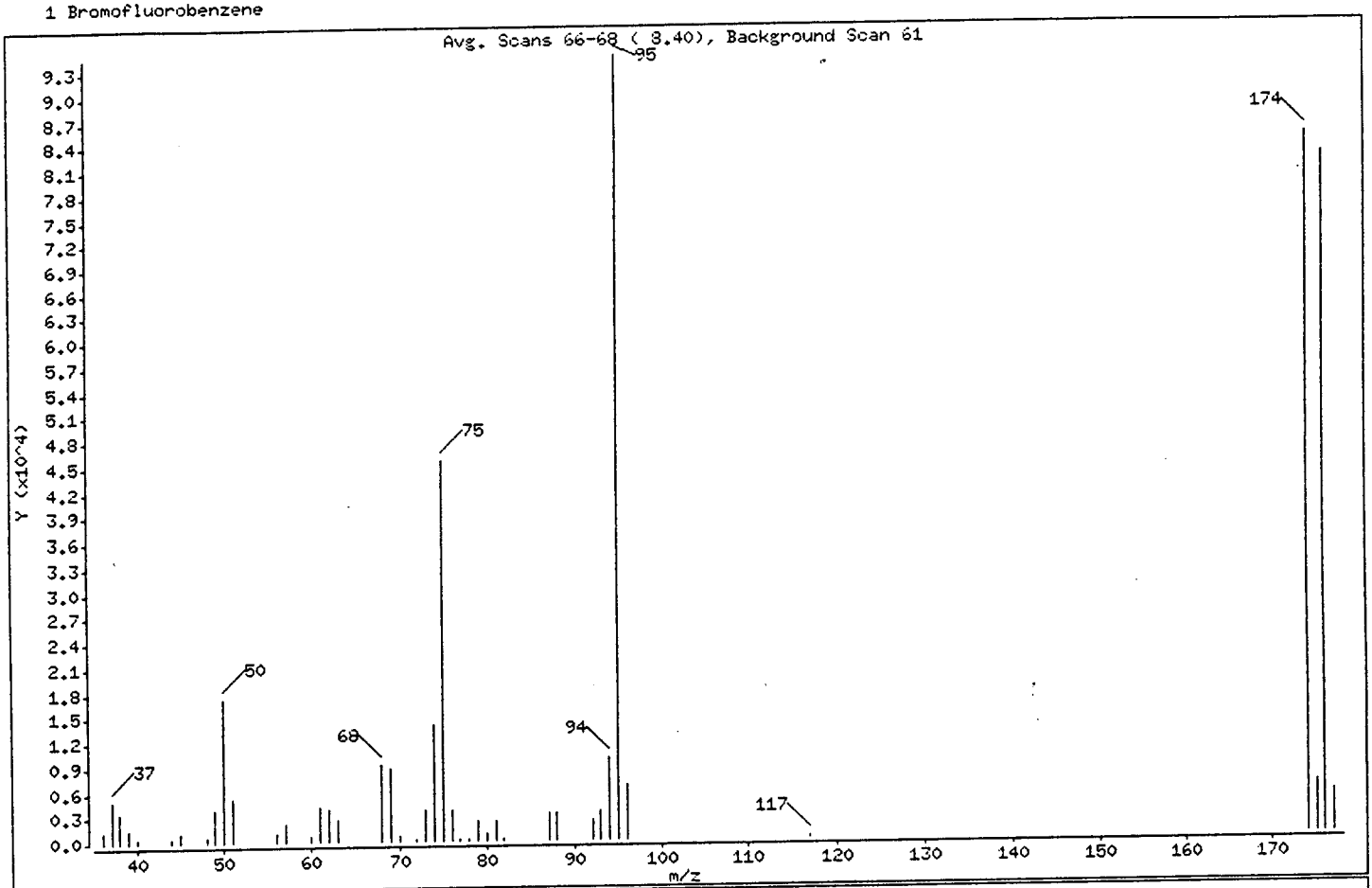
Instrument: VOAMS6.i

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.15
75	30.00 - 60.00% of mass 95	48.13
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	89.41
175	5.00 - 9.00% of mass 174	6.53 (7.30)
176	95.00 - 101.00% of mass 174	86.76 (97.04)
177	5.00 - 9.00% of mass 176	5.34 (6.15)

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23200.d

Date : 25-APR-2001 10:39

Client ID: FBFB115 50ng

Instrument: VOAMS6.i

Sample Info: FBFB115 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

Data File: f23200.d

Spectrum: Avg. Scans 66-68 (8.40), Background Scan 61

Location of Maximum: 95.00

Number of points: 43

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1360	56.00	1128	74.00	14079	92.00	2406
37.00	5103	57.00	2087	75.00	45608	93.00	3532
38.00	3526	60.00	674	76.00	3635	94.00	9836
39.00	1538	61.00	4198	77.00	269	95.00	94760
40.00	370	62.00	3835	78.00	268	96.00	6504
44.00	480	63.00	2640	79.00	2397	117.00	296
45.00	1063	68.00	9193	80.00	886	174.00	84728
48.00	637	69.00	8731	81.00	2366	175.00	6187
49.00	3983	70.00	564	82.00	269	176.00	82216
50.00	17192	72.00	302	87.00	3222	177.00	5058
51.00	5168	73.00	3762	88.00	3352		

