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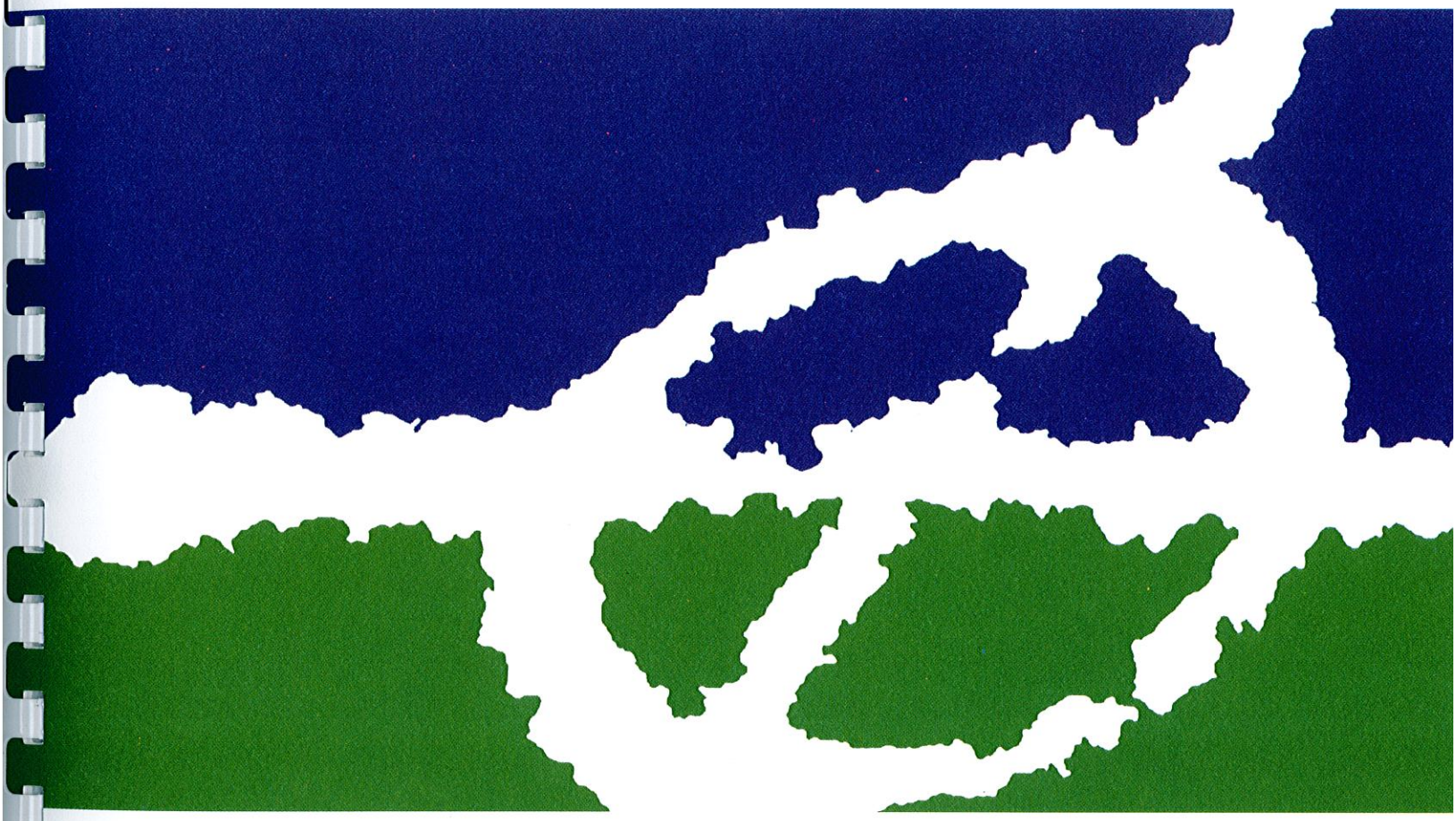

2009 POST-CLOSURE ANNUAL REPORT
Coakley Landfill
Operable Unit-1 and Operable Unit-2
North Hampton, New Hampshire

2009 POST-CLOSURE ANNUAL MONITORING REPORT

COAKLEY LANDFILL
OPERABLE UNIT-1 and OPERABLE UNIT-2
NORTH HAMPTON, NEW HAMPSHIRE
NHDES SITE #198712001
EPA ID #NHD064424153

Prepared For:
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Date: 2009.12.10 10:23:46 -05'00'

December 8, 2009

Project No. M9081

TABLE OF CONTENTS

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1.0 INTRODUCTION

At the request of the Coakley Landfill Group, Provan & Lorber, Inc. has performed post-closure monitoring for the former Coakley Landfill site (the "Site"), located in North Hampton and Greenland, New Hampshire. The Site includes approximately 92-acres located within the towns of North Hampton and Greenland, New Hampshire. The actual landfill covers approximately 27 acres. The Site is located between about 400 to 800 feet west of Lafayette Road (U.S. Rt. 1), south of Breakfast Hill Rd, and about 2.5 miles northeast of the center of the Town of North Hampton, New Hampshire. The Greenland-Rye town line forms a major portion of the eastern boundary of the Site. The landfill borders farmland, undeveloped woodlands and wetlands to the north and west. Commercial and residential properties border the Site to the east and south. Background information has been summarized in numerous previous reports, including the Project Operations Plan (POP), prepared in September 2007 by Golder Associates. A Site Location Map is included as **Figure 1**.

Groundwater monitoring was performed in accordance with the Groundwater Management Permit (GMP) issued June 19, 2008 and in accordance with the Project Operations Plan (POP) and Environmental Monitoring Plan (EMP) dated May 2009, with the exception noted in section 2.1, below. Additionally, samples from five wells were also analyzed for 1,4-dioxane in accordance with table 2-2 of the EMP.

2.0 MONITORING AND SAMPLING PROCEDURES

2.1 Groundwater Sampling Procedures

Water levels were measured in selected monitoring wells using an electronic water-level indicator prior to sampling. The calculated groundwater elevations are summarized on **Table 1**. Water level measurements were performed on August 16 and 17, 2009.

Sampling was performed from August 17 – 20, 2009. Monitoring wells were purged and sampled following low flow sampling techniques using dedicated Teflon-lined polyethylene tubing and a peristaltic pump. Prior to sampling, wells were purged, at a rate of approximately 1 cup per minute for between 30 and 75 minutes, until stabilization of the following monitoring parameters: temperature, pH, specific conductance, oxidation reduction potential (ORP), dissolved oxygen, and turbidity. Final stabilization readings are included on **Tables 2 and 3**. Samples were also collected from domestic wells R-3 and R-5, located at 399 and 364 Breakfast Hill Road, respectively. The water was allowed to run for approximately 10 minutes prior to sampling. Measurements were collected for the above-described stabilization parameters.

Upon collection, each water sample was placed in pre-cleaned laboratory glassware and plastic containers, preserved as appropriate for target compounds. Samples for analysis of dissolved metals were field filtered with 0.45-micron filters prior to preservation.

Samples were packaged on ice in a shipping cooler and delivered to Eastern Analytical Inc. in Concord, NH for laboratory analysis.

Samples were collected following the schedule outlined in the GMP and EMP, with the following exception. The depth to water in well MW-4 was too great to allow sampling using the peristaltic pump. Therefore, MW-4 was purged and sampled using a dedicated disposable bailer. A copy of the GMP is included in **Section 1**. Sample locations are illustrated on **Figure 2 – Site Plan**.

Sampling labels for the well pair FPC-5A and FPC-5B were switched in the field. This switch was confirmed using the known sampling order of the wells and the purge and sampling times on the sample containers and chain-of-custody. Similarly, samples from wells GZ-123 and GZ-125 were switched. In both cases, it was confirmed that the well closest to the access point was sampled first and the sample labels for the adjacent well were applied to the bottles. These corrections were made in the data tables and noted on the laboratory reports.

2.2 Surface Water and Sediment Sampling Procedures

Surface water and sediment samples were collected following the sampling schedule outlined in the GMP. A copy of the GMP is included **Section 1**. Surface water samples were collected prior to collection of the corresponding sediment sample, where applicable.

Surface water and leachate samples were collected by submersing the sample containers in the surface water. Where preserved sample containers were used, care was taken to not overfill the containers and the caps were used to fill the final portion of the container. Measurements were collected for temperature, pH, specific conductance, ORP, dissolved oxygen, and turbidity. Samples were packaged on ice in a shipping cooler and delivered to Eastern Analytical Inc. for laboratory analysis.

Sediment samples were collected using a stainless steel spoon and bowl. The spoon and bowl were decontaminated prior to collection of each sample. Plant material and rocks were removed from the soil and the sample was thoroughly mixed. Each sample was preserved, packaged on ice in a shipping cooler and delivered to Eastern Analytical Inc. for laboratory analysis.

Sediment and surface water sample locations are indicated on **Figure 2**.

2.3 Quality Control Samples

Duplicate samples were collected from MW-5S and AE-2B and analyzed for volatile organic compounds (VOCs), total 23 TAL metals, and for dissolved iron and manganese. The duplicate sample from MW-5S was also analyzed for 1,4-dioxane, ethylene dibromide (EDB), and dibromochloropropane (DBCP).

Matrix spike (MS) and matrix spike duplicate (MSD) samples were also collected from MW-5S and AE-2B for use in QA/QC for VOCs, total TAL metals, dissolved iron and manganese, 1,4-dioxane, EDB, and DBCP.

A duplicate sample was collected from the leachate location (L-1) and analyzed for COD, and ammonia. MS and MSD samples were also collected from L-1 for use in QA/QC for ammonia.

Field blanks were collected following sampling of wells FPC-7B and MW-4. Samples were collected by pouring deionized water into the sample containers and the samples were placed with the other samples collected from the Site. Both samples were analyzed for VOCs, total TAL metals, and for dissolved iron and manganese. The sample collected after well MW-4 was also analyzed for ammonia, 1,4-dioxane, EDB, and DBCP.

Duplicate and MS/MSD samples were collected for sediment sample SED-5 for 23 TAL metals. One field equipment blank was collected for the bowl and spoon used for collection of the sediment samples. Following collection of the sediment samples and decontamination procedures, deionized water was placed in the bowl and stirred with the spoon. The water was then poured into a sample container. The sample was analyzed for total 23 TAL metals.

Each set of samples sent to the laboratory was accompanied by a trip blank that was analyzed for VOCs.

An EPA Region I, Tier I data validation was performed for the laboratory analytical data by *Environmental Data Validation, Inc.*

3.0 FINDINGS

3.1 Groundwater Results

The general groundwater flow direction was determined to be westerly to northwesterly in both the overburden and bedrock wells. Groundwater contours constructed from the August 2009 water table data for overburden wells and bedrock wells are illustrated in **Figures 3 and 4**, respectively. Groundwater elevations decreased an average of 0.11 feet in overburden wells and an average of 0.06 feet in bedrock wells between the August 2008 and August 2009 sampling events. An upward hydraulic gradient was observed at well pairs MW-5S/5D, FPC-2A/B, FPC-5A/B, FPC-6A/B, AE-2A/B, and GZ-123/GZ-125. Downward hydraulic gradients were observed in well pairs FPC-7A/B, FPC-8A/B, FPC-11A/B, AE-1A/B, AE-3A/B, and AE-4A/B.

Concentrations of arsenic exceeded the interim cleanup level (ICL) in Operable Unit 1 (OU-1) in the following wells: MW-4, MW-5S, MW-9, MW-10, MW-11, OP-2, OP-5, and BP-4.

Concentrations of manganese exceeded the ICL in OU-1 in the following wells: MW-4, MW-5S, MW-5D, MW-6, MW-8, MW-9, MW-10, MW-11, OP-2, and OP-5.

The concentration of tetrahydrofuran exceeded the ICL in OU-1 well MW-8.

Concentrations of arsenic exceeded the ICL in Operable Unit 2 (OU-2) in the following wells: FPC-5A, FPC-6A, FPC-9A, FPC-11B, GZ-105, AE-1A, AE-2A, AE-2B, AE-3A, and AE-3B.

Concentrations of manganese exceeded the ICL in OU-2 in the following wells: FPC-2A, FPC-6A, FPC-6B, FPC-11B, GZ-105, GZ-123, AE-1B, AE-2A, AE-2B, AE-3A, AE-3B, and AE-4A.

Concentrations of benzene exceeded the ICL in OU-2 well GZ-105.

Concentrations of dissolved manganese in AE-1A slightly exceeded the ICL, while total manganese was below the ICL. For the remaining wells sampled for dissolved iron and manganese, concentration of dissolved metals exceeded ICLs where concentrations of total metals exceeded ICLs.

1,4-Dioxane was detected at concentrations ranging from 70 micrograms per liter (µg/l) to 310 µg/l in samples collected from four of the five monitoring wells tested. 1,4-Dioxane was not detected in the sample collected from one monitoring well. An Interim Cleanup Level (ICL) has not been established for this site for 1,4-dioxane. However, the New Hampshire Ambient Groundwater Quality Standard (AGQS) for 1,4-dioxane is 3 µg/l.

Ethylene dibromide (EDB) and dibromochloropropane (DBCP) were not detected at the lower detection limits by EPA Method 8011/504.

Groundwater analytical results for OU-1 and OU-2 wells are summarized on **Tables 2 and 3**, respectively. Target compounds were not detected in the samples collected from the residential wells. Residential well results are summarized on **Table 4**. The laboratory reports are included in **Section 2**.

The lateral distributions of arsenic and manganese in overburden and bedrock wells are illustrated on **Figures 5 through 8**. Charts illustrating contaminant concentrations over time for arsenic, manganese, and benzene in selected wells are included in **Section 3**.

3.2 Surface Water Results

Concentrations of iron exceeded the DES chronic surface water standard at surface water locations SW-5, SW-103, and L-1.

Concentrations of lead exceeded the DES chronic surface water standard but were below the acute surface water standard at surface water locations SW-4 and SW-5.

Concentrations of zinc exceeded the DES acute and chronic surface water standards at surface water locations SW-5 and SW-103.

The concentration of 1,4-dioxane at leachate location L-1 exceeded the New Hampshire AGQS. A site-specific ICL has not been established for 1,4-dioxane. EDB and DBCP were not detected.

Surface water analytical results are summarized on **Table 5**. Historic results for SW-5 are summarized on **Table 6**. Leachate results are summarized on **Table 7**. The laboratory reports are included in **Section 2**.

3.3 Sediment Sample Results

The concentration of arsenic exceeded the NHDES S-1 soil standard at sediment location SED-5. A summary of sediment sample analytical results is included on **Table 8**. The laboratory reports are included in **Section 2**.

3.4 Quality Control Sample Results

Variations in duplicate, matrix spike, and matrix spike duplicate samples met accepted criteria.

Target compounds were not detected in any of the field blank or trip blank samples.

Calcium was detected in the bowl equipment blank sample. This compound was detected at considerably higher concentrations in each of the sediment samples.

Selenium was detected at the reporting limit in the sample from MW-5S, but was below the reporting limit in the duplicate sample.

Copper was detected in the sample from AE-2B at a concentration of 0.001 mg/l and at a concentration of 0.003 mg/l in the duplicate sample. These concentrations are far below groundwater standards and the differences do not effect conclusions for the site.

One of the laboratory control samples for beryllium did not meet the accepted QA/QC criteria. However, the high bias has no impact on the data reported, since beryllium was not detected in the associated field samples.

Recoveries for three compounds in the laboratory control sample for one set of the VOC analyses were out of accepted ranges. However, these three compounds were not detected in any of the samples from the Site.

3.5 Data Validation Review

Due to low laboratory control sample recoveries, three compounds in six samples were classified as “UJ – The analyte was analyzed for, but was not detected. The sample

quantitation limit is an estimated quantity." No other problems or errors were identified during the Tier I data validation. The data validation reports are included in **Section 4**.

4.0 SUMMARY AND CONCLUSIONS

Based on data collected at the Site during 2009, Provan & Lorber concludes the following:

- Water samples were collected from 36 monitoring wells, 3 surface water locations, 1 leachate location, and 2 domestic wells. Two sediment soil samples were also collected.
- Groundwater flows in both overburden and bedrock wells were calculated to be westerly to northwesterly during the August 2009 monitoring event, consistent with previous monitoring events.
- An upward hydraulic gradient was observed at well pairs MW-5S/5D, FPC-2A/B, FPC-5A/B, FPC-6A/B, AE-2A/B, and GZ-123/GZ-125. Downward hydraulic gradients were observed in well pairs FPC-7A/B, FPC-8A/B, FPC-11A/B, AE-1A/B, AE-3A/B, and AE-4A/B
- Interim cleanup levels (ICLs) were exceeded in samples collected from all eleven (11) monitoring wells in Operable Unit #1. ICLs were exceeded in samples collected from fifteen (15) of twenty five (25) monitoring wells in Operable Unit #2. The most common exceedences were for arsenic and manganese. Exceedences were also noted for benzene and tetrahydrofuran.
- 1,4-Dioxane was detected in four of five samples from monitoring wells and in the leachate sample at concentrations exceeding the New Hampshire AGQS. An ICL has not been established for the site. EDB and DBCP were not detected.
- Concentrations of target compounds were generally consistent with historical results. Concentrations have remained generally stable to decreasing at the Site with slight increasing trends in some wells and decreasing trends in others.
- NHDES surface water standards were exceeded in all three surface water samples and the leachate sample collected in 2009. Exceedences were noted for copper, iron, lead, zinc, and ammonia.
- The NHDES S-1 soil standard was exceeded for arsenic in the sediment sample collected from one (1) of the two (2) sample locations.
- Variations in duplicate, matrix spike, and matrix spike duplicate samples met accepted criteria.
- Target compounds were not detected in any of the field blank or trip blank samples. Calcium was detected in the bowl equipment blank sample. Considerably higher concentrations of calcium were detected in the sediment samples.

- Based on this data, cross contamination does not appear to be an issue for the Site. The presence of calcium in the blank sample does not appear to impact the conclusions for the Site.
- The data validation review indicated no significant problems or errors.
- No other significant quality control discrepancies were noted.