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23200.d

Date : 25-APR-2001 10:39

Client ID: FBFB115 50ng

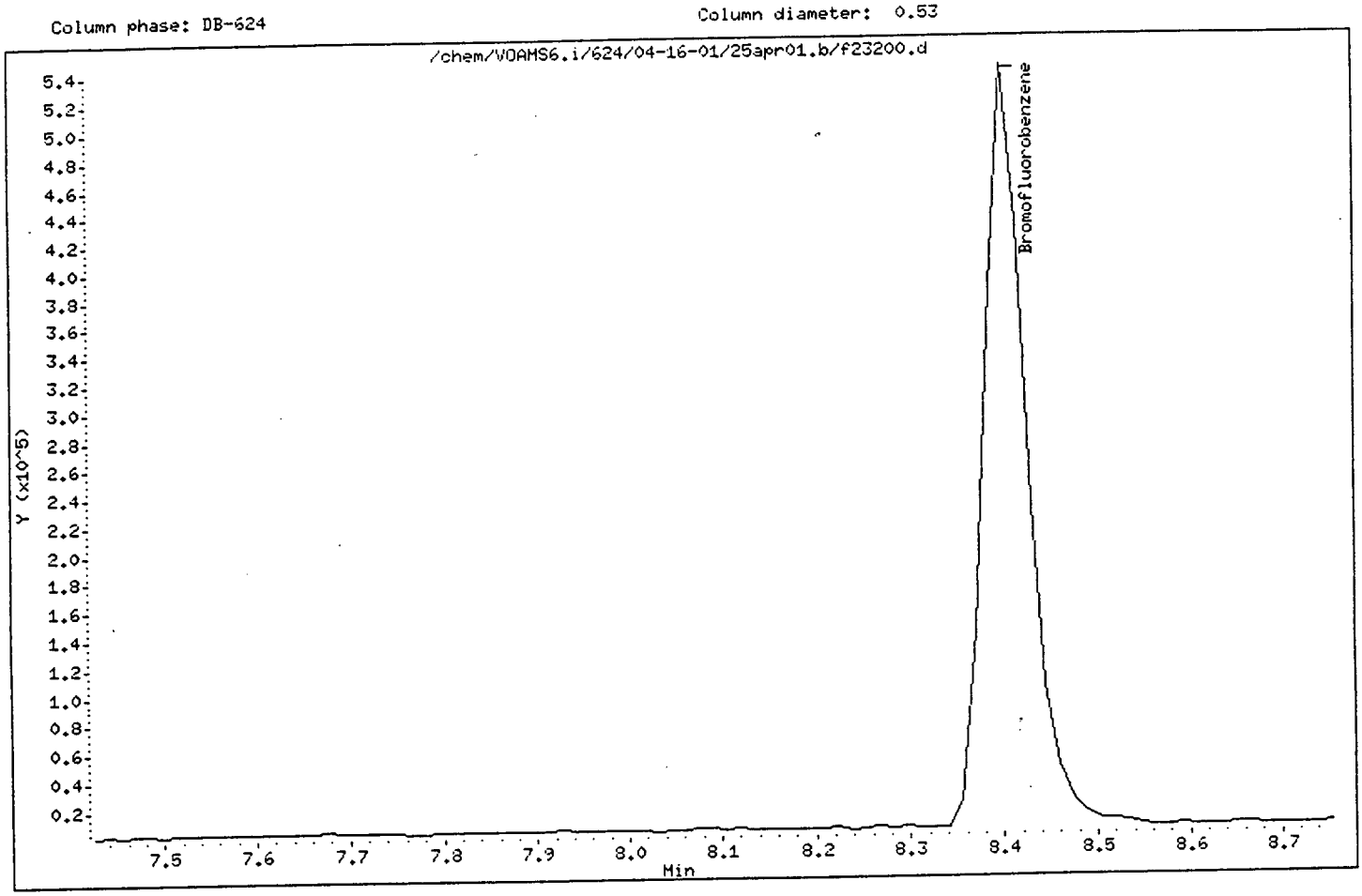
Sample Info: FBFB115 50ng

Instrument: VOAMS6.i

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



LAB SAMPLE NO.

FV115A

VOLATILE METHOD BLANK SUMMARY

Matrix: WATER

Level: LOW

Lab File ID: F23205

Instrument ID: VOAMS6

Date Analyzed: 04/25/01

Time Analyzed: 1312

Heated Purge (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	DW-210	269721	F23206	1353
02	DW-201	269722	F23207	1421
03	DW-202	269723	F23208	1449
04	DW-207	269724	F23209	1518
05	DW-203	269725	F23210	1546
06	DW-208	269726	F23211	1615
07	DW-205	269727	F23212	1644
08	DW-209	269728	F23213	1713
09	DW-204	269729	F23214	1742
10	DW-206	269730	F23215	1811
11	DW-211	269731	F23216	1840
12	TRIP_BLANK	269732	F23217	1908
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **FV115A**
Site:

Lab Sample No: **FV115A**
Lab Job No: K055

Date Sampled: _____
Date Received: _____
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23205.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.3
Bromomethane	ND	0.2
Vinyl Chloride	ND	0.2
Chloroethane	ND	0.3
Methylene Chloride	ND	1.0
Acetone	ND	1.5
Carbon Disulfide	ND	0.2
Trichlorofluoromethane	ND	0.4
1,1-Dichloroethene	ND	0.2
1,1-Dichloroethane	ND	0.2
trans-1,2-Dichloroethene	ND	0.2
cis-1,2-Dichloroethene	ND	0.2
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
2-Butanone	ND	0.6
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.2
cis-1,3-Dichloropropene	ND	0.2
Trichloroethene	ND	0.3
Dibromochloromethane	ND	0.1
1,1,2-Trichloroethane	ND	0.2
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.2
2-Chloroethyl Vinyl Ether	ND	0.4
Bromoform	ND	0.2
4-Methyl-2-Pentanone	ND	0.2
2-Hexanone	ND	0.4
Tetrachloroethene	ND	0.3
1,1,2,2-Tetrachloroethane	ND	0.1
Toluene	ND	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	ND	0.2

Client ID: **FV115A**
Site:

Lab Sample No: **FV115A**
Lab Job No: K055

Date Sampled: _____
Date Received: _____
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23205.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Styrene	ND	0.1
Xylene (Total)	ND	0.2
Ethyl Ether	ND	0.2
Acrolein	ND	7.7
Freon TF	ND	0.3
Isopropanol	ND	500
Acetonitrile	ND	100
TBA	ND	5.8
Acrylonitrile	ND	2.8
MTBE	ND	0.2
Hexane	ND	0.5
DIPE	ND	0.2
Ethyl Acetate	ND	0.8
Vinyl Acetate	ND	5.0
Tetrahydrofuran	ND	5.0
Cyclohexane	ND	0.3
Isobutanol	ND	500
Isopropyl Acetate	ND	0.9
n-Heptane	ND	1.0
n-Butanol	ND	250
Propyl Acetate	ND	0.4
Butyl Acetate	ND	0.5
1,2-Dibromoethane	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.1
Naphthalene	ND	0.3
Methylnaphthalene (total)	ND	1.0
Dimethylnaphthalene (total)	ND	1.0
Dichlorodifluoromethane	ND	0.5
1,4-Dioxane	ND	67
n-Pentane	ND	0.6
5-Methyl-2-Hexanone	ND	5.0
Isopropylbenzene	ND	0.2

Client ID: **FV115A**
Site:

Lab Sample No: **FV115A**
Lab Job No: K055

Date Sampled: _____
Date Received: _____
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23205.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,2,4-Trimethylbenzene	ND	0.2
Cyclohexanone	ND	100
1,2,4-Trichlorobenzene	ND	0.2
Methyl Methacrylate	ND	0.3
Allyl Alcohol	ND	1000
Epichlorohydrin	ND	3.8
Allyl Chloride	ND	5.0
Benzyl Chloride	ND	0.5
Isoprene	ND	0.3
1,1,1,2-Tetrachloroethane	ND	0.2
Camphene (total)	ND	20
Camphor	ND	20
1,3,5-Trimethylbenzene	ND	0.2
1,2,3-Trichlorobenzene	ND	0.3
n-Butylbenzene	ND	1.0
sec-Butylbenzene	ND	1.0
tert-Butylbenzene	ND	1.0
p-Isopropyltoluene	ND	1.0
n-Propylbenzene	ND	1.0
m+p-Ethyltoluene	ND	1.0
o-Ethyltoluene	ND	1.0
Methyl Acetate	ND	0.4
Methyl cyclohexane	ND	0.3
1,2-Dibromo-3-chloropropane	ND	0.4
Cyclohexene	ND	1.0
1,2-Dichlorotrifluoroethane	ND	1.0
n-Propanol	ND	250
3-Methyl-1-Pentyn-3-ol	ND	250
Propylene Oxide	ND	50
Ethanol	ND	500
Chlorotrifluoroethane	ND	1.0
Dichlorofluoromethane	ND	1.0
Ethylene Oxide	ND	500
Methyl Formate	ND	500

Client ID: **FV115A**
Site:

Lab Sample No: **FV115A**
Lab Job No: K055

Date Sampled: _____
Date Received: _____
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23205.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Isobutyraldehyde	ND	5.0
Amyl Acetate	ND	5.0
1,2,3-Trichloropropane	ND	5.0

Client ID: **FV115A**
Site:

Lab Sample No: **FV115A**
Lab Job No: K055

Date Sampled: _____
Date Received: _____
Date Analyzed: 04/25/01
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f23205.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
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29.			
30.			

TOTAL ESTIMATED CONCENTRATION 0.0

Data File: /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23205.d
Report Date: 25-Apr-2001 13:34

STL Edison

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/04-16-01/25apr01.b/f23205.d
Lab Smp Id: FV115A
Client Smp ID: FV115A
Inj Date : 25-APR-2001 13:12
Operator : VOAMS 6
Inst ID: VOAMS6.i
Smp Info : FV115A
Misc Info :
Comment :
Method : /chem/VOAMS6.i/624/04-16-01/25apr01.b/624_01.m
Meth Date : 25-Apr-2001 12:10 davidl
Quant Type: ISTD
Cal Date : 16-APR-2001 14:28
Cal File: f22840.d
Als bottle: 5
QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE
Compound Sublist: all.sub
Target Version: 3.50
Processing Host: hpd2

IC 4/27/01

Concentration Formula: Amt * DF * 5/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	Sample Volume