5.0 RECOMMENDATIONS

Based on data collected at the Site, Provan & Lorber recommends the following:

- In accordance with the current monitoring plan, the next monitoring event should be scheduled for August 2010.
- Additional analyses for 1,4-dioxane should be performed. To characterize the extent of impact, we recommend the sampling of overburden wells MW-4, MW-5S, FPC-8A, AE-2A, MW-9, AE-3A, OP-5, and OP-2 and bedrock wells MW-5D, MW-6, MW-11, FPC-8B, AE-2B, MW-8, AE-3B, and BP-4 for 1,4-dioxane during the August 2010 sampling event.

If you have any questions, please do not hesitate to call me at (603) 746-3220.

Sincerely,

Kevin McKibben

Kevin McKibben, P.G.
Environmental Department Manager
Provan & Lorber, Inc.

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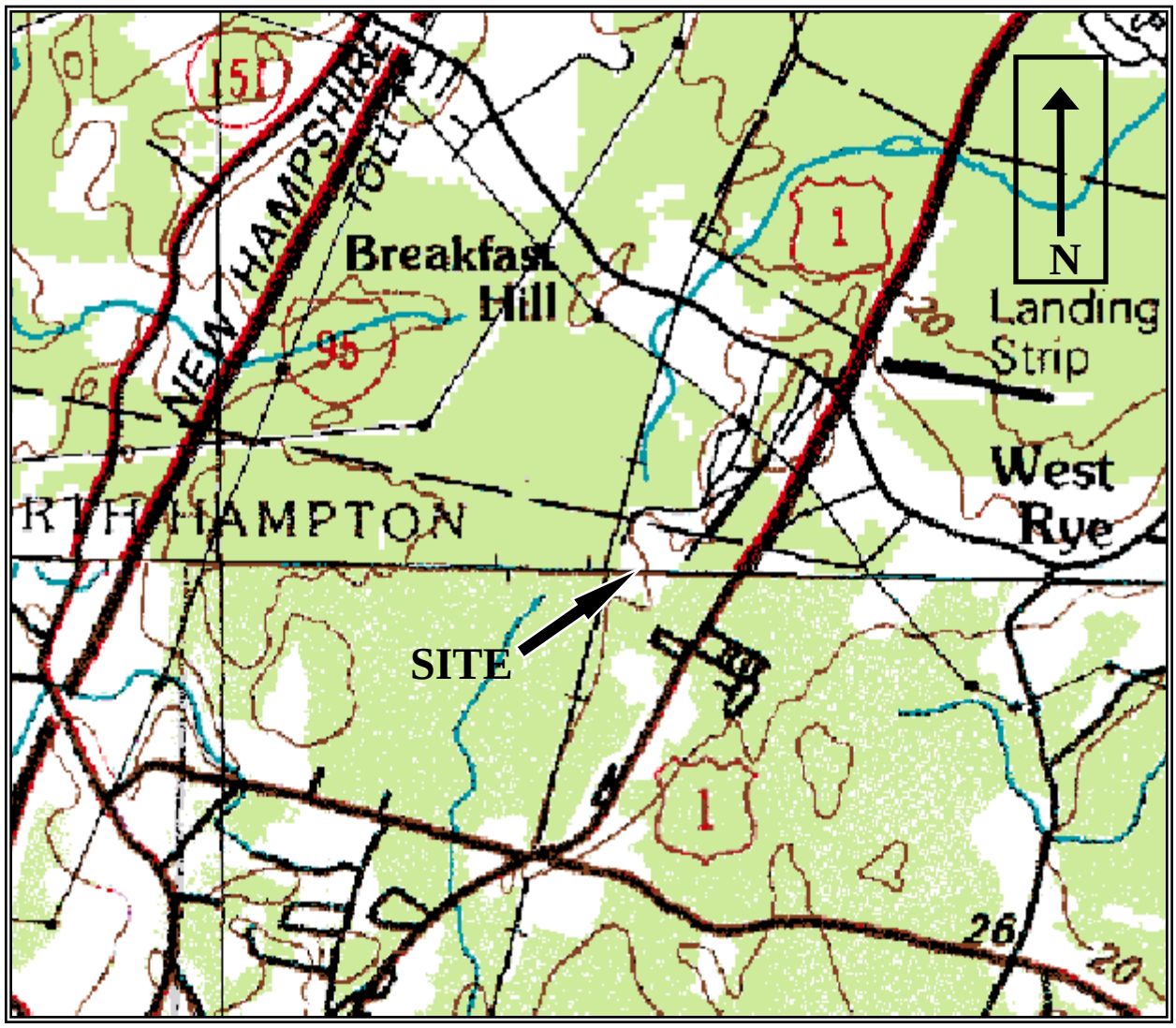
FIGURES



Map Based on USGS
Dover, NH (1985)
and
Exeter, NH (1977)
Quadrangle Maps, 15' Series

Figure 1

LOCATION MAP

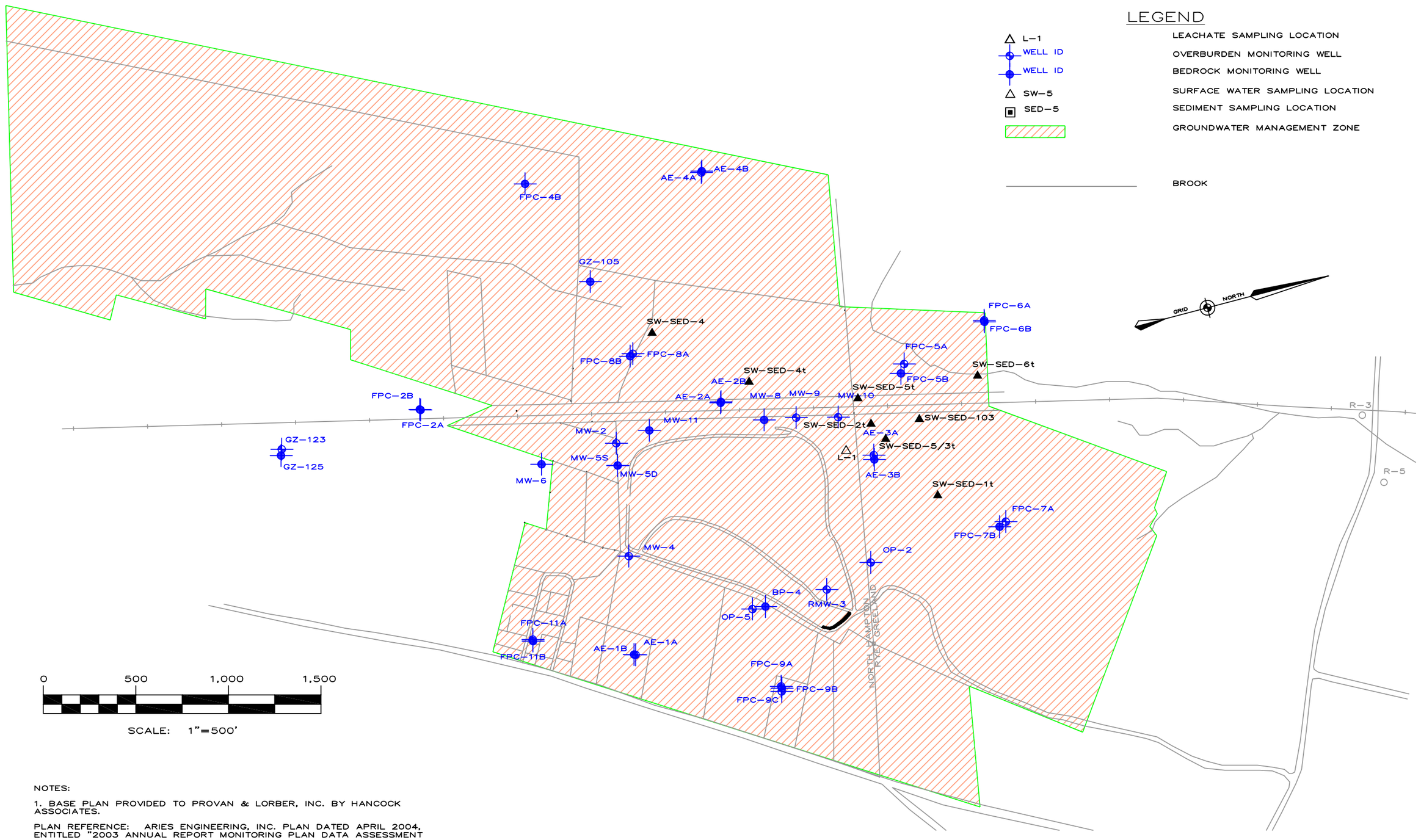
Coakley Landfill

North Hampton, NH

Provan & Lorber, Inc.
Project M9081 December 2009

LEGEND

- L-1 — LEACHATE SAMPLING LOCATION
- WELL ID — OVERBURDEN MONITORING WELL
- WELL ID — BEDROCK MONITORING WELL
- SW-5 — SURFACE WATER SAMPLING LOCATION
- SED-5 — SEDIMENT SAMPLING LOCATION
- GROUNDWATER MANAGEMENT ZONE
- BROOK



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2. ADDITIONAL MONITORING WELL LOCATIONS BASED ON PLAN BY GOLDER ASSOCIATES TITLED "ENVIRONMENTAL MONITORING NETWORK" DATED 08/16/07.

3. SURFACE WATER AND SEDIMENT SAMPLE LOCATIONS BASED ON A SEPTEMBER 2007 PLAN FROM THE CITY OF PORTSMOUTH TITLED "SEDIMENT TOXICITY SAMPLE LOCATIONS".

NO.	DATE	REVISION	ENG	DWG

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603 444-6301

COAKLEY LANDFILL
NORTH HAMPTON, NH

SITE PLAN

DATE	
SEPTEMBER 2009	
ENG. BY: ENG	DRWN. BY: DRWN
CHKD.BY: KMM	PROJ. NO.: M9081

FIGURE 2

LEGEND

WELL ID
ELEV.

OVERBURDEN MONITORING WELL

GROUNDWATER MANAGEMENT ZONE

ELEV. CONTOUR

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009

GRID NORTH

AE-4A
73.20'

FPC-6A
72.22'

FPC-8A
72.73'

FPC-5A
73.37'

75.0'

FPC-2A
76.12'

AE-2A
75.29'

MW-9
75.35'

MW-10
74.50'

R-3

GZ-123
78.28'

MW-2
88.40'

AE-3A
78.68'

80.0'

MW-5S
87.45'

GROUNDWATER FLOW DIRECTION

R-5

FPC-7A
81.16'

85.0'

MW-4
98.43'

OP-2
92.47'

90.0'

RMW-3

OP-5
98.28'

FPC-11A
97.95'

95.0'

AE-1A
98.19'

NORTH HAMPTON STATE GREENLAND

FPC-9A
97.90'

FPC-9C
98.10'

0 500 1,000 1,500

SCALE: 1"=500'

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COAKLEY LANDFILL
NORTH HAMPTON, NH

OVERBURDEN GROUNDWATER ELEVATION CONTOUR MAP
AUGUST 2009

DATE	
SEPTEMBER 2009	
ENG. BY: IG	DRWN. BY: DRWN
CHKD.BY: KMM	PROJ. NO.: M9081

FIGURE 3

LEGEND

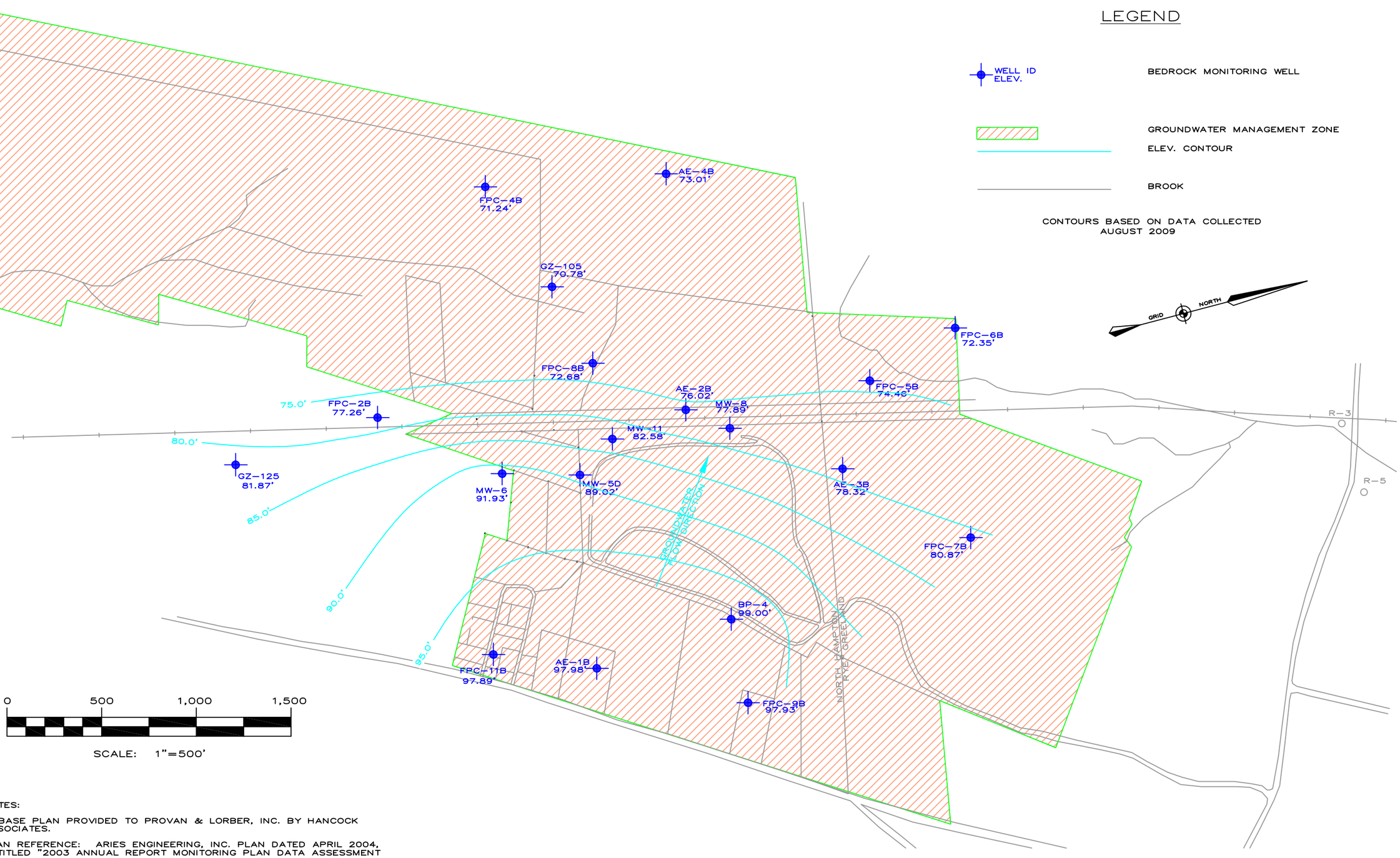
WELL ID
ELEV.
BEDROCK MONITORING WELL

GROUNDWATER MANAGEMENT ZONE

ELEV. CONTOUR

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009



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BEDROCK GROUNDWATER
ELEVATION CONTOUR MAP
AUGUST 2009

DATE	SEPTEMBER 2009
ENG. BY	IG
DRWN. BY	DRWN
CHKD.BY	KMM
PROJ. NO.	M9081

FIGURE 4

LEGEND

WELL ID
CONCENTRATION (ug/l) — OVERBURDEN MONITORING WELL

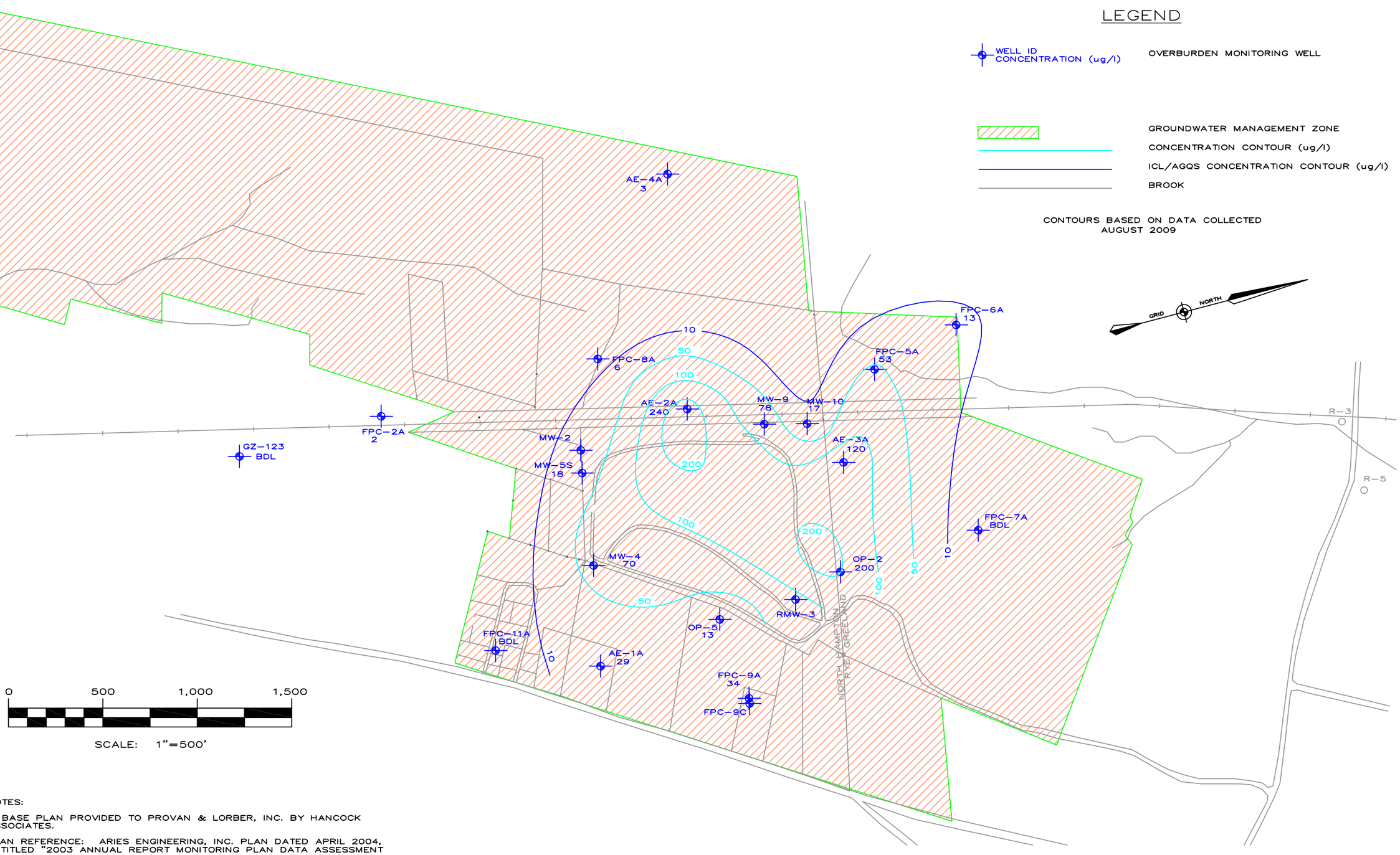
GROUNDWATER MANAGEMENT ZONE

CONCENTRATION CONTOUR (ug/l)