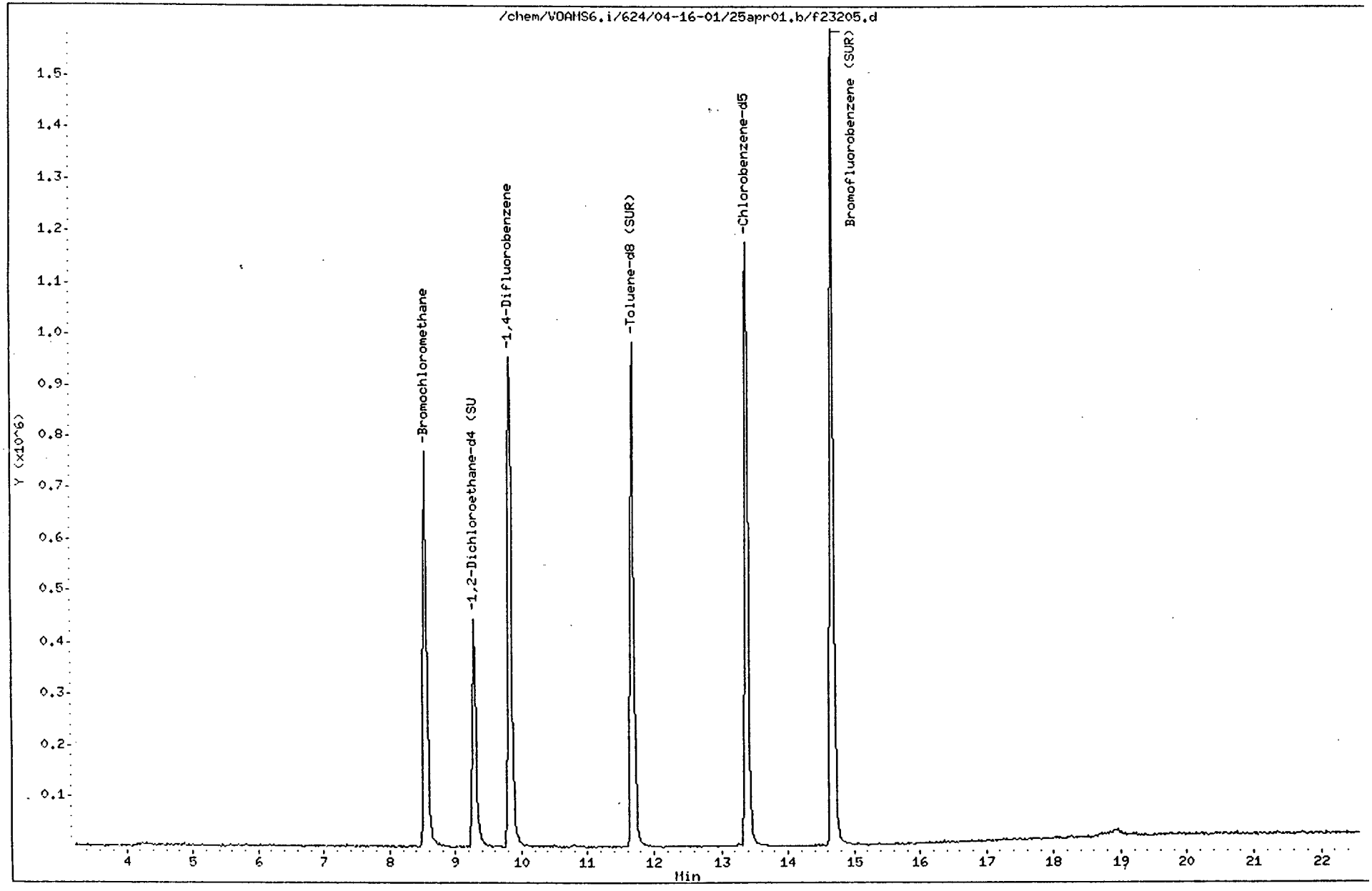
Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.534	8.502	(1.000)	534570	30.0000	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.288	9.256	(0.946)	103648	29.1997	29
* 19 1,4-Difluorobenzene	114	9.820	9.803	(1.000)	1733689	30.0000	
$ 37 Toluene-d8 (SUR)	98	11.683	11.666	(0.873)	1361065	29.0181	29
* 32 Chlorobenzene-d5	117	13.383	13.381	(1.000)	1438348	30.0000	
$ 41 Bromofluorobenzene (SUR)	174	14.670	14.668	(1.096)	1053007	30.5878	30

Data File: /chem/VOAHS6.i/624/04-16-01/25apr01.b/f23205.d
Date : 25-APR-2001 13:12
Client ID: FV115A
Sample Info: FV115A
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAHS6.i

Operator: VOAHS 6
Column diameter: 0.53



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VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 624

Instrument ID: VOAMS6

Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N

Calibration Time(s): 1233 1525

LAB FILE ID: RRF5: F22840 RRF10: F22838 RRF20: F22837
RRF50: F22841 RRF200: F22842

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Chloromethane	0.355	0.417	0.414	0.366	0.360
Bromomethane	0.706	0.705	0.690	0.730	0.724
Vinyl Chloride	0.438	0.525	0.531	0.472	0.474
Chloroethane	0.344	0.358	0.345	0.348	0.341
Methylene Chloride	0.794	0.830	0.817	0.818	0.829
Acetone	0.198	0.127	0.143	0.146	0.154
Carbon Disulfide	1.440	1.582	1.723	1.703	1.851
Trichlorofluoromethane	0.764	0.545	0.881	1.049	1.284
1,1-Dichloroethene	0.803	0.795	0.783	0.826	0.826
1,1-Dichloroethane	1.226	1.282	1.284	1.275	1.272
trans-1,2-Dichloroethene	0.897	0.872	0.889	0.895	0.905
cis-1,2-Dichloroethene	0.945	0.930	0.953	0.974	0.963
Chloroform	1.990	2.051	2.059	2.097	2.098
1,2-Dichloroethane	0.362	0.380	0.380	0.393	0.395
2-Butanone	0.060	0.050	0.057	0.058	0.056
1,1,1-Trichloroethane	1.742	1.783	1.823	1.908	1.926
Carbon Tetrachloride	1.781	1.821	1.913	2.010	2.033
Bromodichloromethane	0.550	0.611	0.632	0.652	0.683
1,2-Dichloropropane	0.182	0.196	0.192	0.190	0.191
cis-1,3-Dichloropropene	0.328	0.352	0.355	0.369	0.388
Trichloroethene	0.340	0.355	0.361	0.373	0.374
Dibromochloromethane	0.722	0.807	0.858	0.915	0.986
1,1,2-Trichloroethane	0.264	0.279	0.282	0.280	0.287
Benzene	0.526	0.564	0.548	0.535	0.547
trans-1,3-Dichloropropene	0.359	0.392	0.409	0.422	0.459
2-Chloroethyl Vinyl Ether	0.095	0.114	0.116	0.122	0.126
Bromoform	0.512	0.596	0.647	0.704	0.797
4-Methyl-2-Pentanone	0.115	0.134	0.138	0.136	0.146
2-Hexanone	0.085	0.098	0.104	0.109	0.114
Tetrachloroethene	0.674	0.664	0.679	0.681	0.675
1,1,2,2-Tetrachloroethane	0.532	0.558	0.555	0.563	0.588
Toluene	0.847	0.852	0.834	0.860	0.897
Chlorobenzene	0.801	0.830	0.810	0.828	0.856
Ethylbenzene	0.314	0.314	0.311	0.318	0.313
Styrene	0.598	0.640	0.637	0.678	0.713
Xylene (Total)	0.398	0.404	0.403	0.413	0.415
Ethyl Ether	0.327	0.384	0.369	0.346	0.348
Acrolein	0.022	0.027	0.030	0.023	0.026
Freon TF	1.922	1.995	2.087	2.069	2.024

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Calibration Time(s): 1233 1525