ICL/AGQS CONCENTRATION CONTOUR (ug/l)

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009



0 500 1,000 1,500

SCALE: 1"=500'

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NORTH HAMPTON, NH

ARSENIC CONCENTRATIONS
OVERBURDEN WELLS
AUGUST 2009

DATE	
SEPTEMBER 2009	
ENG. BY: IG	DRWN. BY: DRWN
CHKD.BY: KMM	PROJ. NO.: M9081

FIGURE 5

LEGEND

WELL ID
CONCENTRATION (ug/l) — OVERBURDEN MONITORING WELL

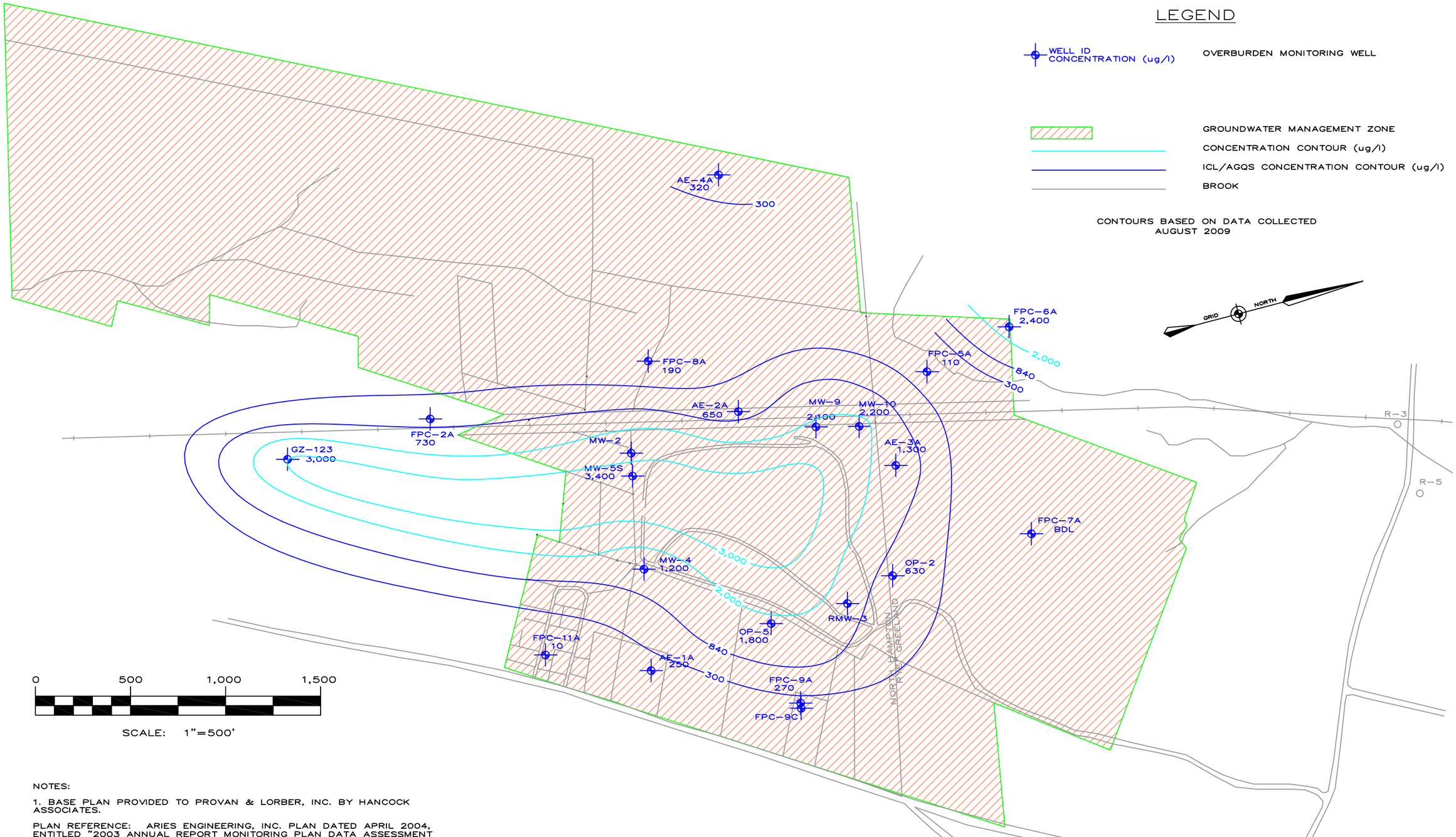
GROUNDWATER MANAGEMENT ZONE

CONCENTRATION CONTOUR (ug/l)

ICL/AGQS CONCENTRATION CONTOUR (ug/l)

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009



0 500 1,000 1,500

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NORTH HAMPTON, NH

MANGANESE CONCENTRATIONS
OVERBURDEN WELLS
AUGUST 2009

DATE	
SEPTEMBER 2009	
ENG. BY: IG	DRWN. BY: DRWN
CHKD.BY: KMM	PROJ. NO.: M9081

FIGURE 6

LEGEND

WELL ID
CONCENTRATION (ug/l) — BEDROCK MONITORING WELL

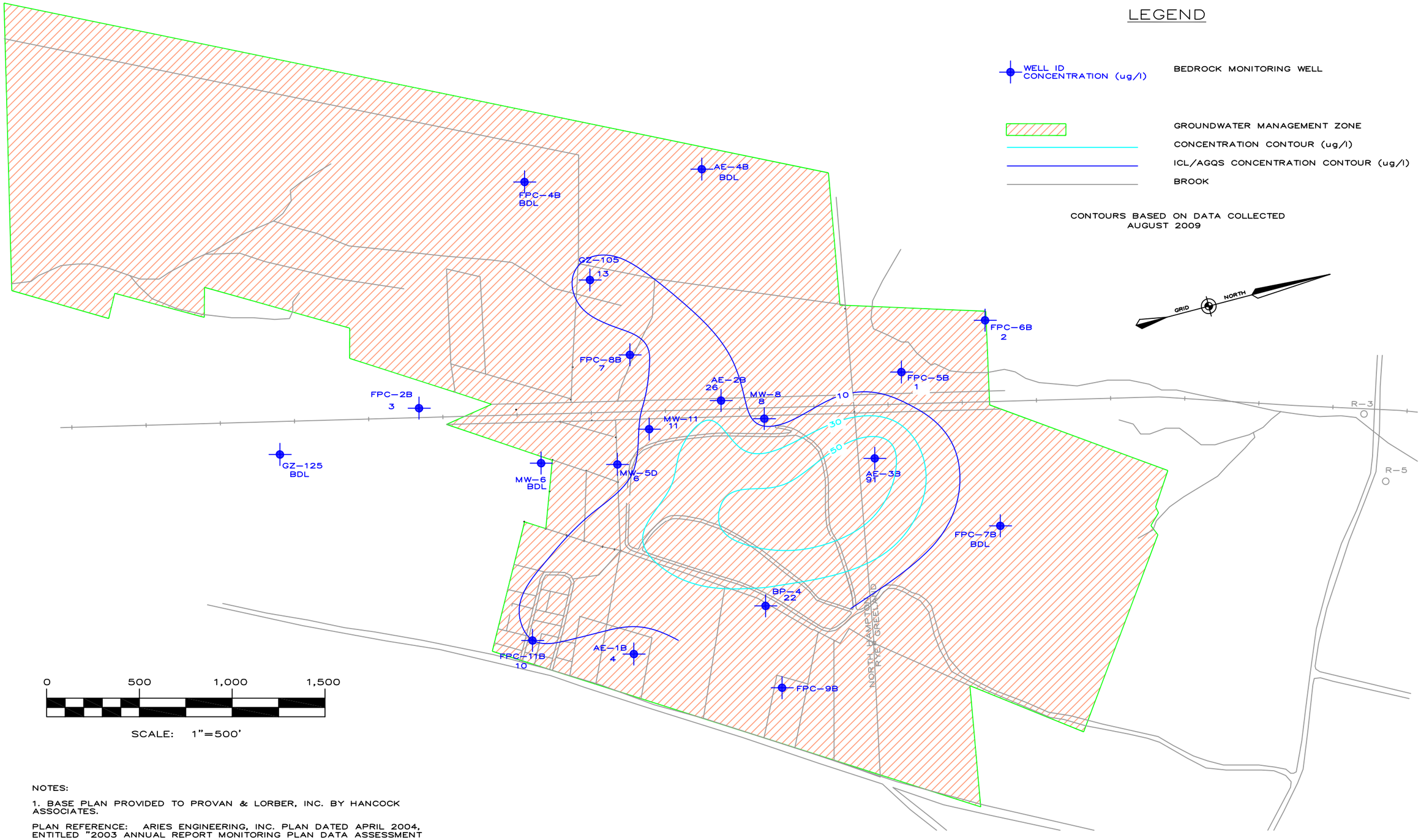
GROUNDWATER MANAGEMENT ZONE

CONCENTRATION CONTOUR (ug/l)

ICL/AGQS CONCENTRATION CONTOUR (ug/l)

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009



NOTES:

1. BASE PLAN PROVIDED TO PROVAN & LORBER, INC. BY HANCOCK ASSOCIATES.

PLAN REFERENCE: ARIES ENGINEERING, INC. PLAN DATED APRIL 2004, ENTITLED "2003 ANNUAL REPORT MONITORING PLAN DATA ASSESSMENT REPORT, COAKLEY LANDFILL, NORTH HAMPTON, NEW HAMPSHIRE, SITE PLAN.

2. ADDITIONAL MONITORING WELL LOCATIONS BASED ON PLAN BY GOLDER ASSOCIATES TITLED "ENVIRONMENTAL MONITORING NETWORK" DATED 08/16/07.

3. SURFACE WATER AND SEDIMENT SAMPLE LOCATIONS BASED ON A SEPTEMBER 2007 PLAN FROM THE CITY OF PORTSMOUTH TITLED "SEDIMENT TOXICITY SAMPLE LOCATIONS".

NO.	DATE	REVISION	ENG	DWG

Provan & Lorber, Inc.
ENGINEERS AND PLANNERS

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PO Box 389
03229
603 746-3220

Littleton, NH
101 Cottage Street
03561
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COAKLEY LANDFILL
NORTH HAMPTON, NH

ARSENIC CONCENTRATIONS
BEDROCK WELLS
AUGUST 2009

DATE	
SEPTEMBER 2009	
ENG. BY	DRWN. BY
IG	DRWN
CHKD.BY	PROJ. NO.
KMM	M9081

FIGURE 7

LEGEND

WELL ID
CONCENTRATION (ug/l) — BEDROCK MONITORING WELL

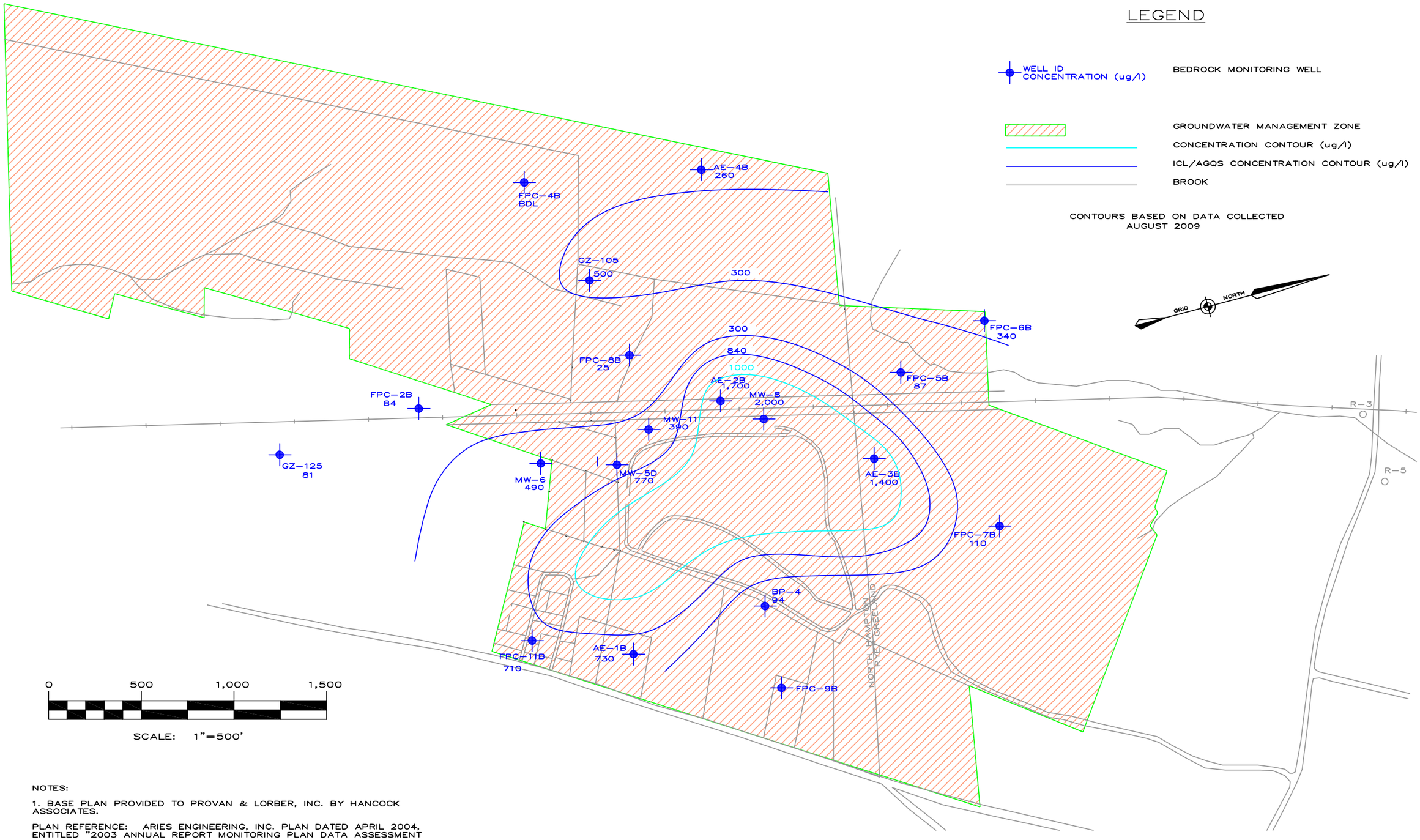
GROUNDWATER MANAGEMENT ZONE

CONCENTRATION CONTOUR (ug/l)

ICL/AGQS CONCENTRATION CONTOUR (ug/l)

BROOK

CONTOURS BASED ON DATA COLLECTED
AUGUST 2009



NOTES:

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COAKLEY LANDFILL
NORTH HAMPTON, NH

MANGANESE CONCENTRATIONS
BEDROCK WELLS
AUGUST 2009

DATE	SEPTEMBER 2009
ENG. BY	IG
DRWN. BY	DRWN
CHKD.BY	KMM
PROJ. NO.	M9081

FIGURE 8

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATION DATA
2008 ANNUAL MONITORING REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