LAB FILE ID: RRF5: F22840 RRF10: F22838 RRF20: F22837
RRF50: F22841 RRF200: F22842

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Isopropanol					
Acetonitrile	0.005	0.007	0.006	0.005	0.005
TBA	0.048	0.052	0.057	0.056	0.057
Acrylonitrile	0.082	0.102	0.102	0.101	0.108
MTBE	1.596	1.728	1.755	1.736	1.750
Hexane	0.247	0.258	0.233	0.240	0.227
DIPE	1.342	1.542	1.582	1.485	1.529
Ethyl Acetate	0.523	0.575	0.579	0.550	0.582
Vinyl Acetate	1.257	1.384	1.502	1.349	1.406
Tetrahydrofuran	0.121	0.117	0.105	0.091	0.094
Cyclohexane	0.616	0.670	0.719	0.666	0.675
Isobutanol					
Isopropyl Acetate	0.288	0.312	0.322	0.313	0.333
n-Heptane	0.080	0.083	0.076	0.079	0.081
n-Butanol					
Propyl Acetate	0.239	0.266	0.271	0.244	0.242
Butyl Acetate	0.284	0.296	0.310	0.307	0.336
1,2-Dibromoethane	0.640	0.665	0.679	0.695	0.72[illegible]
1,3-Dichlorobenzene	0.828	0.915	0.897	0.898	0.972
1,4-Dichlorobenzene	1.056	1.014	1.007	1.076	1.095
1,2-Dichlorobenzene	0.865	0.903	0.877	0.914	0.956
Naphthalene	0.931	0.971	0.939	1.064	1.056
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	1.373	1.495	1.563	1.543	1.508
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002
n-Pentane	0.172	0.145	0.125	0.098	0.093
5-Methyl-2-Hexanone					
Isopropylbenzene	1.177	1.190	1.188	1.234	1.310
1,2,4-Trimethylbenzene	1.014	1.015	1.014	1.071	1.130
Cyclohexanone					
1,2,4-Trichlorobenzene	0.636	0.658	0.652	0.708	0.720
Methyl Methacrylate	0.054	0.064	0.064	0.067	0.070
Allyl Alcohol					
Epichlorohydrin	0.018	0.019	0.021	0.021	0.022
Allyl Chloride					
Benzyl Chloride	0.546	0.633	0.692	0.693	0.784
Isoprene	0.450	0.471	0.509	0.494	0.491
1,1,1,2-Tetrachloroethane	0.496	0.512	0.534	0.537	0.552

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Calibration Time(s): 1233 1525

LAB FILE ID: RRF5: F22840 RRF10: F22838 RRF20: F22837
RRF50: F22841 RRF200: F22842

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Camphene (total)					
Camphor					
1,3,5-Trimethylbenzene	0.959	1.014	0.991	1.043	1.086
1,2,3-Trichlorobenzene	0.572	0.596	0.576	0.627	0.600
n-Butylbenzene					
sec-Butylbenzene					
tert-Butylbenzene					
p-Isopropyltoluene					
n-Propylbenzene					
m+p-Ethyltoluene					
o-Ethyltoluene					
Methyl Acetate	0.374	0.321	0.418	0.403	0.433
Methyl cyclohexane	0.261	0.275	0.295	0.286	0.283
1,2-Dibromo-3-chloropropane	0.135	0.141	0.146	0.157	0.166
Cyclohexene					
1,2-Dichlorotrifluoroethane					
n-Propanol					
3-Methyl-1-Pentyn-3-ol					
Propylene Oxide					
Ethanol					
Chlorotrifluoroethane					
Dichlorofluoromethane					
Ethylene Oxide					
Methyl Formate					
Isobutyraldehyde					
Amyl Acetate					
1,2,3-Trichloropropane	0.881	0.881	0.876	0.897	0.933
1,2-Dichloroethane-d4 (SUR)	0.059	0.065	0.063	0.061	0.060
Toluene-d8 (SUR)	0.968	0.978	0.970	0.977	0.997
Bromofluorobenzene (SUR)	0.720	0.705	0.716	0.706	0.744

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Calibration Time(s): 1233 1525

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Chloromethane	AVRG	0.38255116	7.9*
Bromomethane	AVRG	0.71088814	2.3*
Vinyl Chloride	AVRG	0.48817420	8.0*
Chloroethane	AVRG	0.34722906	1.8*
Methylene Chloride	AVRG	0.81758071	1.8*
Acetone	AVRG	0.15367063	17.4*
Carbon Disulfide	AVRG	1.65985442	9.4*
Trichlorofluoromethane	AVRG	0.90446736	31.0*
1,1-Dichloroethene	AVRG	0.80656960	2.4*
1,1-Dichloroethane	AVRG	1.26759064	1.9*
trans-1,2-Dichloroethene	AVRG	0.89163374	1.4*
cis-1,2-Dichloroethene	AVRG	0.95304885	1.8*
Chloroform	AVRG	2.05911235	2.2*
1,2-Dichloroethane	AVRG	0.38213036	3.5*
2-Butanone	AVRG	0.05647809	6.7*
1,1,1-Trichloroethane	AVRG	1.83631452	4.3*
Carbon Tetrachloride	AVRG	1.91165137	5.8*
Bromodichloromethane	AVRG	0.62569969	8.0*
1,2-Dichloropropane	AVRG	0.19033130	2.7*
cis-1,3-Dichloropropene	AVRG	0.35828625	6.2*
Trichloroethene	AVRG	0.36077299	3.9*
Dibromochloromethane	AVRG	0.85756567	11.7*
1,1,2-Trichloroethane	AVRG	0.27854223	3.0*
Benzene	AVRG	0.54395617	2.6*
trans-1,3-Dichloropropene	AVRG	0.40825538	9.0*
2-Chloroethyl Vinyl Ether	AVRG	0.11464061	10.5*
Bromoform	AVRG	0.65141960	16.5*
4-Methyl-2-Pentanone	AVRG	0.13389601	8.6*
2-Hexanone	AVRG	0.10197109	11.1*
Tetrachloroethene	AVRG	0.67472694	0.9*
1,1,2,2-Tetrachloroethane	AVRG	0.55905522	3.6*
Toluene	AVRG	0.85805785	2.8*
Chlorobenzene	AVRG	0.82525572	2.6*
Ethylbenzene	AVRG	0.31402524	0.8*
Styrene	AVRG	0.65343722	6.7*
Xylene (Total)	AVRG	0.40658267	1.8*
Ethyl Ether	AVRG	0.35485712	6.2*
Acrolein	AVRG	0.02565296	11.1*
Freon TF	AVRG	2.01953411	3.2*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 | Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N | Calibration Time(s): 1233 1525

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Isopropanol	AVRG		
Acetonitrile	AVRG	0.00567230	16.6*
TBA	AVRG	0.05422725	7.0*
Acrylonitrile	AVRG	0.09892992	9.9*
MTBE	AVRG	1.71304846	3.9*
Hexane	AVRG	0.24117302	5.0*
DIPE	AVRG	1.49578349	6.2*
Ethyl Acetate	AVRG	0.56173599	4.5*
Vinyl Acetate	AVRG	1.37954329	6.4*
Tetrahydrofuran	AVRG	0.10548060	12.7*
Cyclohexane	AVRG	0.66905881	5.5*
Isobutanol	AVRG		
Isopropyl Acetate	AVRG	0.31397090	5.3*
n-Heptane	AVRG	0.07986815	3.4*
n-Butanol	AVRG		
Propyl Acetate	AVRG	0.25232083	5.9*
Butyl Acetate	AVRG	0.30645761	6.3*
1,2-Dibromoethane	AVRG	0.68077312	4.6*
1,3-Dichlorobenzene	AVRG	0.90231386	5.7*
1,4-Dichlorobenzene	AVRG	1.04966606	3.6*
1,2-Dichlorobenzene	AVRG	0.90332189	3.9*
Naphthalene	AVRG	0.99221929	6.4*
Methylnaphthalene (total)	AVRG		
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	1.49632520	4.9**
1,4-Dioxane	AVRG	0.00207456	4.1*
n-Pentane	AVRG	0.12659943	26.0**
5-Methyl-2-Hexanone	AVRG		
Isopropylbenzene	AVRG	1.21973643	4.5*
1,2,4-Trimethylbenzene	AVRG	1.04886197	4.9**
Cyclohexanone	AVRG		
1,2,4-Trichlorobenzene	AVRG	0.67502966	5.4**
Methyl Methacrylate	AVRG	0.06372825	8.9*
Allyl Alcohol	AVRG		
Epichlorohydrin	AVRG	0.02039825	7.4**
Allyl Chloride	AVRG		
Benzyl Chloride	AVRG	0.66963133	13.1**
Isoprene	AVRG	0.48293121	4.7**
1,1,1,2-Tetrachloroethane	AVRG	0.52634599	4.2**

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Calibration Time(s): 1233 1525

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Camphene (total)	AVRG		
Camphor	AVRG		
1,3,5-Trimethylbenzene	AVRG	1.01892600	4.8**
1,2,3-Trichlorobenzene	AVRG	0.59410304	3.7*
n-Butylbenzene	AVRG		
sec-Butylbenzene	AVRG		
tert-Butylbenzene	AVRG		
p-Isopropyltoluene	AVRG		
n-Propylbenzene	AVRG		
m+p-Ethyltoluene	AVRG		
o-Ethyltoluene	AVRG		
Methyl Acetate	AVRG	0.38975505	11.3*
Methyl cyclohexane	AVRG	0.28008897	4.6*
1,2-Dibromo-3-chloropropane	AVRG	0.14899738	8.5**
Cyclohexene	AVRG		
1,2-Dichlorotrifluoroethane	AVRG		
n-Propanol	AVRG		
3-Methyl-1-Pentyn-3-ol	AVRG		
Propylene Oxide	AVRG		
Ethanol	AVRG		
Chlorotrifluoroethane	AVRG		
Dichlorofluoromethane	AVRG		
Ethylene Oxide	AVRG		
Methyl Formate	AVRG		
Isobutyraldehyde	AVRG		
Amyl Acetate	AVRG		
1,2,3-Trichloropropane	AVRG	0.89376497	2.6**
1,2-Dichloroethane-d4 (SUR)	AVRG	0.06142314	4.0*
Toluene-d8 (SUR)	AVRG	0.97828925	1.2*
Bromofluorobenzene (SUR)	AVRG	0.71802679	2.2*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 04/25/01 Time: 1113

Lab File ID: F23201 Init. Calib. Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Init. Calib. Times: 1233 1525

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Chloromethane	0.382	0.325		14.9	104
Bromomethane	0.711	0.686		3.5	86.0
Vinyl Chloride	0.488	0.434		11.1	96.0
Chloroethane	0.347	0.347		0.0	62.0
Methylene Chloride	0.818	0.797		2.6	39.5
Acetone	0.154	0.121		21.4	40.0
Carbon Disulfide	1.660	1.327		20.1	40.0
Trichlorofluoromethane	0.905	0.614		32.2	52.0
1,1-Dichloroethene	0.807	0.779		3.5	49.5
1,1-Dichloroethane	1.268	1.247		1.6	27.5
trans-1,2-Dichloroethene	0.892	0.885		0.8	30.5
cis-1,2-Dichloroethene	0.953	0.951		0.2	40.0
Chloroform	2.059	2.061		-0.1	32.5
1,2-Dichloroethane	0.382	0.398		-4.2	32.0
2-Butanone	0.056	0.058		-3.6	40.0
1,1,1-Trichloroethane	1.836	1.842		-0.3	25.0
Carbon Tetrachloride	1.912	1.906		0.3	27.0
Bromodichloromethane	0.626	0.633		-1.1	34.5
1,2-Dichloropropane	0.190	0.195		-2.6	66.0
cis-1,3-Dichloropropene	0.358	0.356		0.6	76.0
Trichloroethene	0.361	0.354		1.9	33.5
Dibromochloromethane	0.858	0.855		0.3	32.5
1,1,2-Trichloroethane	0.278	0.274		1.4	29.0
Benzene	0.544	0.535		1.6	36.0
trans-1,3-Dichloropropene	0.408	0.398		2.4	50.0
2-Chloroethyl Vinyl Ether	0.115	0.109		5.2	124
Bromoform	0.651	0.647		0.6	29.0
4-Methyl-2-Pentanone	0.134	0.134		0.0	40.0
2-Hexanone	0.102	0.100		2.0	40.0
Tetrachloroethene	0.675	0.683		-1.2	26.5
1,1,2,2-Tetrachloroethane	0.559	0.564		-0.9	39.5
Toluene	0.858	0.827		3.6	25.5
Chlorobenzene	0.825	0.815		1.2	34.0
Ethylbenzene	0.314	0.304		3.2	41.0
Styrene	0.653	0.640		2.0	40.0
Xylene (Total)	0.407	0.401		1.5	40.0
Ethyl Ether	0.355	0.327		7.9	40.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 04/25/01 Time: 1113

Lab File ID: F23201 Init. Calib. Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Init. Calib. Times: 1233 1525

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Acrolein	0.026	0.022		15.4	40.0
Freon TF	2.019	1.859		7.9	40.0
Isopropanol					40.0
Acetonitrile	0.006	0.004		33.3	40.0
TBA	0.054	0.054		0.0	40.0
Acrylonitrile	0.099	0.097		2.0	40.0
MTBE	1.713	1.598		6.7	40.0
Hexane	0.241	0.231		4.1	40.0
DIPE	1.496	1.474		1.5	40.0
Ethyl Acetate	0.562	0.580		-3.2	40.0
Vinyl Acetate	1.380	1.323		4.1	40.0
Tetrahydrofuran	0.106	0.107		-0.9	40.0
Cyclohexane	0.669	0.638		4.6	40.0
Isobutanol					40.0
Isopropyl Acetate	0.314	0.312		0.6	40.0
n-Heptane	0.080	0.077		3.8	40.0
n-Butanol					40.0
Propyl Acetate	0.252	0.257		-2.0	40.0
Butyl Acetate	0.307	0.295		3.9	40.0
1,2-Dibromoethane	0.681	0.665		2.3	40.0
1,3-Dichlorobenzene	0.902	0.898		0.4	27.0
1,4-Dichlorobenzene	1.050	1.074		-2.3	37.0
1,2-Dichlorobenzene	0.903	0.903		0.0	37.0
Naphthalene	0.992	0.991		0.1	40.0
Methylnaphthalene (total)					40.0
Dimethylnaphthalene (total)					40.0
Dichlorodifluoromethane	1.496	1.081	0.01	27.7	40.0
1,4-Dioxane	0.002	0.002		0.0	40.0
n-Pentane	0.127	0.099	0.01	22.0	40.0
5-Methyl-2-Hexanone			0.01		40.0
Isopropylbenzene	1.220	1.185		2.9	40.0
1,2,4-Trimethylbenzene	1.049	1.017	0.01	3.0	40.0
Cyclohexanone			0.0001		40.0
1,2,4-Trichlorobenzene	0.675	0.695	0.01	-3.0	40.0
Methyl Methacrylate	0.064	0.065		-1.6	40.0
Allyl Alcohol					40.0
Epichlorohydrin	0.020	0.020	0.01	0.0	40.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 04/25/01 Time: 1113

Lab File ID: F23201 Init. Calib. Date(s): 04/16/01 04/16/01

Heated Purge: (Y/N) N Init. Calib. Times: 1233 1525

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Allyl Chloride			0.01		40.0
Benzyl Chloride	0.670	0.642	0.01	4.2	40.0
Isoprene	0.483	0.427	0.01	11.6	40.0
1,1,1,2-Tetrachloroethane	0.526	0.532	0.01	-1.1	40.0
Camphene (total)					40.0
Camphor					40.0
1,3,5-Trimethylbenzene	1.019	0.998	0.01	2.1	40.0
1,2,3-Trichlorobenzene	0.594	0.610		-2.7	40.0
n-Butylbenzene					40.0
sec-Butylbenzene					40.0
tert-Butylbenzene					40.0
p-Isopropyltoluene					40.0
n-Propylbenzene					40.0
m+p-Ethyltoluene					40.0
o-Ethyltoluene					40.0
Methyl Acetate	0.390	0.419		-7.4	40.0
Methyl cyclohexane	0.280	0.267		4.6	40.0
1,2-Dibromo-3-chloropropane	0.149	0.149	0.01	0.0	40.0
Cyclohexene					40.0
1,2-Dichlorotrifluoroethane					40.0
n-Propanol					40.0
3-Methyl-1-Pentyn-3-ol					40.0
Propylene Oxide					40.0
Ethanol					40.0
Chlorotrifluoroethane					40.0
Dichlorofluoromethane					40.0
Ethylene Oxide					40.0
Methyl Formate					40.0
Isobutyraldehyde					40.0
Amyl Acetate					40.0
1,2,3-Trichloropropane	0.894	0.884	0.01	1.1	40.0
1,2-Dichloroethane-d4 (SUR)	0.062	0.063		-1.6	
Toluene-d8 (SUR)	0.978	0.951		2.8	
Bromofluorobenzene (SUR)	0.718	0.737		-2.6	