MONITORING WELL IDENTIFICATION	Ref. Pt Elev. (FT. NGVD)	Apr-93 GW. EL. FT.	Dec-96 GW. EL. FT.	Apr-97 GW. EL. FT.	Sep-97 GW. EL. FT.	Dec-97 GW. EL. FT.	Jun-98 GW. EL. FT.	Aug-98 GW. EL. FT.	Apr-99 GW. EL. FT.	Aug-99 GW. EL. FT.	Nov-99 GW. EL. FT.	Apr-00 GW. EL. FT.	Aug-00 GW. EL. FT.	Nov-00 GW. EL. FT.	Apr-01 GW. EL. FT.	Aug-01 GW. EL. FT.	Jun-02 GW. EL. FT.	Aug-02 GW. EL. FT.	Aug-03 GW. EL. FT.	Aug-04 GW. EL. FT.	Aug-05 GW. EL. FT.	Aug-06 GW. EL. FT.	Nov-07 GW. EL. FT.	Aug-08 GW. EL. FT.	Aug-09 GW. EL. FT.
BP-4	111.70		98.94	97.83	96.07	95.84	99.55	97.03	97.04	95.26	95.93	97.1	96.93	96.03	99.37	96.29	97.27	96.26	96.51	96.89	96.34	97.71	95.72	97.52	99.00
MW-2	94.54															86.75	89.00				NM	NM	88.61	88.95	88.40
MW-4	129.12	101.52							98.41	95.94	96.78	97.92	97.61	96.65	100.33	96.88	98.01	96.99	97.07	97.35	96.71	98.12	96.17	97.98	98.43
MW-5S	98.42	93.69							88.35	84.27	87.42	87.96	87.57	87.70	88.70	85.79	87.92	85.24	85.17	87.35	85.00	87.88	86.00	87.93	87.45
MW-5D	98.39								89.89	85.84	88.77	89.41	88.59	88.98	90.39	87.27	89.27	86.79	87.89	88.63	86.69	88.49	87.28	89.09	89.02
MW-6	101.15	93.4	93.84	93.44	90.04	92.25	93.44	91.33	92.55	88.03	91.98	92.52	92.20	92.32	93.23	89.79	92.50	89.16	90.09	92.13	89.01	92.46	90.52	92.42	91.93
MW-8	85.30		81.1	79.46	78.48	78.07	78.71	76.66	78.6	75.32	77.91	78.37	77.98	78.50	78.61	76.30	78.21	75.92	76.60	77.86	75.94	78.18	76.89	78.48	77.89
MW-9	82.62		77.97	78.03	75.87	76.06	77.16	74.47	75.82	73.42	75.46	76.09	76.00	76.86	76.88	74.10	75.74	73.81	73.28	76.13	73.94	75.71	75.80	76.88	75.35
MW-10	80.60		74.56	74.67	73.96	74.07	74.68	73.17	74.51	72.78	74.57	74.63	74.83	75.06	75.22	73.93	74.91	73.45	74.20	74.93	73.99	74.71	74.95	74.86	74.50
MW-11	92.70		87.21	85.36	83.56	83.81	83.69	81.77	83.42	79.17	82.42	82.8	82.35	82.40	83.09	80.59	82.67	80.11	81.24	82.26	79.85	82.89	81.07	82.99	82.58
OP-2	98.49	91.44	95.86	95.4				92.85	92.11	89.52	90.88	91.86	91.76	91.24	85.74	90.49	91.98	90.34	90.75	91.54	90.43	92.29	90.77	92.53	92.47
OP-5	112.68	94.92	99.26	98.28	96.59	96.41	100.41	100.41	97.39	95.84	96.41	97.58	97.33	96.40	107.29	97.54	97.72	96.82	96.98	97.31	96.78	98.03	96.04	97.81	98.28
RMW-3	117.61	95.03	99.81	98.45				90.96	89.61	87.25	88.15	89.3	89.17	88.32	91.58	88.59	89.82	88.60	88.58	88.62	88.73	obstructed	obstructed	obstructed	obstructed
FPC-2A	78.40											75.69	76.70	76.98	NR		76.66	78.40	76.24	76.31	75.66	76.32	75.90	76.30	76.12
FPC-2B	77.98											77.47	77.30	77.71	77.78		77.38	76.37	76.81	77.28	76.45	77.30	76.90	77.46	77.26
FPC-4B	75.83	71.83																	69.96	71.58	68.21	71.63	70.95	71.81	71.24
FPC-5A	74.30	75.01	74.44	74.44	73.94		74.44	73.29	74.14	72.2	73.93	73.9	73.98	74.18	74.14	73.02	73.10	73.03	73.10	74.30	72.18	73.50	73.50	73.73	73.37
FPC-5B	74.90	74.85	74.81	74.81	73.91	74.21	74.81	73.3	74.6	72.38	74.48	74.25	74.60	74.77	74.70	73.43	70.96	73.15	74.23	74.40	73.19	74.66	74.50	74.85	74.46
FPC-6A	77.00	73.23							72.74		72.84	72.85	72.85	73.11	73.01		72.65			72.83	70.71	72.83	72.38	73.02	72.22
FPC-6B	77.10	73.20							72.81	69.86	72.94		72.09	73.21	73.14	70.88	72.33	70.30	71.94	70.32	68.37	70.47	70.19	72.93	72.35
FPC-7A	82.08	81.63							81.36										80.12	80.99	80.03	81.46	81.30	81.49	81.16
FPC-7B	82.33	80.53							80.93										79.82	80.72	79.69	81.02	79.43	81.20	80.87
FPC-8A	73.80	73.85	73.67	73.65	71.49	73.15	73.49	71.01	73.04	69.23	72.93	72.93	72.88	73.34	73.20	71.06	72.99	70.36	71.26	72.86	70.63	73.01	72.20	73.09	72.73
FPC-8B	73.60	72.83	73.52	73.49	71.44	73.04	73.33	70.84	72.88	69.14	72.77	72.78	72.63	73.18	72.99	70.93	72.79	70.07	71.22	72.69	70.58	72.83	72.03	72.00	72.68
FPC-9A	117.57	99.87							97.32	95.02	95.72	96.92	96.75	95.90	99.22	96.25	97.05	96.02	96.27	96.40	95.83	97.59	95.48	97.44	97.90
FPC-9B	117.87	99.99							97.81	95.07	95.79	96.98	96.83	95.99	99.28	96.15	97.08	96.11	96.37	NM	NM	NM	95.14	97.41	97.93
FPC-9C	117.75	100.45							97.87	95.77	96.33		97.25	96.50	99.62	NM	97.52		96.75	NM	NM	NM	96.08	97.62	98.10
FPC-11A	117.95	100.4							97.7										96.65	97.01	96.51	97.71	95.81	97.58	97.95
FPC-11B	117.90	96.5							97.74										96.70	96.90	96.34	97.69	95.54	97.57	97.89
AE-1A	127.00								97.95	95.55	96.21	97.37	97.23	96.34	99.67	96.54	97.54	96.53	96.67	97.05	97.35	98.10	95.89	97.74	98.19
AE-1B	126.80								97.91	95.51	96.13	97.35	97.19	96.31	99.65	96.43	97.51	96.51	96.65	97.09	96.49	98.09	95.87	97.73	97.98
AE-2A	79.60									72.49	75.74	75.71	75.67	76.03	75.69	73.58	75.66	72.98	73.75	75.19	73.18	75.70	74.69	75.81	75.29
AE-2B	79.50									72.59	75.79	75.79	75.44	76.04	75.78	73.49	75.65	73.16	74.42	75.33	73.60	75.61	74.22	75.94	76.02
AE-3A	86.10								77.47	76.64	77.74	77.56	77.99	77.92	77.80	77.05	77.70	76.86	76.30	77.90	77.14	78.02	77.90	77.98	78.68
AE-3B	87.30								78.55	77.19	78.38	78.35	78.47	78.61	78.64	78.30	78.49	77.47	77.90	78.58	76.86	78.66	78.47	78.50	78.32
AE-4A	77.20																			73.47	70.75	73.75	72.91	73.10	73.20
AE-4B	77.50																			73.42	70.51	73.30	72.28	73.61	73.01
GZ-105	73.60	66.42							70.86	67.46	70.77	70.78	69.82	71.16	71.02	69.31	70.83	68.45	69.71	71.09	69.28	70.91	70.68	71.05	70.78
GZ-109	119.36	99.49	98.8	98.01	95.84	95.68	99.08	96.99	97.39	94.91	94.59	96.81									NM				
GZ-123	87.49																						76.91	77.90	78.28
GZ-125	88.77																						80.35	81.73	81.87

NOTES:
1. Shaded data denotes a bedrock monitoring well.
2. A blank indicates data was not collected.
3. GW.EL. indicates groundwater elevation and FT. indicates measurements were in feet.

TABLE 2

SUMMARY OF OU-1 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

CONTAMINANT OF CONCERN	**INTERIM**	MW-4	MW-4	MW-4	MW-4	MW-4	MW-5S	MW-5S	MW-5S	MW-5S	**MW-5D**	**MW-5D**	**MW-5D**	**MW-5D**	**MW-6**	**MW-6**	**MW-6**	**MW-8**	**MW-8**	**MW-8**
DATE SAMPLED	**CLEANUP**	30-Aug-05	30-Aug-06	16-Nov-07	13-Aug-08	20-Aug-09	29-Aug-06	9-Nov-07	13-Aug-08	20-Aug-09	29-Aug-06	15-Nov-07	13-Aug-08	20-Aug-09	12-Nov-07	12-Aug-08	19-Aug-09	13-Nov-07	13-Aug-08	20-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	**LEVEL**																			
Acetone	**6,000**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	**5**	BDL	NA	NA	NA	NA	BDL	5	4	3	2	3	2	2	BDL	BDL	BDL	3	4	4
Chlorobenzene	**100**	4	NA	NA	NA	NA	BDL	3	2	2	4	5	4	3	BDL	BDL	BDL	3	4	3
Chloroethane		BDL	NA	NA	NA	NA	BDL	13	9	8	24	33	38	32	BDL	BDL	BDL	19	21	18
Chloromethane	**30**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4 Dichlorobenzene	**75**	BDL	NA	NA	NA	NA	BDL	3	2	3	BDL	2	2	2	BDL	BDL	BDL	2	2	2
1,1 Dichloroethane	**81**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethylbenzene	**700**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isopropylbenzene	**800**	BDL	NA	NA	NA	NA	BDL	2	1	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	2	2
p - Isopropyltoluene	**260**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	**20**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Diethyl Ether	**1,400**	BDL	NA	NA	NA	NA	BDL	52	45	37	89	130	120	100	BDL	BDL	BDL	130	110	99
Tetrahydrofuran	**154**	BDL	NA	NA	NA	NA	BDL	60	40	40	110	110	110	90	BDL	BDL	BDL	180	180	180
Toluene	**1,000**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	1	1
1,3,5 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene		BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m&p - Xylene		BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	2	1
1,4-Dioxane				NA	NA	NA		NA	NA	70		NA	NA	140	NA	NA	BDL	NA	NA	310
Methylethylketone (MEK)	**200**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylisobutylketone (MIBK)	**2,000**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl-t-butyl Ether (MTBE)	**13**	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5	BDL	BDL	BDL	BDL	BDL
Tertiary-butyl Alcohol (TBA)			NA	NA	NA	NA		BDL	BDL	BDL		60	50	40	BDL	BDL	BDL	70	70	60
METALS IN ug/l																				
Aluminum		BDL	34,000	28,000	34,000	BDL	BDL	BDL	BDL	BDL	8	BDL	BDL	BDL	BDL	BDL	BDL	60	60	BDL
Arsenic	**10**	130	43	58	69	70	10	26	26	18	5	11	5	6	BDL	BDL	BDL	10	8	8
Barium		530	190	200	250	73	190	210	190	180	120	130	110	120	BDL	BDL	BDL	170	190	210
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		120,000	66,000	88,000	80,000	65,000	54,000	45,000	43,000	42,000	48,000	30,000	31,000	32,000	13,000	11,000	11,000	31,000	36,000	42,000
Chromium	**50**	600	150	140	190	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper		170	38	71	78	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	1	2	1	BDL	BDL
Iron (Total)		380,000	110,000	160,000	150,000	24,000	17,000	25,000	23,000	16,000	17,000	15	12,000	15,000	5,800	1,800	8,000	4,300	6,500	5,600
Dissolved Iron		17,000	27,000	24,000	50,000	23,000	19,000	23,000	21,000	14,000	NA	NA	NA	NA	3,900	250	340	NA	NA	NA
Lead	**15**	100	23	37	43	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Magnesium		84,000	38,000	39,000	47,000	24,000	30,000	24,000	22,000	26,000	44,000	27,000	26,000	32,000	5,200	4,000	4,500	36,000	40,000	50,000
Mercury		BDL	BDL	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	410	99	130	150	9	17	22	19	14	14	11	12	10	3	1	2	19	26	22
Potassium		60,000	39,000	44,000	49,000	38,000	27,000	22,000	22,000	25,000	30,000	22,000	23,000	25,000	1,700	1,500	1,600	12,000	14,000	14,000
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	4	BDL	2	4	BDL	BDL	BDL	BDL	3	5
Silver		BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		52,000	56,000	39,000	43,000	34,000	76,000	110,000	87,000	94,000	140,000	170,000	160,000	140,000	12,000	10,000	11,000	240,000	210,000	210,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		540	91	190	210	6	6	14	BDL	BDL	7	BDL	BDL	BDL	9	6	8	18	BDL	BDL
Cobalt		130	34	53	53	5	8	11	11	7	BDL	BDL	1	BDL	BDL	BDL	BDL	3	6	3
Beryllium	**4**	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	13,000	4,500	5,900	5,800	1,200	3,700	4,400	3,900	3,400	890	860	780	770	740	520	490	1,600	1,900	2,000
Dissolved Manganese		1,500	1,300	1,300	2,600	1,200	3,700	4,200	4,300	3,200	NA	NA	NA	NA	820	470	510	NA	NA	NA
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	350	63	82	91	2	BDL	BDL	BDL	BDL	BDL	1	1	1	BDL	BDL	BDL	1	2	2
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarb		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																				
Temperature Degrees C		18.55	17.10	13.20	18.36	15.50	12.25	9.79	13.30	12.25	11.33	11.48	12.37	12.70	10.38	11.22	12.18	10.46	13.51	13.95
pH		6.59	6.47	6.59	6.22	6.65	6.61	6.79	6.83	6.98	7.22	7.09	7.07	6.96	5.82	5.95	6.02	7.22	7.29	7.88
Conductivity in us/cm		544	1024	1029	1025	1080	884	1203	1090	1095	1146	1570	1451	12	196	148	152	1670	1570	1660
Dissolved Oxygen in mg/l		3.41	3.68	1.68	3.24	1.31	3.34	0.45	0.65	0.18	1.32	0.49	0.18	9.68	0.98	0.58	5.84	1.15	0.96	0.20
Turbidity in NTU		1071.9		10.9	6000	35.1	10.9	1.1	79.0	8.70	10.0	3.33	103	11.0	17.0	315	40.6	13.9	100	0.30
Oxidation/Reduction Potential in mV		-43.0	-44.0	154	22	-51	-82.0	-128	-91	-112	-171.0	1	-127	-141	95	120	83	45	-151	-163

NOTES:
1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
   Bolded wells denote bedrock wells.
2. A blank indicates data was not collected.
3. Bolded contaminants are site contaminants of concern for which interim cleanup standards (ICLs) have been established.
4. Shaded values denote exceedance of an established interim cleanup level.
5. Volatile organic compound and metals results are in micrograms per liter (ug/l).
6. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 2

SUMMARY OF OU-1 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

CONTAMINANT OF CONCERN	INTERIM	MW-9	MW-9	MW-9	MW-9	MW-9	MW-10	MW-10	MW-10	MW-10	MW-10	**MW-11**	**MW-11**	**MW-11**	**MW-11**	RMW-3	RMW-3	RMW-3	RMW-3
DATE SAMPLED	CLEANUP	25-Aug-05	29-Aug-06	13-Nov-07	13-Aug-08	18-Aug-09	26-Aug-05	29-Aug-06	13-Nov-07	13-Aug-08	18-Aug-09	29-Aug-06	8-Nov-07	13-Aug-08	19-Aug-09	26-Aug-05	8-Nov-07	11-Aug-08	17-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																		
Acetone	**6,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Benzene	**5**	5	NA	NA	NA	NA	BDL	NA	NA	NA	NA	5	8	5	4	BDL			
Chlorobenzene	**100**	79	NA	NA	NA	NA	BDL	NA	NA	NA	NA	2	3	2	2	8			
Chloroethane		5	NA	NA	NA	NA	BDL	NA	NA	NA	NA	20	32	19	19	BDL			
Chloromethane	**30**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
1,4 Dichlorobenzene	**75**	19	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	2	1	1	BDL			
1,1 Dichloroethane	**81**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Ethylbenzene	**700**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Isopropylbenzene	**800**	2	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	4	2	2	BDL			
p - Isopropyltoluene	**260**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Naphthalene	**20**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Diethyl Ether	**1,400**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	47	75	37	34	BDL			
Tetrahydrofuran	**154**	84	NA	NA	NA	NA	BDL	NA	NA	NA	NA	50	60	30	30	BDL			
Toluene	**1,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
1,2,4 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	2	BDL	1	BDL			
1,3,5 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
o-Xylene		BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
m&p - Xylene		4	NA	NA	NA	NA	BDL	NA	NA	NA	NA	8	12	4	6	BDL			
1,4-Dioxane				NA	NA	NA			NA	NA	NA		NA	NA	100				
Methylethylketone (MEK)	**200**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Methylisobutylketone (MIBK)	**2,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Methyl-t-butyl Ether (MTBE)	**13**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL			
Tertiary-butyl Alcohol (TBA)			NA	NA	NA	NA		NA	NA	NA	NA		BDL	BDL	BDL				
METALS IN ug/l																			
Aluminum		BDL	BDL	BDL	BDL	BDL	BDL	19	BDL	70	50	BDL	BDL	BDL	BDL	1,500			
Arsenic	**10**	280	81	56	57	78	24	11	12	9	17	10	15	13	11	110			
Barium		92	66	41	39	58	89	55	64	19	46	96	95	89	83	46			
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Calcium		86,000	55,000	27,000	35,000	39,000	81,000	53,000	52,000	17,000	45,000	31,000	26,000	22,000	24,000	47,000			
Chromium	**50**	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	3			
Copper		3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA			
Iron (Total)		51,000	65,000	16,000	34,000	37,000	46,000	27,000	28,000	6,600	29,000	17,000	15,000	19,000	15,000	57,000			
Dissolved Iron		56,000	57,000	17,000	35,000	45,000		NA	NA	NA	NA	NA	NA	NA	NA				
Lead	**15**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Magnesium		45,000	22,000	12,000	11,000	12,000	23,000	14,000	15,000	3,900	11,000	25,000	19,000	19,000	21,000	14,000			
Mercury		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Nickel	**100**	14	5	16	7	4	14	7	8	3	5	8	12	18	8	22			
Potassium		25,000	15,000	6,800	7,300	9,700	20,000	9,400	12,000	5,200	8,600	10,000	9,300	8,800	9,800	19,000			
Selenium		6	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Sodium		98,000	35,000	38,000	28,000	19,000	110,000	35,000	90,000	14,000	31,000	110,000	140,000	110,000	110,000	18,000			
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Zinc		4	3	BDL	BDL	BDL	7	16	19	5	6	6	32	BDL	BDL	13			
Cobalt		4	BDL	12	7	3	5	7	6	2	5	BDL	3	6	2	13			
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Manganese	**300**	710	2,400	1,200	3,500	2,100	3,500	3,200	2,800	760	2,200	450	410	440	390	2,900			
Dissolved Manganese		820	2,200	1,400	3,300	2,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL			
Vanadium	**260**	7	BDL	BDL	BDL	BDL	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2			
Sulfate		NA	NA	13,000	NA	NA	NA	NA	10,000	NA	NA	NA	NA	NA	NA	NA			
Chloride		NA	NA	30,000	NA	NA	NA	NA	73,000	NA	NA	NA	NA	NA	NA	NA			
Alkalinity Bicarb		NA	NA	220,000	NA	NA	NA	NA	340,000	NA	NA	NA	NA	NA	NA	NA			
Alkalinity Carbonate		NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	NA	NA	NA			
FIELD PARAMETERS																			
Temperature Degrees C		15.34	14.9	10.66	15.67	15.15	15.32	16.3	10.22	17.40	17.05	12.27	9.50	12.14	12.30	13.11			
pH		6.54	6.4	6.01	6.08	6.54	6.69	6.47	6.31	6.12	6.49	6.89	6.72	6.88	7.04	6.22			
Conductivity in us/cm		1273	644.6	491	473	578	1033	464.4	960	220	564	800.3	1420	830	858	287			
Dissolved Oxygen in mg/l		0.78	622	0.68	0.42	0.35	2.26	735	0.48	0.52	0.28	0.37	0.22	0.60	0.61	3.7			
Turbidity in NTU		28.8	13.3	2.48	81.9	3.38	12.2	9.8	2.28	19.0	2.81	24.3	2.17	34.7	8.54	93.3			
Oxidation/Reduction Potential in mV		-101.5	-55	38	-19	-59	-106.4	-65	37	9	-69	-204	-30	-102	-104	15.4			