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY
METHOD 624

Matrix: WATER Level: LOW Lab Job No: K055

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	FV115A	97	97	102		0
02	269721	102	95	101		0
03	269722	97	95	102		0
04	269723	99	96	103		0
05	269724	98	95	103		0
06	269725	99	95	102		0
07	269726	97	94	101		0
08	269727	97	94	100		0
09	269728	96	96	103		0
10	269729	96	96	102		0
11	269730	99	95	102		0
12	269731	96	96	102		0
13	269732	96	96	102		0
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= 1,2-Dichloroethane-d4	(72-122)
S2	= Toluene-d8	(80-125)
S3	= Bromofluorobenzene	(65-128)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 269752

MS Sample from Lab Job No: K060

QA Batch: 4917

Compound	MS % REC.	BS % REC.	LIMITS
Chloromethane	80	14	0-273
Bromomethane	105	55	0-242
Vinyl Chloride	80	28	0-251
Chloroethane	100	60	14-230
Methylene Chloride	95	90	0-221
Trichlorofluoromethane	65	49	17-181
1,1-Dichloroethene	100	80	0-234
1,1-Dichloroethane	100	90	59-155
trans-1,2-Dichloroethene	95	90	54-156
Chloroform	100	95	51-138
1,2-Dichloroethane	100	95	49-155
1,1,1-Trichloroethane	95	95	52-162
Carbon Tetrachloride	100	90	70-140
Bromodichloromethane	100	100	35-155
1,2-Dichloropropane	100	95	0-210
cis-1,3-Dichloropropene	90	90	0-227
Trichloroethene	115	90	71-157
Dibromochloromethane	95	95	53-149
1,1,2-Trichloroethane	95	95	52-150
Benzene	95	90	37-151
trans-1,3-Dichloropropene	95	95	17-183
2-Chloroethyl Vinyl Ether	0	100	0-305
Bromoform	90	95	45-169
Tetrachloroethene	130	100	64-148
1,1,2,2-Tetrachloroethane	95	100	46-157
Toluene	95	95	47-150
Chlorobenzene	100	100	37-160
Ethylbenzene	100	95	37-162
1,3-Dichlorobenzene	100	100	59-156
1,4-Dichlorobenzene	95	100	18-190

* Values outside of QC limits

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 269752

MS Sample from Lab Job No: K060

QA Batch: 4917

Compound	MS % REC.	BS % REC.	LIMITS
1,2-Dichlorobenzene	100	100	18-190

* Values outside of QC limits

Spike Recovery: 0 out of 62 outside limits

COMMENTS:

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F23201 Date Analyzed: 04/25/01

Instrument ID: VOAMS6 Time Analyzed: 1113

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	586688	8.50	1893096	9.80	1570234	13.38
	UPPER LIMIT	1173376	9.00	3786192	10.30	3140468	13.88
	LOWER LIMIT	293344	8.00	946548	9.30	785117	12.88
	LABORATORY SAMPLE NO.						
01	FV115A	534570	8.53	1733689	9.82	1438348	13.38
02	269721	528327	8.49	1661102	9.79	1395214	13.35
03	269722	532555	8.55	1702210	9.83	1428950	13.38
04	269723	516855	8.54	1671854	9.83	1399050	13.38
05	269724	531611	8.53	1687860	9.82	1420958	13.38
06	269725	529746	8.53	1667281	9.82	1413816	13.38
07	269726	539154	8.53	1703286	9.82	1448215	13.37
08	269727	546900	8.52	1732107	9.80	1469031	13.37
09	269728	534971	8.52	1705054	9.80	1440305	13.35
10	269729	520783	8.50	1705004	9.80	1420561	13.35
11	269730	526427	8.52	1671011	9.80	1406573	13.35
12	269731	521700	8.52	1644201	9.80	1380819	13.35
13	269732	508090	8.52	1625668	9.80	1363704	13.37
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

REFERENCE NO. 37

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2

DATE: 20 JUN 2001

SUBJECT: Diamond Aerosol Corporation

FROM: John Birri, Special Projects Coordinator
Laboratory Branch, DESA

TO: Kristin Dobinson
Program Support Branch, ERRD

Attached are the Thallium results for the Diamond Aerosol Corporation samples received from Sentinel, Inc. on May 23,2001. These data include the Thallium results for seven aqueous samples originally collected by Roy F. Weston on January 29, 2001. Any correspondence concerning these results should refer to our internal project number, 01050030, to uniquely identify it. Please refer to the first page of the report for a description of any remark codes used as data qualifiers. It should be noted that all data are considered EPA-validated.

If you have any questions you can contact me by phone at (732) 906-6886, by fax at (732) 906-6165 or via the LAN.

Attachments

2

U.S. Environmental Protection Agency
Region 2 Laboratory

Data Report: Diamond Aerosol Corp.

Project Number: 01050030

Program: Y206

Codes	Explanation
B	RESULTS BASED UPON COLONY COUNTS OUTSIDE ACCEPTABLE RANGE
J	ESTIMATED VALUE
K	ACTUAL VALUE KNOWN TO BE LESS THAN VALUE GIVEN
L	ACTUAL VALUE KNOWN TO BE GREATER THAN VALUE GIVEN
N	SEE NARRATIVE COMMENTS
V	SAMPLE RECEIVED BUT NOT ANALYZED DUE TO LAB ACCIDENT
U	REPORTING LIMIT
QD	ACCURACY CHECK SAMPLE ABOVE UPPER ACCEPTANCE LIMIT
QE	ACCURACY CHECK SAMPLE BELOW LOWER ACCEPTANCE LIMIT
QF	PRECISION OF CALIBRATION CURVE LESS THAN ACCEPTANCE CRITERIA
QJ	REPORTING LIMIT ESTIMATED DUE TO INTERFERENCE
QG	CONTINUING CALIBRATION CHECK DOES NOT MEET ACCEPTANCE CRITERIA
QS	SPIKE RECOVERIES ABOVE UPPER ACCEPTANCE LIMIT
QR	SPIKE RECOVERIES BELOW LOWER ACCEPTANCE LIMIT
QP	SAMPLE REPLICATE PRECISION DOES NOT MEET ACCEPTANCE CRITERIA
QH	RECOMMENDED HOLDING TIME EXCEEDED
QT	TENTATIVELY IDENTIFIED COMPOUND
QM	PRESENCE OF MATERIAL VERIFIED BUT NOT QUANTIFIED
QB	BLANK CONTAMINATED WITH ANALYTE IN EXCESS OF ACCEPTANCE CRITERIA
QQ	SAMPLE IMPROPERLY MAINTAINED

U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Diamond Aerosol Corp.

Project Number: 01050030

*Sorted By Sample ID

AC01074 Field/Station ID: 4042-DW06 Coll. Ending Date/Time: 01/29/01 12:35
Matrix: Aqueous
Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01075 Field/Station ID: 4042-DW15 Coll. Ending Date/Time: 01/30/01 11:10
Matrix: Aqueous
Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01076 Field/Station ID: 4042-DW16 Coll. Ending Date/Time: 01/30/01 11:40
Matrix: Aqueous
Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01077 Field/Station ID: 4042-DW17 Coll. Ending Date/Time: 01/29/01 17:20
Matrix: Aqueous
Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01078 Field/Station ID: 4042-DW22 Coll. Ending Date/Time: 01/30/01 14:30
Matrix: Aqueous
Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01079 Field/Station ID: 4042-DW24 Coll. Ending Date/Time: 01/30/01 14:20
Matrix: Aqueous
Sample Description:

V = Not Validated; **Inc** = Result not entered

Report Date: 06/22/01 11:40AM

U.S. EPA Region 2 Laboratory
Data Report

Survey Name: Diamond Aerosol Corp.

Project Number: 01050030

*Sorted By Samp

AC01079 Field/Station ID: 4042-DW24 Coll. Ending Date/Time: 01/30/01 14:20
Matrix: Aqueous

Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

AC01080 Field/Station ID: 4042-DW26 Coll. Ending Date/Time: 01/30/01 15:15
Matrix: Aqueous

Sample Description:

Single Component Analyses

CAS Number	Analyte Name	Result	Units	Remark Codes
7440-28-0	THALLIUM	1.0	ug/L	U

MAC

Project Approval: J. R. Brown for K. Kubik **Date:** 6/22/01

NV = Not Validated; **Inc** = Result not entered

Report Date: 06/22/01 11:40AM

REFERENCE NO. 38

PROJECT NOTE		RAC V
To: Diamond Aerosol file	**Date:** 7/6/01	**Page:** 1 of 1
From: Scott Snyder		
Subject: Residential well population within 0.25 mile of the site		
Reference: New Jersey State Data Center, Housing Units and Household Population, New Jersey Counties and Municipalities 1990, April 1991.		

The attachment to this note is a summary table of residential wells within 0.25 mile of the Diamond Aerosol site. The information in this table was compiled from field notes and questionnaires completed during the residential well sampling conducted by WESTON and EPA during February 2001. For those residences where access was denied or could not be obtained and the number of residents is unknown, the average number of people per household in Hunterdon County (2.76) is applied.

Residential Well Population Within 0.25 Mile = 142

DIAMOND AEROSOL CORPORATION
RESIDENTIAL WELL DATA BASE

NAME	ADDRESS	BLOCK	LOT	PHONE NUMBER	DEPTH OF WELL	NO. OF PEOPLE	SAMPLE NO.	COMMENTS
Severino/Eliseo Piazza	34 Anthony Road	49	72	(908) 832-2762	60	3	DW15	well on east side of house; no treatment
Andrew Huston	37 Anthony Road	49	75	(908) 832-7667	unknown	1	DW08	well in rear of house; carbon filter, softener bypassed for sampling
Wayne/Mary Gaydick	40 Anthony Road	57	19	(908) 832-6348	shallow; hand dug	6	DW25	well is a spring under house; possible BG location
Ernest Cox	47 Anthony Road	49	77	(908) 832-7316	77	2	DW24	well in back of house at wishing well; no treatment
Michael/Peggy Prezioso	48 Anthony Road	57	20.03	(908) 832-7544; 7970	250	5	DW07	well in lower back yard; softener not bypassed for sampling
Perry/Siobhan Quinn Papantonis	54 Anthony Road	57	21	(908) 832-9615	unknown	4	DW26	softener, carbon filter not bypassed during sampling
Diamond Aerosol Facility	62 Anthony Road	57	23	(908) 832-7882	80	2	DW20	well in back of lab building; no treatment
Joeseph Baumgartner	68 Anthony Road	57	24	(908) 832-7829	45	3	DW22	well in front of house; no treatment
Richard/Colleen Gayton	70 Anthony Road	57	25	(908) 832-9294	unknown	2	DW23	well in front of house; no treatment
John/Elaine Paulus	71 Anthony Road	36	22.03					***ACCESS DENIED***
Anita Jackson	72 Anthony Road	57	26	unknown	unknown	1	DW35	well on east side of house; no treatment
Walter/Patricia Hildebrandt	73 Anthony Road	36	22.02	H-(908) 832-7546; W-234-1008 x 259	110	2	DW14	well in front of house in flower bed; no treatment
Peter/Annette Russo	74 Anthony Road	57	28.03	W-(908) 725-6110; H- 832-5798	550	4	DW09	well in south corner; sediment filter
Marlene Larson	76 Anthony Road	57	28.01	(908) 832-2062	400	1	DW30	well in back yard; no treatment
Francis/Rebecca Persico	78 Anthony Road	57	28.02					***ACCESS DENIED***
Daniel/Lucille Cerami	79 Anthony Road	36	22	(908) 832-9008	150	N/A	DW16	property is used as a farm-no residents; well is right of driveway
Stevens	86 Anthony Road	57	29	(908) 832-6144	4	5	DW27	shallow well
Giaquinto Viola	661 Woodglen Road	36	17	(908) 832-7686	80	4	DW06	well in front of house; no treatment
Byron/Francoise Edward	670 Woodglen Road	49	5.01					Access not obtained-residents unavailable during sampling
Alan/Diane Goracy	671 Woodglen Road	36	18.03	(908) 832-7158	225	5	DW28	well in front bushes; no treatment
Robert/Evelyn Mickel	676 Woodglen Road	49	4.01	(908) 788-1338	130	4	DW34	well in front of house; sediment filter
John/Donna Watkins	679 Woodglen Road	36	18	unknown	unknown	3	DW19	well shared with 681 Woodglen Road
Earl/Catherine Wittman	680 Woodglen Road	49	3	(908) 832-2955	84	5	DW21	well in southeast corner of property; no treatment
Donald/Jeanmarie Hewitson	681 Woodglen Road	36	18.02	(908) 832-0837	unknown	5	DW19	well shared with 679 Woodglen Road
Douglas/Geraldine Ramsay	683 Woodglen Road	36	18.01					***ACCESS DENIED***
Franklin/Ingrid Cosmen	685 Woodglen Road	36	19					***ACCESS DENIED***
Frank/Ann Marie Bruno	688 Woodglen Road	49	1	(908) 832-9784	unknown	4	DW04/05	well 10' north of house; filter, softener bypassed for sampling
Victor/Geraldine Rabbat	201 Meadow View Lane	49	4.04	W-(973) 785-1156; H-(908) 832-2635	unknown	5	DW03	well SW corner of house; softener not bypassed for sampling
Michael/Beth Boyle	202 Meadow View Lane	49	4.05	(908)832-0010	unknown	3	DW33	filter, softener-bypassed during sampling
Brian/Linda Ann Hoffman	203 Meadow View Lane	49	4.03	(908)832-6248	520	4	DW29	well in front by driveway; no treatment
Paul/Anne Mankiewich	204 Meadow View Lane	49	4.06	(908) 832-7997	175	3	DW02	well in rear of house; filter, softener bypassed during sampling
Bruce/Mary Jane Murphy	205 Meadow View Lane	49	4	(908) 820-6149	385	2	DW31	well in back west corner of house; iron filter not bypassed
Jay/Margaret Hartenstein	1 Winters Drive	57	20.02	(908) 832-5061	425	2	DW18	well in back yard; softener bypassed during samping
Philip/Maureen Stout	2 Winters Drive	57	20.01	(908) 832-6342	unknown	2	DW37	well in front SE side of house; softener not bypassed
Wim/Nicole Vandenhouweele	3 Winters Drive	57	20.04					***ACCESS DENIED***
Joseph/Elaine Yudichak	4 Winters Drive	57	20	W-(908) 2386511; H-(908) 8320424	500	3	DW17	well in back yard; no treatment
Kevin/Beverly Winters	5 Winters Drive	57	20.05	(908) 832-7424	200	3	DW11	well in back yard; no treatment
George/Joan Call	105 Mt. Lebanon Road	57	17					***ACCESS DENIED***
Martha Monahan	109 Mt. Lebanon Road	57	17.01	(908) 832-0659	280	4	DW12	well in front of house; no treatment
Statford Hayes/Dana MacArthur	113 Mt. Lebanon Road	57	16	-(908) 832-5628; W-(732) 287-1000x23	unknown	2		***ACCESS DENIED***
Scott Kolvek/Fiona Macleod	20 Shady Lane	49	78	(908) 832-9096	300	3	DW13	well in front of house; no treatment
David/Susan Tullo	10 Stillwaters Way	57	27	H-(908) 832-0190; W-(908) 766-9110	70	4	DW10	well on west side of house; no treatment
Russell/Kathleen Dilello	3 Beech Brook Lane	57	21.011	H-(908) 832-5034; W-(609) 448-8282	370	2	DW01	well in front yard; no treatment
Ronald Fisher	5 Beech Brook Lane	57	21.01	H-(908) 832-0834; W-(908) 303-3158	500	4	DW36	well 100' NE of house; iron filter not bypassed during sampling
Jason/Kristin Beatrice	1 Dimitra Drive	57	17.05	(908)832-7741	210	3	DW32	well by driveway; carbon filter, softener not bypassed for sampling
Gwen Melisi	4 Dimitra Drive	57	17.04					***ACCESS DENIED***

NJSDC 1990 Census Publication

Housing Units and Household Population

New Jersey, Counties and Municipalities

1990

April 1991

$5.00

ATTACHMENT A P. 1

Table 2. Housing Units, Households, and Persons in Households and Group Quarters: 1990 (Cont.)
New Jersey Municipalities by Counties

The population counts set forth herein are subject to possible correction for undercount or overcount. The United States Department of Commerce is considering whether to correct these counts and will publish corrected counts, if any, not later than July 15, 1991.