RMW-3 WELL OBSTRUCTED NOT SAMPLED (8-Nov-07) | RMW-3 WELL OBSTRUCTED NOT SAMPLED (11-Aug-08) | RMW-3 WELL OBSTRUCTED NOT SAMPLED (17-Aug-09)

NOTES:
1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
   Bolded wells denote bedrock wells.
2. A blank indicates data was not collected.
3. Bolded contaminants are site contaminants of concern for which interim cleanup standards (ICLs) have been established.
4. Shaded values denote exceedance of an established interim cleanup level.
5. Volatile organic compound and metals results are in micrograms per liter (ug/l).
6. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 2

SUMMARY OF OU-1 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

CONTAMINANT OF CONCERN	**INTERIM**	OP-2	OP-2	OP-2	OP-2	OP-2	OP-5	OP-5	OP-5	OP-5	OP-5	**BP-4**	**BP-4**	**BP-4**	**BP-4**	**BP-4**
DATE SAMPLED	**CLEANUP**	26-Aug-05	29-Aug-06	9-Nov-07	13-Aug-08	18-Aug-09	26-Aug-05	30-Aug-06	9-Nov-07	13-Aug-08	19-Aug-09	26-Aug-05	30-Aug-06	9-Nov-07	13-Aug-08	19-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	**LEVEL**															
Acetone	**6,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Benzene	**5**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Chlorobenzene	**100**	2	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Chloroethane		13	NA	NA	NA	NA	BDL	NA	NA	NA	NA	16	NA	NA	NA	NA
Chloromethane	**30**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
1,4 Dichlorobenzene	**75**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
1,1 Dichloroethane	**81**	3	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Ethylbenzene	**700**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Isopropylbenzene	**800**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
p - Isopropyltoluene	**260**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Naphthalene	**20**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Diethyl Ether	**1,400**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Tetrahydrofuran	**154**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Toluene	**1,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
1,2,4 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
1,3,5 Trimethylbenzene	**330**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
o-Xylene		BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
m&p - Xylene		BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
1,4-Dioxane				NA	NA	NA			NA	NA	NA			NA	NA	NA
Methylethylketone (MEK)	**200**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Methylisobutylketone (MIBK)	**2,000**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Methyl-t-butyl Ether (MTBE)	**13**	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA	BDL	NA	NA	NA	NA
Tertiary-butyl Alcohol (TBA)			NA	NA	NA	NA		NA	NA	NA	NA		NA	NA	NA	NA
METALS IN ug/l																
Aluminum		BDL	BDL	BDL	BDL	BDL	1500	BDL	BDL	BDL	BDL	77	BDL	BDL	BDL	BDL
Arsenic	**10**	25	200	190	170	200	25	27	33	17	13	11	26	30	23	22
Barium		21	19	19	20	17	25	13	23	15	13	63	53	55	43	39
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		49,000	40,000	37,000	40,000	42,000	15,000	15,000	14,000	8,800	7,600	62,000	69,000	51,000	48,000	50,000
Chromium	**50**	BDL	BDL	BDL	BDL	BDL	7	BDL	BDL	BDL	BDL	15	BDL	BDL	BDL	BDL
Copper		BDL	BDL	BDL	BDL	14	6	BDL	BDL	1	BDL	7	BDL	BDL	BDL	BDL
Iron (Total)		47,000	44,000	48,000	57,000	48,000	24,000	12,000	19,000	10,000	8,100	69,000	36,000	31,000	30,000	26,000
Dissolved Iron		47,000	49,000	50,000	61,000	45,000	15,000	12,000	21,000	9,600	8,100	NA	NA	NA	NA	NA
Lead	**15**	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Magnesium		130,000	12,000	9,300	10,000	11,000	4,500	3,600	3,200	2,200	2,300	31,000	3,800	21,000	22,000	26,000
Mercury		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	11	7	7	6	7	31	22	33	30	25	150	9	10	13	8
Potassium		28,000	23,000	17,000	21,000	21,000	2,800	2,800	2,300	1,900	1,900	23,000	30,000	21,000	21,000	23,000
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL
Silver		BDL	BDL	BDL	BDL	BDL	4	BDL	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL
Sodium		17,000	17,000	12,000	16,000	18,000	9,900	8,600	10,000	9,000	9,000	110,000	9,200	140,000	110,000	89,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		2	5	BDL	BDL	16	7	7	BDL	BDL	7	5	6	BDL	BDL	11
Cobalt		4	BDL	5	4	4	20	14	23	19	15	80	BDL	2	3	BDL
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	390	470	620	580	630	3,800	2,500	3,800	2,300	1,800	1,700	1,300	1,200	1,100	94
Dissolved Manganese		450	480	650	550	620	3,500	2,600	4,000	2,200	2,000	NA	NA	NA	NA	NA
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	4	BDL	BDL	1	1	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarb		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																
Temperature Degrees C		17.2	16.33	10.41	16.25	14.55	12.30	13.31	9.34	11.28	11.28	11.26	11.9	9.41	13.38	13.90
pH		6.33	6.55	6.17	6.12	6.57	5.94	5.79	5.64	5.58	5.92	6.88	6.6	6.89	7.00	7.11
Conductivity in us/cm		671	480.9	675	669	707	196	150.6	253	169	150	1021	964.8	1204	1106	1100
Dissolved Oxygen in mg/l		2.93	8.77	0.72	1.12	0.2	2.16	1.15	0.35	0.22	0.68	1.88	2.14	0.37	1.19	22
Turbidity in NTU		16.1	14.2	1.97	15.8	1.01	23.2	0.7	1.49	100	2.48	35.1	2.6	1.50	27.4	7.73
Oxidation/Reduction Potential in mV		-54.1	-161	-11	-27	-54	11.5	27	16	81	69	-107.8	-92	-85.0	-107	-153

NOTES:
1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
   Bolded wells denote bedrock wells.
2. A blank indicates data was not collected.
3. Bolded contaminants are site contaminants of concern for which interim cleanup standards (ICLs) have been established.
4. Shaded values denote exceedance of an established interim cleanup level.
5. Volatile organic compound and metals results are in micrograms per liter (ug/l).
6. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 3

SUMMARY OF OU-2 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	INTERIM	FPC-2A	FPC-2A	FPC-2A	FPC-2A	FPC-2B	FPC-2B	FPC-2B	FPC-2B	FPC-4B	FPC-4B	FPC-4B	FPC-4B	FPC-5A	FPC-5A	FPC-5A	FPC-5A	FPC-5B	FPC-5B	FPC-5B	FPC-5B
DATE SAMPLED	CLEANUP	29-Aug-06	16-Nov-07	12-Aug-08	17-Aug-09	29-Aug-06	16-Nov-07	12-Aug-08	17-Aug-09	28-Aug-06	14-Nov-07	11-Aug-08	17-Aug-09	28-Aug-06	14-Nov-07	13-Aug-08	20-Aug-09	25-Aug-05	15-Nov-07	13-Aug-08	20-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																				
Acetone		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	**5**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	**100**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
1,4 Dichlorobenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
1,1 Dichloroethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2 Dichloroethene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
p - Isopropyltoluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl Ether		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Tetrahydrofuran		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Toluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
m&p - Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Methylethylketone (MEK)	**200**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Methylisobutylketone (MIBK)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Methyl t-butyl ether (MTBE)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
METALS IN ug/l																					
Aluminum		BDL	60	BDL	BDL	27	BDL	14	360	BDL	70	220	BDL	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Arsenic	**10**	BDL	8	3	2	BDL	2	3	3	BDL	BDL	BDL	BDL	42	53	54	53	BDL	4	1	1
Barium		12	18	13	14	12	12	12	17	3	7	5	4	120	130	120	130	47	64	39	54
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		22,000	18,000	16,000	19,000	11,000	7,800	6,800	7,700	5,300	4,200	3,300	3,900	51,000	34,000	41,000	44,000	11,000	7,200	5,400	7,400
Chromium	**100**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper		BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron (Total)		3,200	14,000	5,600	4,400	100	120	260	1,100	100	110	650	BDL	9,200	8,300	11,000	9,700	360	330	280	240
Dissolved Iron		3,800	1,800	3,500	4,200	900	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Lead	**15**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Magnesium		14,000	12,000	9,600	11,000	1,700	1,200	980	1,300	3,500	2,800	2,100	2,500	28,000	19,000	21,000	27,000	7,100	4,600	3,300	5,000
Mercury		BDL	BDL	BDL	BDL	BDL	0.2	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	1	1	BDL	8	4	10	7	5	8	6	7
Potassium		48,000	6,000	4,200	4,400	6,000	5,900	4,700	4,800	2,200	1,900	1,500	1,600	27,000	22,000	25,000	27,000	9,600	7,100	6,500	7,800
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	2	2
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		12,000	15,000	12,000	13,000	43,000	43,000	39,000	40,000	5,100	6,000	5,000	6,000	120,000	120,000	120,000	110,000	300,000	310,000	260,000	290,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		7	BDL	BDL	BDL	5	BDL	BDL	14	7	6	BDL	BDL	7	BDL	BDL	BDL	5	BDL	BDL	BDL
Cobalt		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	670	800	620	730	18	BDL	23	84	BDL	31	66	BDL	140	110	110	110	88	95	74	87
Dissolved Manganese		660	860	570	770	BDL	BDL	21	26	BDL	23	6	BDL	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	1	1	1
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA	BDL	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	110,000	110,000	NA	NA	270,000	NA	NA
Alkalinity Bicarbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	410,000	410,000	NA	NA	360,000	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BDL	BDL	NA	NA	BDL	NA	NA
FIELD PARAMETERS																					
Temperature Degrees C		14.10	8.94	13.79	15.20	13.10	9.11	13.87	15.60	12.87	9.90	10.17	11.49	10.50	9.55	12.82	12.01	11.60	11.83	13.67	12.25
pH		6.52	6.68	6.58	6.34	7.99	7.93	7.28	7.48	6.63	5.95	6.39	6.17	7.02	7.46	6.74	3.35	7.96	7.68	7.61	8.12
Conductivity in us/cm		215	274	242	279	184	201	162	210	53	95	62	83	501	1,180	1,108	1,153	466	1,467	1,174	1,354
Dissolved Oxygen in mg/l		0.97	0.80	0.25	4.34	0.62	3.18	1.54	4.38	7.61	0.56	7.09	3.05	1.08	0.33	0.25	3.35	2.36	1.45	1.61	1.06
Turbidity in NTU		10.5	93	44.7	4.35	1.50	3.40	100.3	6.50	1.80	2.75	32.9	0.29	11.0	2.20	93.7	4.85	0.40	0.87	4.10	4.50
Oxidation/Reduction Potential in mV		-22	119	20	14	-131	45	-3	28	77	164	143	189	-95	-114	-6	-101	-116	30	-87	-110

NOTES:

1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
2. Bolded well denotes a bedrock groundwater monitoring well.
3. Blank column indicates the well was not sampled.
4. Potential ICLs are indicated for arsenic and maganese.
5. Shaded values denote exceedance of an established interim cleanup level.
6. Volatile organic compound and metals results are in micrograms per liter (ug/l).
7. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 3

SUMMARY OF OU-2 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	INTERIM	FPC-6A	FPC-6A	FPC-6A	FPC-6A	**FPC-6B**	**FPC-6B**	**FPC-6B**	**FPC-6B**	FPC-7A	FPC-7A	FPC-7A	FPC-7A	**FPC-7B**	**FPC-7B**	**FPC-7B**	**FPC-7B**	FPC-8A	FPC-8A	FPC-8A	FPC-8A
DATE SAMPLED	CLEANUP	28-Aug-06	14-Nov-07	13-Aug-08	17-Aug-09	28-Aug-06	14-Nov-07	13-Aug-08	17-Aug-09	28-Aug-06	16-Nov-07	13-Aug-08	18-Aug-09	28-Aug-06	16-Nov-07	13-Aug-08	18-Aug-09	28-Aug-06	8-Nov-07	11-Aug-08	20-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																				
Acetone		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Benzene	**5**	BDL	2	BDL	BDL	BDL	2	1	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Chlorobenzene	**100**	3	5	BDL	3	3	7	4	3	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Chloroethane		4	8	BDL	5	5	11	8	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Chloromethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,4 Dichlorobenzene		BDL	1	BDL	BDL	BDL	2	1	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,1 Dichloroethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
cis-1,2 Dichloroethene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Ethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Isopropylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
p - Isopropyltoluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Naphthalene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Diethyl Ether		BDL	20	8	10	BDL	23	15	10	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Tetrahydrofuran		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Toluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,2,4 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,3,5 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
o-Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
m&p - Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Methylethylketone (MEK)	**200**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Methylisobutylketone (MIBK)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Methyl t-butyl ether (MTBE)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
METALS IN ug/l																					
Aluminum		BDL	BDL	BDL	60	140	980	90	BDL	BDL	520	320	BDL	BDL	BDL	140	60	380	670	BDL	2,600
Arsenic	**10**	BDL	3	2	13	5	9	14	2	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	4	2	6
Barium		53	95	44	29	30	89	44	49	2	7	5	3	BDL	3	18	4	4	8	4	15
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		17,000	20,000	6,800	24,000	28,000	46,000	30,000	13,000	20,000	13,000	13,000	14,000	14,000	16,000	14,000	16,000	26,000	21,000	24,000	21,000
Chromium	**100**	BDL	BDL	BDL	BDL	BDL	3	2	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	6
Copper		BDL	BDL	BDL	BDL	BDL	6	1	BDL	BDL	3	1	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	4
Iron (Total)		5,500	9,000	7,400	1,900	1,600	1,800	1,700	6,500	BDL	1,300	740	BDL	1,200	270	8,300	500	900	1,300	340	3,600
Dissolved Iron		6,400	8,600	5,400	2,200	1,600	810	1,500	5,600	BDL	BDL	BDL	BDL	BDL	BDL	70	BDL	NA	NA	NA	NA
Lead	**15**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1
Magnesium		9,300	11,000	4,200	10,000	12,000	23,000	13,000	6,600	6,400	4,400	3,800	4,100	3,800	4,600	3,700	4,500	3,500	3,300	3,200	4,300
Mercury		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	2	5	2	5	BDL	13	8	3	3	13	7	4	BDL	2	18	2	BDL	2	BDL	4
Potassium		6,000	6,600	4,300	6,200	6,600	10,000	8,100	4,800	2,700	2,800	2,100	2,100	2,000	2,400	1,900	2,100	2,400	2,000	2,100	2,500
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		75,000	100,000	50,000	79,000	82,000	140,000	110,000	78,000	9,800	9,000	8,000	9,000	7,800	10,000	9,000	10,000	11,000	12,000	13,000	13,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		6	BDL	BDL	BDL	8	6	BDL	BDL	6	7	8	BDL	6	BDL	9	8	6	BDL	BDL	10
Cobalt		BDL	BDL	BDL	5	BDL	5	6	BDL	BDL	6	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	410	500	360	2,400	2,100	3,100	3,000	340	6	110	34	BDL	200	76	1,800	110	150	150	62	190
Dissolved Manganese		400	530	340	2,600	2,300	3,400	2,800	360	BDL	BDL	BDL	BDL	BDL	BDL	36	BDL	NA	NA	NA	NA
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL	7
Sulfate		NA	5,000	NA	NA	NA	1,000	NA	NA	NA	15,000	NA	NA	NA	17,000	NA	NA	NA	NA	NA	NA
Chloride		NA	81,000	NA	NA	NA	140,000	NA	NA	NA	7,000	NA	NA	NA	7,000	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate		NA	200,000	NA	NA	NA	390,000	NA	NA	NA	49,000	NA	NA	NA	51,000	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																					
Temperature Degrees C		11.10	10.73	11.72	16.01	15.00	11.05	15.19	12.14	12.30	9.13	12.45	11.29	12.45	8.67	11.90	12.58	12.30	8.89	10.51	10.60
pH		6.72	6.55	6.30	6.84	6.81	6.69	6.55	6.97	6.36	6.97	5.93	6.59	6.61	6.47	6.12	6.49	6.36	6.80	6.66	6.95
Conductivity in us/cm		143	610	319	589	401	1,137	726	489	122	168	147	162	127	171	159	172	162	211	200	223
Dissolved Oxygen in mg/l		2.07	1.32	1.41	0.29	0.81	0.41	0.24	0.30	4.63	3.72	4.75	4.56	9.63	3.99	3.68	2.72	2.01	0.85	0.37	1.31
Turbidity in NTU		27.2	5.67	12.0	1.74	2.10	165	56.7	29.2	37.2	8.60	25.0	0.23	70.6	3.11	111	1.75	1.56	28.4	9.90	1.31
Oxidation/Reduction Potential in mV		-53	42	-13	-17	-39	45	0	-51	94	169	151	218	105	105	169	201	96	-42	101	21