HUNTERDON County Municipalities	(1) Total Housing Units	(2) Vacant Housing Units	(3) Total Persons	(4) Persons in Group Quarters	(5) Total Households (1)-(2)	(6) Persons in Households (3)-(4)	(7) Persons per Household (6)/(5)
HUNTERDON COUNTY	39,987	2,081	107,776	3,338	37,906	104,438	2.76
Alexandria township	1,275	72	3,594	63	1,203	3,531	2.94
Bethlehem township	1,081	48	3,104	0	1,033	3,104	3.00
Bloomsbury borough	348	18	890	0	330	890	2.70
Califon borough	416	21	1,073	0	395	1,073	2.72
Clinton town	829	37	2,054	0	792	2,054	2.59
Clinton township	3,514	138	10,816	1,107	3,376	9,709	2.88
Delaware township	1,636	67	4,512	0	1,569	4,512	2.88
East Amwell township	1,542	55	4,332	17	1,487	4,315	2.90
Flemington borough	1,854	66	4,047	103	1,788	3,944	2.21
Franklin township	1,058	58	2,851	0	1,000	2,851	2.85
Frenchtown borough	613	40	1,528	20	573	1,508	2.63
Glen Gardner borough	783	67	1,665	0	716	1,665	2.33
Hampton borough	629	63	1,515	0	566	1,515	2.68
High Bridge borough	1,454	50	3,886	0	1,404	3,886	2.77
Holland township	1,824	105	4,892	0	1,719	4,892	2.85
Kingwood township	1,227	80	3,325	0	1,147	3,325	2.90
Lambertville city	1,818	108	3,927	18	1,710	3,909	2.29
Lebanon borough	489	71	1,036	0	418	1,036	2.48

continued ...

REFERENCE NO. 39

United States Environmental Protection Agency
Solid Waste and Emergency Response
August, 1994

National Biennial RCRA Hazardous Waste Report (Based on 1991 Data)

LIST OF TREATMENT, STORAGE, OR DISPOSAL FACILITIES

NEW JERSEY

REPORTED RCRA TREATMENT, STORAGE OR DISPOSAL (TSD) FACILITIES*

EPA ID	TSD FACILITY NAME	LOCATION CITY	RCRA TONS MANAGED
NJD002496503	DECORATED PAPER CORP	CAMDEN	.000
NJD980767982	DELRAN AUTO BODY	RIVERSIDE	.000
NJD138051206	DELTA AIR LINES, INC. EWR	NEWARK	.000
NJD058981416	DELUXE CHECK PRINTERS	MOORESTOWN	2.064
NJD046644407	DENZER & SCHAFER X-RAY CO	BAYVILLE	.000
NJD077090728	DEPTFORD MOTORS	DEPTFORD	.000
NJD047318043	DETREX CORPORATION	CINNOMINSON	.224
NJD095276853	DIA-NIELSEN USA INC	CINNAMINSON	.000
NJD049644438	DIAMOND AEROSOL CORP	GLEN GARDNER	.000
NJD981566490	DIMENSIONAL COMMUNICATIONS	NORTHVALE	.000
NJD986618643	DITSCHMANS FLEMINGTON FORD	FLEMINGTON	.000
NJD009711466	DO-RITE CLEANERS	FRANKLIN PARK	.000
NJD011457918	DON'S AUTOBODY	MORRIS PLAINS	.000
NJD982722514	DORWOOD INDUSTRIES INC	DENVILLE	.000
NJD982741381	DRAFTING GRAPHICS INC	MORRIS PLAINS	.000
NJD980779367	DRAGO ENT T/A OAK TREE AUTO	MORGANVILLE	.000
NJD052438785	DREW CHEVROLET CO. INC.	ELIZABETH	.000
NJD002561868	DREW UNIVERSITY	MADISON	.000
NJD986597227	DREW UNIVERSITY	MADISON	.000
NJD981481757	DROGIN BUS COMPANY	BAYONNE	.000
NJD982541625	DRUM SERVICE OF NEWARK INC	NEWARK	.000
NJD980768352	DUBOW'S	JERSEY CITY	.000
NJD982534893	DUCHESS INDUSTRIES INC	LODI	.000
NJD001396068	DUFFY ELECTRONICS & MANUFACT	BELMAR	.000
NJD980786388	DUMONT AUTO BODY	DUMONT	.000
NJD981488166	DYNAMACR AUTO BODY INC	MONMOUTH JUNCTION	.000
NJ0981488166	DYNAMARC AUTO BODY INC	MONMOUTH	.000
NJD078595279	E COAST SPRAYING CO	NORTH BERGEN	.000
NJD054716063	E P HENRY INC	VINELAND	.000
NJD042416495	E W SAYBOLT & COMPANY	KENILWORTH	.000
NJD002385730	E.I. DUPONT-CHAMBERS WORKS	DEEPWATER	29,457,126.288
NJD082986423	EAST HANOVER COLLISION	EAST HANOVER	.000
NJD981140445	ECHO QUALITY CLEANERS INC	SPRINGFIELD	.000
NJD986591477	EDISON COLLISION	EDISON	.000
NJD986593689	EDISON COLLISION	EDISON	.000
NJD078258142	EDISON FOAM PROCESSING	EDISON	.000
NJD071628010	EDMUNDS AUTO BODY	PENNSAUKEN	.000
NJD002173946	EI DUPONT DENEMOURS & CO	POMPTON LAKES	.000
NJD981087083	EJ AUTO BODY	CHATAM	.000
NJD030249338	ELECTRICAL INDUSTRIES	MURRAY HILL	.000
NJD081898850	ELECTRO CERAMIC	HACKENSACK	.000
NJD981131667	ELECTRO PAINTERS INC	DELRAN	.000
NJD002527000	ELECTRO-SCAN INC	GARFIELD	.750
NJD986582898	ELECTROCATOLYTIC INC	UNION	.000
NJD981871346	ELITE BODYWORKS	ATCO	.000
NJD004151395	ELIZABETHTOWN WATER COMPANY	BOUND BROOK	.000
NJD011220381	ELMWOOD FORD SALES	ELMWOOD PARK	.000
NJD030291546	EM-GEE CLEANERS	CAMDEN	.000
NJD002596799	EMC TECHNOLOGY INC	CHERRY HILL	.000
NJD002348944	EMHART INDUSTRIES INC.	TRENTON	.000
NJD064274657	ENGELHARD CORP	NEWARK	.000
NJD000811034	ENGELHARD CORPORATION	ISELIN	.000
NJD041211392	ENGELHARD CORPORATION	CARTERET	.000
NJD056699267	ENGELHARD CORPORATION	UNION	.000
NJD986577781	EPOLIN/ACCORT LABS INC	NEWARK	.000
NJD982742447	EQUITABLE ENVELOPE CORP	BERGENFIELD	.000
NJD981087174	ERNIE'S AUTO BODY	PT PLEASANT	.000
NJD011418837	ESOCKS SUNOCO	MANVILLE	.000
NJD050273531	ESSEX AUTO BODY	HACKENSACK	.000
NJD002144145	ETHICON INC.	BRIDGEWATER	.000
NJD982536674	EUROCLASS AUTO WORKS	HASKELL	.000
NJD986597086	EUROTECH INC	ASBURY	.000
NJD981181985	EXCLUSIVE CLEANERS	NO BRUNSWICK	.000

* Please refer to the introduction for an explanation of this list.