NOTES:

1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
2. Bolded well denotes a bedrock groundwater monitoring well.
3. Blank column indicates the well was not sampled.
4. Potential ICLs are indicated for arsenic and maganese.
5. Shaded values denote exceedance of an established interim cleanup level.
6. Volatile organic compound and metals results are in micrograms per liter (ug/l).
7. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

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COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	INTERIM	FPC-8B	FPC-8B	FPC-8B	FPC-8B	FPC-9A	FPC-9A	FPC-9A	FPC-9A	FPC-11A	FPC-11A	FPC-11A	FPC-11A	FPC-11B	FPC-11B	FPC-11B	FPC-11B	GZ-105	GZ-105	GZ-105	GZ-105
DATE SAMPLED	CLEANUP	28-Aug-06	8-Nov-07	11-Aug-08	19-Aug-09	30-Aug-06	12-Nov-07	13-Aug-08	17-Aug-09	30-Aug-06	15-Nov-07	12-Aug-08	17-Aug-09	30-Aug-06	15-Nov-07	12-Aug-08	17-Aug-09	29-Aug-06	14-Nov-07	11-Aug-08	19-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																				
Acetone		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Benzene	**5**	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	6	6	6	6
Chlorobenzene	**100**	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	9	10	10	11
Chloroethane		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	7	9	11	12
Chloromethane		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,4 Dichlorobenzene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	2	4	4	5
1,1 Dichloroethane		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
cis-1,2 Dichloroethene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Ethylbenzene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Isopropylbenzene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	2	2	2
p - Isopropyltoluene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Naphthalene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Diethyl Ether		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	49	61	57	62
Tetrahydrofuran		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	83	80	70	80
Toluene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,2,4 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
1,3,5 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
o-Xylene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
m&p - Xylene		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	1	1	1
Methylethylketone (MEK)	**200**	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Methylisobutylketone (MIBK)		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
Methyl t-butyl ether (MTBE)		BDL	BDL	BDL	BDL	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	NA	NA	NA	BDL	BDL	BDL	BDL
METALS IN ug/l																					
Aluminum		13	BDL	BDL	BDL	BDL	1,000	BDL	BDL	270	640	120	BDL	13,000	350	BDL	90	BDL	BDL	BDL	BDL
Arsenic	**10**	5	7	7	7	44	37	26	34	BDL	1	1	BDL	6	9	8	10	6	11	10	13
Barium		6	7	7	8	120	92	65	88	4	17	15	10	72	18	34	48	43	52	48	61
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		30,000	20,000	21,000	23,000	66,000	47,000	54,000	51,000	7,400	28,000	25,000	17,000	64,000	54,000	75,000	56,000	65,000	44,000	49,000	69,000
Chromium	**100**	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	2	BDL	BDL	16	BDL	2	BDL	BDL	BDL	BDL	BDL
Copper		BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	3	BDL	BDL	4	2	BDL	BDL	BDL	BDL	BDL	BDL
Iron (Total)		130	60	140	60	9,600	8,600	4,700	6,300	1,000	2,100	390	100	13,000	1,900	3,200	1,900	6,200	5,100	3,700	4,900
Dissolved Iron		NA	BDL	60	BDL	NA	7,000	4,500	6,300	BDL	BDL	BDL	BDL	2,100	240	2,800	1,900	5,300	3,800	3,700	4,700
Lead	**15**	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	2	BDL	BDL	6	1	BDL	BDL	BDL	BDL	BDL	BDL
Magnesium		6,900	4,300	4,300	5,000	37,000	23,000	22,000	25,000	1,700	6,100	5,200	3,800	27,000	12,000	16,000	19,000	23,000	18,000	18,000	27,000
Mercury		BDL	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	BDL	BDL	BDL	BDL	4	7	4	3	BDL	9	4	3	17	13	12	3	7	8	9	9
Potassium		3,600	2,600	3,000	2,700	14,000	8,600	8,100	9,200	28,000	3,800	3,000	2,400	6,500	3,600	5,300	5,800	7,500	5,700	6,200	7,100
Selenium		BDL	BDL	BDL	BDL	BDL	2	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	1
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		18,000	16,000	17,000	18,000	94,000	100,000	78,000	89,000	28,000	20,000	39,000	37,000	95,000	41,000	38,000	88,000	153,000	160,000	160,000	150,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		6	BDL	12	BDL	6	58	27	5	6	26	BDL	6	19	31	13	8	4	BDL	BDL	BDL
Cobalt		BDL	BDL	BDL	BDL	BDL	1	BDL	BDL	8	2	BDL	BDL	21	6	4	1	BDL	BDL	BDL	BDL
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	21	29	28	25	270	410	520	270	22	500	36	10	880	1,300	1,400	710	480	390	400	500
Dissolved Manganese		NA	33	25	25	NA	450	510	270	BDL	600	BDL	BDL	770	1,500	1,300	780	510	470	400	500
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4	BDL	BDL	BDL
Vanadium	**260**	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	3	1	BDL	7	1	BDL	BDL	BDL	BDL	1	BDL
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																					
Temperature Degrees C		12.03	8.63	10.74	11.27	10.50	8.40	11.15	13.91	12.10	12.70	12.89	13.80	11.70	12.46	13.72	13.15	11.03	10.15	10.60	10.96
pH		7.26	7.81	8.02	8.17	7.00	7.01	6.82	7.58	6.82	5.93	6.00	6.03	6.67	6.65	6.96	6.98	8.48	7.16	7.95	7.57
Conductivity in us/cm		176	236	216	253	941	941	880	1	164	348	394	312	398	761	712	935	431	1,145	512	1,360
Dissolved Oxygen in mg/l		5.47	0.87	0.12	0.22	1.36	0.42	0.35	0.19	8.87	4.84	6.07	5.98	6.55	0.79	0.31	0.43	1.65	0.28	0.17	0.21
Turbidity in NTU		0.40	2.20	70.6	6.61	15.6	40.1	95.0	1.60	352.8	21.3	94.1	124.0	2,906	17.0	21.5	2.28	46.1	18.9	16.4	3.88
Oxidation/Reduction Potential in mV		-61	1	-163	-150	-113	26	-5	-96	58	137	193	178	-36	110	9	-72	-190	29	-118	-119

NOTES:

1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
2. Bolded well denotes a bedrock groundwater monitoring well.
3. Blank column indicates the well was not sampled.
4. Potential ICLs are indicated for arsenic and maganese.
5. Shaded values denote exceedance of an established interim cleanup level.
6. Volatile organic compound and metals results are in micrograms per liter (ug/l).
7. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 3

SUMMARY OF OU-2 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	INTERIM	GZ-123	GZ-123	GZ-123	GZ-125	GZ-125	GZ-125	AE-1A	AE-1A	AE-1A	AE-1A	AE-1B	AE-1B	AE-2A	AE-2A	AE-2A	AE-2A	AE-2B	AE-2B	AE-2B	AE-2B
DATE SAMPLED	CLEANUP	12-Nov-07	12-Aug-08	18-Aug-09	12-Nov-07	12-Aug-08	12-Aug-08	30-Aug-06	16-Nov-07	12-Aug-08	20-Aug-09	12-Aug-08	20-Aug-09	30-Aug-06	8-Nov-07	11-Aug-08	18-Aug-09	29-Aug-06	8-Nov-07	11-Aug-08	18-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																				
Acetone		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	**5**	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	2	BDL	BDL	3	5	5	2
Chlorobenzene	**100**	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	5	2	2	3	5	5	3
Chloroethane		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	8	11	12	6
Chloromethane		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4 Dichlorobenzene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	2	1	BDL	BDL	1	1	BDL
1,1 Dichloroethane		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
cis-1,2 Dichloroethene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isopropylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p - Isopropyltoluene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Diethyl Ether		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	19	7	6	46	65	63	39
Tetrahydrofuran		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	20	BDL	10	69	60	70	50
Toluene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m&p - Xylene		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylethylketone (MEK)	**200**	BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylisobutylketone (MIBK)		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl t-butyl ether (MTBE)		BDL	BDL	BDL	BDL	BDL	BDL	NA	NA	NA	NA	NA	NA	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METALS IN ug/l																					
Aluminum		BDL	BDL	BDL	BDL	BDL	BDL	63	970	180	BDL	BDL	BDL	BDL	BDL	210	BDL	BDL	BDL	BDL	BDL
Arsenic	**10**	BDL	BDL	BDL	BDL	BDL	BDL	15	39	41	29	3	4	240	280	230	240	24	20	19	26
Barium		5	4	5	4	3	3	18	22	18	18	150	58	26	41	30	28	200	190	170	160
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		11,000	12,000	16,000	14,000	13,000	15,000	45,000	14,000	11,000	25,000	22,000	25,000	21,000	29,000	23,000	24,000	72,000	57,000	49,000	52,000
Chromium	**100**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper		1	BDL	BDL	BDL	BDL	BDL	BDL	9	3	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1
Iron (Total)		3,900	1,800	2,300	350	790	1,400	340	3,100	140	100	620	1,100	12,000	19,000	16,000	14,000	22,000	18,000	16,000	13,000
Dissolved Iron		1,700	370	2,500	BDL	BDL	BDL	400	BDL	BDL	120	BDL	1,100	14,000	19,000	15,000	17,000	25,000	18,000	15,000	13,000
Lead	**15**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	15	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Magnesium		3,000	3,100	4,500	8,600	8,000	8,900	16,000	3,000	2,000	8,600	10,000	13,000	9,300	11,000	8,300	9,000	60,000	40,000	32,000	35,000
Mercury		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Nickel	**100**	5	4	5	BDL	BDL	BDL	BDL	5	BDL	BDL	BDL	BDL	12	12	12	10	10	13	10	10
Potassium		2,100	1,900	2,100	2,800	2,600	2,600	4,900	4,300	3,100	3,800	10,000	9,300	16,000	21,000	17,000	16,000	16,000	13,000	13,000	13,000
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	2
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		17,000	15,000	17,000	18,000	17,000	19,000	22,000	26,000	23,000	24,000	31,000	33,000	43,000	39,000	32,000	33,000	180,000	230,000	200,000	190,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		8	BDL	BDL	6	8	6	10	45	9	BDL	7	BDL	6	BDL	BDL	7	6	BDL	BDL	BDL
Cobalt		5	3	5	BDL	BDL	BDL	16	3	BDL	BDL	BDL	BDL	8	13	11	10	BDL	4	2	BDL
Beryllium	**4**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	3,300	2,300	3,000	160	62	81	440	130	14	250	300	730	510	770	610	650	2,400	2,100	1,700	1,700
Dissolved Manganese		3,600	1,900	3,200	170	53	88	450	6	BDL	320	BDL	750	510	830	560	710	2,300	2,200	1,500	1,700
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																					
Temperature Degrees C		11.72	12.26	14.53	10.04	12.92	12.16	11.80	9.70	15.26	13.23	13.56	13.02	12.40	10.36	11.14	11.39	12.20	9.88	10.98	12.74
pH		5.57	5.63	6.13	5.75	5.93	5.81	8.77	8.78	8.82	8.76	7.82	7.60	6.47	6.69	6.54	7.33	6.72	7.07	6.84	7.27
Conductivity in us/cm		220	183	245	276	240	281	227	208	175	262	387	472	321	743	514	614	1,269	1,610	1,366	1,530
Dissolved Oxygen in mg/l		0.77	2.41	2.62	2.95	3.12	2.03	3.55	2.31	3.16	1.36	6.19	0.98	3.93	0.35	0.14	0.22	1.45	1.01	0.67	0.31
Turbidity in NTU		22.9	35.2	4.15	5.03	23.0	16.6	82.8	15.9	12.2	2.62	163	3.13	0.20	0.77	74.4	2.28	3.10	0.60	27.2	2.38
Oxidation/Reduction Potential in mV		129	162	121	165	186	172	-50	88	82	74	113	-81	-29	-102	-59	-69	-127	-58	-102	-94

NOTES:
1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
2. Bolded well denotes a bedrock groundwater monitoring well.
3. Blank column indicates the well was not sampled.
4. Potential ICLs are indicated for arsenic and maganese.
5. Shaded values denote exceedance of an established interim cleanup level.
6. Volatile organic compound and metals results are in micrograms per liter (ug/l).
7. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 3

SUMMARY OF OU-2 GROUNDWATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	INTERIM	AE-3A	AE-3A	AE-3A	AE-3A	**AE-3B**	**AE-3B**	**AE-3B**	**AE-3B**	AE-4A	AE-4A	AE-4A	AE-4A	**AE-4B**	**AE-4B**	**AE-4B**	**AE-4B**
DATE SAMPLED	CLEANUP	29-Aug-06	15-Nov-07	12-Aug-08	18-Aug-09	29-Aug-06	16-Nov-07	12-Aug-08	18-Aug-09	28-Aug-06	14-Nov-07	11-Aug-08	18-Aug-09	28-Aug-06	14-Nov-07	11-Aug-08	18-Aug-09
VOLATILE ORGANIC COMPOUNDS IN ug/l	LEVEL																
Acetone		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzene	**5**	BDL	2	2	2	BDL	BDL	BDL	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chlorobenzene	**100**	6	9	8	7	BDL	BDL	BDL	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chloroethane		13	12	13	11	6	5	BDL	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chloromethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,4 Dichlorobenzene		BDL	2	1	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,1 Dichloroethane		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
cis-1,2 Dichloroethene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Ethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Isopropylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p - Isopropyltoluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Diethyl Ether		BDL	18	19	15	BDL	13	12	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Tetrahydrofuran		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,2,4 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,3,5 Trimethylbenzene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
o-Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m&p - Xylene		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylethylketone (MEK)	**200**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methylisobutylketone (MIBK)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Methyl t-butyl ether (MTBE)		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METALS IN ug/l																	
Aluminum		BDL	BDL	100	BDL	BDL	BDL	BDL	BDL	240	70	470	100	1,500	1,200	1,200	530
Arsenic	**10**	100	130	150	120	91	82	95	91	BDL	3	10	3	BDL	1	BDL	BDL
Barium		65	86	85	76	180	130	150	160	11	15	20	13	8	28	19	12
Cadmium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Calcium		45,000	38,000	42,000	45,000	57,000	45,000	48,000	45,000	6,900	4,900	6,100	6,300	7,700	6,400	7,100	7,300
Chromium	**100**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	2	BDL
Copper		BDL	BDL	1	1	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	5	4	2
Iron (Total)		22,000	19,000	22,000	26,000	14,000	12,000	13,000	16,000	9,100	6,500	28,000	9,500	1,500	1,900	2,100	720
Dissolved Iron		19,000	19,000	20,000	24,000	17,000	16,000	12,000	15,000	3,700	160	2,900	3,500	BDL	BDL	400	BDL
Lead	**15**	BDL	BDL	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	2	BDL
Magnesium		24,000	20,000	21,000	25,000	32,000	22,000	25,000	26,000	6,100	4,300	5,200	5,800	4,700	5,100	5,200	5,700
Mercury		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.3	0.1	BDL
Nickel	**100**	8	8	9	8	6	8	9	7	BDL	7	2	BDL	BDL	3	2	1
Potassium		24,000	22,000	22,000	26,000	25,000	20,000	21,000	23,000	2,300	2,300	2,400	2,300	5,000	4,200	4,600	4,200
Selenium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Silver		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sodium		87,000	100,000	86,000	73,000	110,000	110,000	120,000	92,000	6,700	7,000	7,000	8,000	23,000	22,000	20,000	21,000
Thallium		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc		3	BDL	7	BDL	5	BDL	BDL	BDL	BDL	BDL	8	BDL	6	8	8	BDL
Cobalt		BDL	3	3	4	BDL	1	1	1	BDL	3	1	BDL	BDL	2	1	BDL
Beryllium	**4**	BDL	BDL	85	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Manganese	**300**	690	840	850	1,300	1,000	570	480	1,400	310	290	400	320	220	1,100	600	260
Dissolved Manganese		660	890	800	1,300	1,000	760	430	1,400	300	330	330	350	90	84	250	42
Antimony	**6**	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	8	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Vanadium	**260**	BDL	BDL	1	1	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	3	2	BDL
Sulfate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Bicarbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity Carbonate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FIELD PARAMETERS																	
Temperature Degrees C		14.80	11.92	14.39	15.32	12.30	9.84	11.36	12.89	12.27	11.10	13.70	15.22	11.78	9.93	10.73	12.66
pH		6.77	7.25	6.64	6.52	7.23	7.20	7.15	7.40	6.41	6.89	6.56	6.81	6.74	7.30	6.79	7.00
Conductivity in us/cm		926	1,124	1,076	970	969	1,208	1,126	1,156	111	118	129	147	156	207	176	205
Dissolved Oxygen in mg/l		1.71	0.31	0.24	0.25	1.37	0.54	0.16	0.29	1.24	3.98	108.00	0.31	1.43	0.51	0.62	1.28
Turbidity in NTU		4.80	3.94	28.2	10.8	5.40	16.3	87.9	4.53	3.89	81.6	490	68.2	6.10	49.4	115	16.3
Oxidation/Reduction Potential in mV		-98	-109	-85	-95	-149	90	-142	-96	-83	78	-8	-18	-37	92	115	167

NOTES:
1. NA = Sample was not analyzed for indicated parameter
   BDL = Below Detection Limit
2. Bolded well denotes a bedrock groundwater monitoring well.
3. Blank column indicates the well was not sampled.
4. Potential ICLs are indicated for arsenic and maganese.
5. Shaded values denote exceedance of an established interim cleanup level.
6. Volatile organic compound and metals results are in micrograms per liter (ug/l).
7. Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric turbidity unit, mV = millivolt

TABLE 4

SUMMARY OF RESIDENTIAL WELL MONITORING RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	R-3	R-3	R-3	R-5	R-5	R-5
DATE SAMPLED	24-Jan-08	13-Aug-08	19-Aug-09	24-Jan-08	13-Aug-08	19-Aug-09
VOCs						
Methyl tert-butyl ether (MTBE)	1.6	<0.5	<0.5	<0.5	<0.5	<0.5
FIELD PARAMETERS						
Temperature Degrees C	13.51	12.51	11.38	14.22	14.00	16.51
pH	5.63	5.85	7.92	5.84	5.92	6.68
Conductivity in us/cm	316	423	452	243	281	456
Dissolved Oxygen in mg/l	4.16	3.72	4.64	6.43	8.04	6.75
Turbidity in NTU	2.0	15.4	2.2	1.4	12	2
Oxidation/Reduction Potential in mV	157	95	-122	162	87	194

NOTES:
1. BDL = Below Method Detection Limit
2. Only contaminants detected in one or more groundwater samples are listed in this table.
3. Volatile organic compound results are in micrograms per liter (ug/l).

TABLE 5

SUMMARY OF SURFACE WATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	DES SURFACE WATER STANDARDS		SW-4	SW-4		SW-4	SW-4	SW-5	SW-5/SW-3T		SW-5/SW-3T	SW-5	SW-103	SW-103		SW-103	SW-103	SW-1T		SW-2T		SW-5T		SW-6T	
DATE SAMPLED			29-Aug-06	15-Nov-07		14-Aug-08	19-Aug-09	30-Aug-06	15-Nov-07		14-Aug-08	19-Aug-09	28-Aug-06	13-Nov-07		14-Aug-08	19-Aug-09	13-Nov-07		13-Nov-07		13-Nov-07		13-Nov-07			
PARAMETER ANALYZED	ACUTE	CHRONIC																								
VOCS BY EPA METHOD 8260B IN ug/L																										
ACETONE				BDL		BDL	BDL		BDL		BDL	BDL		BDL		BDL	BDL	BDL		10		BDL		BDL		
BENZENE	5,300	NSE	BDL	BDL		BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL		BDL	BDL	BDL		BDL		BDL		BDL		
CHLOROBENZENE	250	50	BDL	BDL		BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL		BDL	BDL	BDL		BDL		BDL		BDL		
TOLUENE				BDL		BDL	BDL		BDL		BDL	7.2		BDL		BDL	1.2	BDL		BDL		BDL		BDL		
METALS BY EPA METHOD 200.8 IN ug/L			Total	Total	Dissolved	Total	Total	Total	Total	Dissolved	Total	Total	Total	Total	Dissolved	Total	Total	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
ALUMINUM	**750**	87	740	90	100	**1,700**	BDL	**3,300**	150	BDL	BDL	BDL	200	BDL	BDL	BDL	BDL	**1,900**	BDL	BDL	BDL	90	100	140	120
ARSENIC (1)	340	150	BDL	2	3	4	4	17	6	8	2	45	4	5	6	2	11	7	1	1	1	1	2	2	2
BARIUM	NSE	NSE	12	23	24	50	49	70	29	33	53	63	38	40	45	29	78	29	10	17	22	15	20	9	9
CADMIUM (1)	0.95	0.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CALCIUM	NSE	NSE	10,000	31,000	34,000	25,000	21,000	67,000	28,000	33,000	43,000	66,000	48,000	33,000	37,000	46,000	55,000	27,000	33,000	35,000	43,000	20,000	26,000	25,000	28,000
CHROMIUM	183	24	BDL	BDL	BDL	2	BDL	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5	BDL	BDL	BDL	BDL	BDL	BDL	1
COPPER	**3.6**	2.7	BDL	3	2	**6**	1	BDL	3	2	BDL	1	BDL	3	2	2	3	3	3	3	**5**	2	3	1	3
IRON (1)	NSE	1000	1,100	160	90	4,700	6.8	25,000	5,100	5,600	2,100	30,000	14,000	11,000	13,000	2,800	25,000	5,200	90	300	110	400	430	310	100
LEAD (1)	14	0.54	BDL	BDL	BDL	BDL	4	BDL	1	BDL	BDL	1	BDL	BDL	BDL	BDL	BDL	4	BDL	BDL	BDL	BDL	BDL	1	BDL
MAGNESIUM	NSE	NSE	4,700	13,000	15,000	5,600	7,100	19,000	8,200	9,600	10,000	15,000	12,000	8,900	9,900	10,000	14,000	9,200	10,000	9,800	13,000	6,800	8,800	8,900	10,000
MERCURY (1)	1.4	0.77	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL (1)	144.9	16.1	BDL	3	4	9	2	8	5	6	5	5	BDL	7	7	6	5	6	3	3	4	2	3	4	5
POTASSIUM	NSE	NSE	1,300	3,100	3,500	2,000	5,000	20,000	21,000	24,000	7,200	20,000	7,100	18,000	18,000	9,400	8,200	7,300	8,700	13,000	17,000	4,300	5,600	450	720
SELENIUM	NSE	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SILVER	0.32	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SODIUM	NSE	NSE	5,200	17,000	19,000	9,000	13,000	43,000	35,000	42,000	36,000	46,000	23,000	38,000	41,000	16,000	39,000	24,000	32,000	23,000	30,000	23,000	30,000	58,000	70,000
THALLIUM	1400	40	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ZINC (1)	35.4	32.2	14	30	**940**	**40**	26	19	10	**900**	BDL	**89**	6	10	**740**	BDL	**69**	11	**740**	BDL	**780**	**64**	**980**	6	**920**
COBALT	NSE	NSE	BDL	BDL	BDL	11	1	3	3	3	2	2	BDL	7	9	BDL	2	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL
BERYLLIUM	130	5.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MANGANESE	NSE	NSE	350	470	360	1,900	1,600	2,800	1,200	1,500	1,300	1,600	1,600	1,400	1,600	590	3,300	460	150	260	350	400	540	58	38
ANTIMONY	9000	1600	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
VANADIUM	NSE	NSE	BDL	1	1	12	2	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL	BDL	2	4	BDL	BDL	BDL	BDL	BDL	3	3
AMMONIA BY EPA METHOD 350.3 IN mg/l	36.1	3.08		BDL		0.14	1.0	5.8	2.9		BDL	8.7	0.2	0.44		0.81	0.48	BDL		3.1		BDL		BDL	
CYANIDE (Total)				BDL		NA	NA		BDL		NA	NA		BDL		NA	NA	BDL		BDL		BDL		BDL	
FIELD PARAMETERS																									
Temperature Degrees C				11.94		18.34	23.67		7.46		18.10	19.69		7.71		17.84	21.04	7.00		6.87		8.98		6.51	
pH				6.31		5.63	5.92		6.99		6.45	6.31		6.69		6.35	6.77	6.40		7.11		6.35		6.34	
Conductivity in us/cm				372		126	228		675		451	965		603		388	610	230		517		364		499	
Dissolved Oxygen in mg/l				2.98		2.49	1.19		0.50		3.29	0.84		1.30		2.85	1.09	5.84		4.11		1.94		3.70	
Turbidity in NTU				7.51		16.80	3.99		12.6		8.4	33.0		2.44		7.40	43.5	48.7		2.67		0.62		7.31	
Oxidation/Reduction Potential in mV				167		68	52		-70		73	-111		-9		114	-137	179		75		120		131	

NOTES:

1. BDL = Below Method Detection Limit
2. Only contaminants detected in one or more surface water samples are listed in this table.
3. Bolded values indicates exceedance of NHDES acute surface water criteria.
4. Shaded values indicate exceedance of NHDES chronic surface water criteria.
5. Shaded and bolded values indicate exceedances of both NHDES acute and chronic criteria.
6. (1) = Criteria for these metals are expressed as a function of the water effect ratio (WER) as defined in 40 CFR
   The values displayed in this table correspond to a WER of 1.0.
7. NSE indicates no standard has been established for the indicated parameter.
8. Volatile organic compound and metals results are in micrograms per liter (ug/l).

Field Parameter Units: us/cm = microsiemens per centimeter, mg/l = milligram per liter, NTU = nephelometric

TABLE 6

SUMMARY OF HISTORICAL SURFACE WATER ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	DES SURFACE		SW-5	SW-5	SW5	SW-5	SW-5	SW-5	SW-5	SW-5		SW-5	SW-5
DATE SAMPLED	WATER STANDARDS		27-Apr-99	26-Apr-01	16-Aug-01	27-Aug-03	26-Aug-04	29-Aug-05	30-Aug-06	15-Nov-07		14-Aug-08	19-Aug-09
PARAMETER ANALYZED	ACUTE	CHRONIC											
VOCs BY EPA METHOD 8260B IN ug/L													
BENZENE	5,300	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL
CHLOROBENZENE	250	50	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL
TOLUENE	NSE	NSE	2	BDL	BDL					BDL		BDL	7.2
METALS BY EPA METHOD 200.8 IN ug/L			Total	Total	Total	Total	Total	Total	Total	Total	Dissolved	Total	Total
ALUMINUM	**750**	87	**19,000**	40	**5,600 (H)**	200	**240,000**	**9,100**	**3,300**	150	BDL	BDL	BDL
ARSENIC (1)	340	150	BDL (2)	2	25	3	**720**	**1200**	17	6	8	2	45
BARIUM	NSE	NSE	190	26	180	40	6100	360	70	29	33	53	63
CADMIUM (1)	0.95	0.8	**1**	BDL	BDL	BDL	**10**	BDL	BDL	BDL	BDL	BDL	BDL
CALCIUM	NSE	NSE	51,000	74,000	38,000	83,000	310,000	54,000	67,000	28,000	33,000	43,000	66,000
CHROMIUM	183	24	71	BDL	16	3	**380**	30	5	BDL	BDL	BDL	BDL
COPPER	**3.6**	2.7	**34**	3	**11**	BDL	**140**	BDL	BDL	3	2	BDL	1
IRON (1)	NSE	1000	35,000	600	13,000	1,600	1,200,000	250,000	25,000	5,100	5,600	2,100	30,000
LEAD (1)	14	0.54	**22**	BDL	9	BDL	**440**	10	BDL	1	BDL	BDL	1
MAGNESIUM	NSE	NSE	29,000	29,000	38,000	35,000	90,000	18,000	19,000	8,200	9,600	10,000	15,000
MERCURY (1)	1.4	0.77	BDL	BDL	BDL	BDL	**2**	BDL	BDL	BDL	BDL	BDL	BDL
NICKEL (1)	144.9	16.1	52	11	25	11	270	20	8	5	6	5	5
POTASSIUM	NSE	NSE	26,000	29,000	68,000	40,000	50,000	20,000	20,000	21,000	24,000	7,200	20,000
SELENIUM	NSE	5	BDL	BDL	6	BDL	9	BDL	BDL	BDL	BDL	BDL	BDL
SILVER	0.32	NSE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SODIUM	NSE	NSE	88,000	70,000	220,000	160,000	22,000	21,000	43,000	35,000	42,000	36,000	46,000
THALLIUM	1400	40	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ZINC (1)	35.4	32.2	**83**	11	**49**	8	**530**	**50**	19	10	**900**	BDL	**89**
COBALT	NSE	NSE	19	BDL	BDL	BDL	200	10	3	3	3	2	2
BERYLLIUM	130	5.3	1	BDL	BDL	BDL	11	BDL	BDL	BDL	BDL	BDL	BDL
MANGANESE	NSE	NSE	3,300	140	3,500	790	200,000	5,800	2,800	1,200	1,500	1,300	1,600
ANTIMONY	9000	1600	BDL	BDL	8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
VANADIUM	NSE	NSE	49	1	11	BDL	360	19	BDL	BDL	BDL	BDL	1

NOTES:

1. BDL = Below Method Detection Limit
2. Bolded values indicates exceedance of NHDES acute surface water criteria.
3. Shaded values indicate exceedance of NHDES chronic surface water criteria.
4. Shaded and bolded values indicate exceedances of both NHDES acute and chronic criteria.
5. (1) = Criteria for these metals are expressed as a function of the water effect ratio (WER)
   The values displayed in this table correspond to a WER of 1.0.
6. NSE indicates no standard has been established for the indicated parameter.
7. H = Duplicate sample indicates possible
heterogeneity.
8 Volatile organic compound and metals results are in micrograms per liter (ug/l).

TABLE 7

SUMMARY OF LEACHATE ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	DES SURFACE WATER STANDARDS		L-1	L-1	L-1	L-1	L-1	L-1	L-1		L-1	L-1
DATE SAMPLED			16-Aug-01	7-Aug-02	27-Aug-03	25-Aug-04	25-Aug-05	30-Nov-06	13-Nov-07		12-Aug-08	19-Aug-09
COMMENTS	ACUTE	CHRONIC						ID 104240				
PARAMETER ANALYZED												
VOCs BY EPA METHOD 8260BC IN ug/L												
BENZENE	5300	NSE	3	2	2	BDL	2	2	3		BDL	1.9
CHLOROBENZENE	250	50	27	15	18	12	20	18	22		BDL	20
CHLOROETHANE	NSE	NSE	8	6	6	3	6	BDL	6		BDL	4.4
CHLOROFORM	28.9	1240	BDL	BDL	BDL	BDL	BDL	BDL	BDL		BDL	BDL
1,4 DICHLOROBENZENE	1120	763	BDL	3	2	BDL	3	2	3		BDL	2.5
1,2 DICHLOROBENZENE									1		BDL	1.1
ISOPROPYLBENZENE	NSE	NSE	BDL	BDL	BDL	BDL	BDL	2	2		BDL	1.5
DIETHYL ETHER	NSE	NSE	31	BDL	BDL	BDL	BDL	BDL	23		BDL	13
NAPHTHALENE									BDL		BDL	0.6
TETRAHYDROFURAN	NSE	NSE	32	BDL	BDL	BDL	BDL	BDL	20		BDL	12
1,4-DIOXANE			NA	NA	NA	NA	NA	NA	NA		NA	26
METALS BY EPA METHOD 6020 IN ug/L			Total	Total	Total	Total	Total		Total	Dissolved	Total	Total
ALUMINUM	**750**	87	**3200**	**4100**	**9,500**	**29,000**	**18,000**		BDL	BDL	170	BDL
ARSENIC	340	150	83	23	67	150	300		7	6	4	4
BARIUM	NSE	NSE	1300	260	610	2200	4600		97	99	11	100
CADMIUM	0.95	0.80	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL
CALCIUM	NSE	NSE	120,000	97,000	100,000	140,000	150,000		50,000	62,000	20,000	64,000
CHROMIUM	183	24	20	13	27	55	70		BDL	BDL	1	BDL
COPPER	**3.6**	2.7	BDL	**5**	**13**	**36**	**40**		BDL	1	**8**	BDL
IRON	NSE	1,000	350,000	130,000	330,000	1,000,000	1,100,000		30,000	27,000	1,200	35,000
LEAD	14	0.54	BDL	2	8	**34**	BDL		BDL	BDL	BDL	BDL
MAGNESIUM	NSE	NSE	49,000	43,000	36,000	34,000	43,000		20,000	25,000	2,500	25,000
MERCURY	1.4	0.77	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL
NICKEL	144.9	16.1	22	18	28	32	40		7	8	3	7
POTASSIUM	NSE	NSE	66	55	46,000	38,000	50,000		34,000	40	7,800	37,000
SELENIUM	NSE	5	7	8	4	3	BDL		BDL	BDL	BDL	BDL
SILVER	0.32	NSE	BDL	BDL (2)	**2**	BDL	BDL		BDL	BDL	BDL	BDL
SODIUM	NSE	NSE	220,000	200,000	160,000	140,000	150,000		130,000	150,000	BDL	100,000
THALLIUM	1,400	40	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL
ZINC	36.2	36.5	**45**	**51**	**140**	**390**	**690**		BDL	**650**	**56**	12
COBALT	NSE	NSE	BDL	3	6	11	10		BDL	1	BDL	BDL
BERYLLIUM	130	5.3	3	BDL	BDL	3	BDL		BDL	BDL	BDL	BDL
MANGANESE	NSE	NSE	7,600	5,700	5,900	10,000	9,800		2,700	3,200	98	3,200
ANTIMONY	9,000	1,600	6	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL
VANADIUM	NSE	NSE	46	13	36	89	220		1	1	2	2
CHEMICAL OXYGEN DEMAND BY EPA METHOD 410.4 IN mg/l	NSE	NSE	190	178	560	282	377		70		50	50
CYANIDE (Total)									BDL		NA	NA
AMMONIA BY EPA METHOD 350.3 IN mg/l	36.1	3.08	**44.0**	**41.0**	**44.8**	**56.8**	**79.0**		**33**		0.62	21
FIELD PARAMETERS												
Temperature Degrees C									11.81		17.73	14.14
pH									6.19		6.57	6.37
Conductivity in us/cm									1600		176	1459
Dissolved Oxygen in mg/l									2.23		4.94	1.25
Turbidity in NTU									17.9		90	9.98
Oxidation/Reduction Potential in mV									138		42	-38

NOTES:

1. BDL = Below Method Detection Limit
2. Only contaminants detected in one or more leachate samples are listed in this table.
3. Acute surface water standard shown for ammonia is for a surface water with a pH of 7.0.
4. (1) = Criteria for these metals are expressed as a function of the water effect ration (WER) as defined in 40 CFR 131.36 c, the values displayed in this table correspond to a WER of 1.0.
5. A bold entry indicates the parameter exceeded the acute surface water standard.
6. Shaded values indicate the parameter exceeded the chronic surface water standard.
7. Bold and shaded values indicate exceedances of both NHDES acute and chronic criteria.
7. NSE indicates no standard has been established for the indicated parameter.
8. Volatile organic compounds and metals results are in micrograms per liter (µg/l).

TABLE 8

SUMMARY OF SEDIMENT ANALYTICAL RESULTS
2009 ANNUAL MONITORING PLAN DATA ASSESSMENT REPORT
COAKLEY LANDFILL OU-1 AND OU-2
NORTH HAMPTON, NEW HAMPSHIRE

SAMPLE IDENTIFICATION	NHDES	SED-4	SED-4	SED-4	SED-4	SED-5	SED-5	SED-5/3T	SED-5/3T	SED-5	SED-103	SED-1T	SED-2T	SED-4T	SED-5T	SED-6T
DATE SAMPLED	S-1 Soil	29-Aug-06	15-Nov-07	14-Aug-08	19-Aug-09	29-Aug-05	30-Aug-06	15-Nov-07	14-Aug-08	19-Aug-09	13-Nov-07	13-Nov-07	13-Nov-07	15-Nov-07	13-Nov-07	13-Nov-07
METALS BY EPA METHOD 6020 IN mg/kg	Standard															
ALUMINUM	NE	6,700	3,800	12,000	3,100	6,600	34,000	9,900	11,000	17,000	6200	10,000	19,000	8,700	10,000	14,000
ARSENIC	11	BDL	4.2	2.1	3.1	310	17	15	16	15	1.5	13	17	19	4.7	3.2
BARIUM	1000	49	68	71	52	270	150	110	49	110	18	78	110	54	60	82
CADMIUM	33	BDL	0.8	BDL	0.5	BDL	BDL	2.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
CALCIUM	NE	12,000	15,000	2,000	17,000	8,900	3,600	8,700	1,700	1,700	1400	5,300	2,300	8,200	11,000	2,600
CHROMIUM	1000	BDL	4.0	14	3.4	13	69	39	23	49	13	32	44	11	17	28
COPPER	NE	20	17	2.5	16	6	45	55	16	28	1.9	12	27	7.2	12	9
IRON	NE	2,400	3,100	2,100	2,800	210,000	40,000	54,000	13,000	29,000	5600	8,400	25,000	8,400	4,100	6,600
LEAD	400	110	68	10	32	20	23	4,000	10	18	4.1	15	23	39	11	13
MAGNESIUM	NE	2,400	2,000	900	2,000	3,200	10,000	4,500	3,800	7,700	1600	2,200	6,500	1,500	1,600	2,000
MERCURY	6	BDL	0.5	BDL	0.3	0.5	BDL	0.9	0.2	BDL	BDL	BDL	BDL	0.3	0.2	BDL
NICKEL	400	BDL	7.4	6.3	6.9	9	53	32	14	38	7.0	16	33	6.8	11	18
POTASSIUM	NE	340	300	1,700	200	1,300	8,200	1,600	1,300	5,400	500	1,300	4,700	1,000	1,100	1,500
SELENIUM	180	BDL	BDL	BDL	2.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SILVER	89	BDL	BDL	BDL	BDL	BDL	BDL	1.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SODIUM	NE	1100	300	200	400	240	800	400	200	300	300	300	500	400	500	300
THALLIUM	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
ZINC	1000	74	110	8.3	93	38	130	700	28	80	15	26	70	28	35	29
COBALT	NE	BDL	2.3	1.2	2.0	6	14	9.7	5.1	11	2.2	5.1	9.4	3.8	2	3
BERYLLIUM	1	BDL	BDL	0.6	BDL	BDL	BDL	BDL	BDL	1.0	BDL	0.9	1.0	0.7	BDL	BDL
MANGANESE	5200	160	910	63	980	2,500	500	600	240	300	97	350	400	760	250	73
ANTIMONY	9	BDL	1.0	BDL	0.7	BDL	BDL	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
VANADIUM	NE	29	14	14	10	17	55	24	25	41	10	18	38	17	13	17
CYANIDE	100		1.3	NA	NA			1.2	NA	NA	BDL	BDL	BDL	0.6	BDL	BDL

NOTES:
1. BDL = Below Method Detection Limit
2. Results are in milligrams per kilogram (mg/kg).

SECTION 1

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

June 19, 2008

Peter Britz
Environmental Planner
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

SUBJECT: **North Hampton –** Coakley Landfill Superfund Site, 480 Breakfast Hill Road
Groundwater Management Permit, DES Site # 198712001, Project RSN # 431

Groundwater Management Permit Application, prepared by Hancock & Associates, dated May 14, 2008

Dear Mr. Britz:

Please find enclosed Groundwater Management Permit Number GWP-198712001-N-001, approved by the Department of Environmental Services (Department). This permit is issued for a period of 5 years to monitor the effects of past discharges of contaminants of concern, as defined in Table 12 of the 1994 Site Record of Decision.

All monitoring summaries and all required sampling results must be submitted to the Groundwater Management Permits Coordinator at the address below. All correspondence shall contain a cover letter that clearly shows the Department identification number for the site (DES Site # 198712001). **Please note that upon issuance of this permit, it is only necessary to submit monitoring results to the "Groundwater Management Permits Coordinator" and not to my attention**.

Please note that Condition # 9 requires the permit holder to provide notice of the permit by certified mail, within 30 days of permit issuance, to all owners of lots of record within the Groundwater Management Zone. Documentation of the notification, in the form of a copy of the notice with return receipt(s), shall be submitted to the Department within 60 days of permit issuance.

Also, please note that Condition # 10 requires the permit holder to record "Notice" of the permit (not the permit), within 60 days of issuance, at the registry of deeds in the chain of title for each lot within the Groundwater Management Zone. An example Notice is enclosed for your use. A copy of each recorded Notice shall be submitted to the Department within 30 days of recordation.

Should you have any questions, please contact me at the Waste Management Division.

Sincerely,

Andrew Hoffman, P.E.
State Project Coordinator
Hazardous Waste Remediation Bureau
Tel: (603) 271-6778
Fax: (603) 271-2181
Email: Andrew.Hoffman@des.nh.gov

Enclosure(s): Groundwater Management Permit No. GWP-198712004-N-001
Sample Recordation Notice

cc: Daniel MacRitchie, Hancock Associates
Kim McNamara, City Health Officer
Richard Pease, Federal Sites, Supervisor
Karlee Kenison, HWRB-GR&P, Supervisor
Peter Roth, NH DoJ

The

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

GROUNDWATER MANAGEMENT PERMIT NO. GWP-198712001-N-001

to the permittee

COAKLEY LANDFILL GROUP

to monitor the past discharge of

Contaminants of Concern, as identified in Table 12 of the 1994 Record of Decision

at

COAKLEY LANDFILL
(480 Breakfast Hill Road)

in NORTH HAMPTON, N.H.

via the groundwater monitoring system comprised of

12 OU-1 monitoring wells, 25 OU-2 monitoring wells, 3 surface water, and 2 sediment and 1 leachate sampling station(s)

as depicted on the Site Plan entitled

"Environmental Monitoring Network"

dated August 16, 2007, prepared by Golder & Associates, Inc. of Manchester, New Hampshire

TO: COAKLEY LANDFILL GROUP
1 JUNKINS AVENUE
PORTSMOUTH, NEW HAMPSHIRE 03801

Date of Issuance: June 19, 2008
Date of Expiration: June 18, 2013

Pursuant to authority in N.H. RSA 485-C:6-a, the New Hampshire Department of Environmental Services (Department), hereby grants this permit to monitor past discharges to the groundwater at the above described location for five years subject to the following conditions:

(continued)

STANDARD MANAGEMENT PERMIT CONDITIONS

1. The permittee shall not violate Ambient Groundwater Quality Standards adopted by the Department (N.H. Admin. Rules Env-Or 600) in groundwater outside the boundaries of the Groundwater Management Zone, as shown on the referenced site plan.

2. The permittee shall not cause groundwater degradation that results in a violation of surface water quality standards (N.H. Admin. Rules Env-Ws 1700) in any surface water body.

3. The permittee shall allow any authorized staff of the Department, or its agent, to enter the property covered by this permit for the purpose of collecting information, examining records, collecting samples, or undertaking other action associated with this permit.

4. The permittee shall apply for the renewal of this permit at least 90 days prior to its expiration date.

5. This permit is transferable only upon written request to, and approval of, the Department. Compliance with the existing Permit shall be established prior to permit transfer. Transfer requests shall include the name and address of the person to whom the permit transfer is requested, signature of the current and future permittee, and a summary of all monitoring results to date.

6. The Department reserves the right, under N.H. Admin. Rules Env-Or 600, to require additional hydrogeologic studies and/or remedial measures if the Department receives information indicating the need for such work.

7. The permittee shall maintain a water quality monitoring program and submit monitoring results inclusive with the annual report to the Department's Groundwater Management Permits Coordinator no later than 120 days after sampling. Samples shall be taken from on-site monitoring wells and surface water sampling points as shown and labeled on the referenced site plan and other sampling points listed on the following table in accordance with the schedule outlined herein:

Monitoring Locations	**Sampling Frequency**	**Parameters**
MW-5S, MW-6, FPC-2A, FPC-2B, FPC-4B, FPC-6A, FPC-6B, FPC-8B, GZ-105, GZ-123, GZ-125, AE-2A, AE-2B, AE-3A, AE-3B, AE-4A, AE-4B	August each year	Field parameters, dissolved iron & manganese, target analyte list (TAL) metals (total), NHDES Waste Management Division Full List of Analytes for Volatile Organics (Full List VOCs).
MW-4, MW-9, OP-2, OP-5, FPC-7A, FPC-7B, FPC-9A, FPC-11A, FPC-11B, AE-1A, AE-1B	August each year	Field parameters, dissolved iron & manganese, TAL metals (total).
MW-5D, MW-8, MW-11,FPC-8A	August each year	Field parameters, TAL metals (total), Full List VOCs.
MW-10, RMW-3, BP-4, FPC-5A, FPC-5B	August each year	Field parameters, TAL metals (total).

(continued)

Monitoring Locations	**Sampling Frequency**	**Parameters**
R-3, R-5	August each year	Field parameters, Full List VOCs.
SW-4, SW-5, SW-103	August each year	Field parameters, ammonia, TAL metals (total), Full List VOCs.
SED-4, SED-5	August each year	TAL metals (total).
L-1	August each year	Field parameters, COD, ammonia, TAL metals (total), Full List VOCs.

Sampling shall be performed in accordance with the documents listed in Env-Or 610.02 (e). Samples shall be analyzed by a laboratory certified by the U.S. Environmental Protection Agency or the New Hampshire Department of Environmental Services. All overburden groundwater samples collected for metal analyses (iron, manganese, and Drinking Water Metals) shall be analyzed for dissolved metals; and thus must be field filtered (with a 0.45-micron filter) and acidified after filtration in the field. Surface water samples and samples collected from bedrock or water supply wells shall be analyzed for total metals, and shall not be filtered. Surface water samples shall be collected and analyzed in accordance with 40 CFR 136. As referred to herein, the term "Target Analyte Metals (TAL)" refers to aluminum, arsenic, barium, cadmium, calcium, chromium, copper, iron, lead, magnesium, mercury, nickel, potassium, selenium, silver, sodium, thallium, zinc, cobalt, beryllium, manganese, antimony and vanadium.

Summaries of water quality shall be submitted annually in December to the Department's Waste Management Division, attention Groundwater Management Permits Coordinator, using a format acceptable to the Department. The Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

The Annual Summary Report shall be prepared and stamped by a professional engineer or professional geologist licensed in the State of New Hampshire.

8. Issuance of this permit is based on the Groundwater Management Permit Application dated May 14, 2008, and the historical documents found in the Department file DES Site # 198712001. The Department may require additional hydrogeologic studies and/or remedial measures if invalid or inaccurate data are submitted.

9. Within 30 days of the date of Department approval of this Groundwater Management Permit, the permittee shall provide notice of the permit by certified mail, return receipt requested, to all owners of lots of record within the Groundwater Management Zone. The permittee shall submit documentation of this notification to the Department within 60 days of permit issuance.

10. Within 60 days of the date of Department approval of this Groundwater Management Permit, the permit holder shall record notice of the permit in the registry of deeds in the chain of title for each **lot** within the Groundwater Management Zone. **This recordation requires that the registry be provided with the name of current property owner and associated book and page numbers for the deed of each lot encumbered by this permit. Portions of State/Town/City roadways and associated right-of-way properties within the Groundwater Management Zone do not require recordation.** A copy of each recorded notice shall be submitted to the Department within 30 days of recordation.

11. Within 30 days of discovery of a violation of an ambient groundwater quality standard at or beyond the Groundwater Management Zone boundary, the permittee shall notify the Department in writing. Within 60 days of discovery, the permittee shall submit recommendations to correct the violation. The Department shall approve the recommendations if the Department determines that they will correct the violation.

SPECIAL CONDITIONS FOR THIS PERMIT

12. Recorded property within the Groundwater Management Zone shall include the lots as listed and described in the following table:

Tax Map/ Lot #	**Property Address**	**Owner Name and Address**	**Deed Reference (Book/Page)**
Map 10 Lot 11	355 Lafayette Road Rye	First & Ten Property Management PO Box 1058 Rye 03843	Book 3294 Page 2953
Map 17 Lot 72	67 North Road North Hampton	Joan Nordstrom 67 North Road North Hampton 03862	Book 2416 Page 583
Map 17 Lot 73	65 North Road North Hampton	Yolanda Fitzgerald PO Box 626 North Hampton 03862	Book 3007 Page 2807
Map 17 Lot 82	160 Lafayette Rd North Hampton	Luck Enterprises 115 Lafayette Road North Hampton 03862	Book 2473 Page 1659
Map 17 Lot 86	180 Lafayette Rd North Hampton	Christopher & Ricardo Fucci 180 Lafayette Road North Hampton 03862	Book 3319 Page 952
Map 17 Lot 87	186 Lafayette Rd North Hampton	Lori Lessard, Trustee 186 Lafayette Road North Hampton 03862	Book 2760 Page 2101
Map 21 Lot 8	188 Lafayette Rd North Hampton	Helen McKittrick 188 Lafayette Road North Hampton 03862	Book 2641 Page 2656
Map 21 Lot 10	8A Lafayette Terrace North Hampton	Darleena Wylie 8 Lafayette Terrace North Hampton 03862	Book 3219 Page 2588
Map 21 Lot 11	12A Lafayette Terrace North Hampton	Susan Laffey 12 Lafayette Terrace North Hampton 03862	Book 2964 Page 2565
Map 21 Lot 12	16A Lafayette Terrace North Hampton	Christine Adinolfo 16 Lafayette Terrace North Hampton 03862	Book 2963 Page 1721
Map 21 Lot 14	20 Lafayette Terrace North Hampton	Joseph Hanley 20 Lafayette Terrace North Hampton 03862	Book 4682 Page 1265

Tax Map/ Lot #	Property Address	Owner Name and Address	Deed Reference (Book/Page)
Map 21 Lot 14-1	40-42 Lafayette Terrace North Hampton	James Jones 207 Atlantic Avenue North Hampton 03862	Book 4451 Page 1104
Map 21 Lot 15	44 Lafayette Terrace North Hampton	Bridget Conner 44 Lafayette Terrace North Hampton 03862	Book 4183 Page 1638
Map 21 Lot 16	46 Lafayette Terrace North Hampton	Rodney Booker 46 Lafayette Terrace North Hampton 03862	Book 4275 Page 902
Map 21 Lot 17	1 Lafayette Terrace North Hampton	Bernard Tracey 257 Washington Road Rye 03870	Book 2450 Page 687
Map 21 Lot 18	3 Lafayette Terrace North Hampton	Kathleen Tracey 3 Lafayette Terrace North Hampton 03862	Book 1243 Page 317
Map 21 Lot 19	5 Lafayette Terrace North Hampton	Kimberly Bartlett 5 Lafayette Terrace North Hampton NH 03862	Book 3824 Page2799
Map 21 Lot 20	9 Lafayette Terrace North Hampton	Alexis Perron 9 Lafayette Terrace North Hampton NH 03862	Book 3088 Page 1774
Map 21 Lot 21	15 Lafayette Terrace North Hampton	Tracy Margeson 15 Lafayette Terrace North Hampton NH 03862	Book 3121 Page 1606
Map 21 Lot 22	15 Lafayette Terrace North Hampton	Anita Gabree 15 Lafayette Terrace North Hampton 03862	Book 3013 Page 2221
Map 21 Lot 23	15 Lafayette Terrace North Hampton	Tracy Margeson 15 Lafayette Terrace North Hampton NH 03862	Book 3121 Page 1606
Map 21 Lot 24	43 Lafayette Terrace North Hampton	William Warman 380 Lafayette Rd,11-102 Seabrook NH 03874	Book 4374 Page1365
Map 21 Lot 25	45 Lafayette Terrace North Hampton	ZCCMMXIIV0000IIII/5 NH Ltd Partnership PO Box 65 Portsmouth NH 03802	Book 2530 Page 1863
Map 21 Lot 26	198 Lafayette Road North Hampton	Gozinta LLC 198 Lafayette Road North Hampton NH 03862	Book 4275 Page 902
Map 21 Lot 27	206 Lafayette Road North Hampton	206 Lafayette Road LLC 206 Lafayette Road North Hampton NH 03862	Book 4785 Page 379
Map 21 Lot 27-1	200 Lafayette Road North Hampton	Derek Burt 8774 Mustic Circle Northport FL 34287	Book 2491 Page 339

Tax Map/ Lot #	Property Address	Owner Name and Address	Deed Reference (Book/Page)
Map 21 Lot 28	216 Lafayette Road North Hampton	Stella Ciboroski PO Box 443 Concord, NH 03301	Book 2366 Page 1127
Map 21 Lot 28-1	216 Lafayette Road North Hampton	Leo Crotty, Jr. 216 Lafayette Road North Hampton NH 03862	Book 2475 Page 1278
Map 21 Lot 29	212 Lafayette Road North Hampton	S&L Realty Trust PO Box 4276 Portsmouth NH 03802	Book 3666 Page 1199
Map 21 Lot 31	224 Lafayette Road North Hampton	MA NEGM, LLC 302 Main Street Somersworth MA 03878	Book 4649 Page 2366
Map 21 Lot 41	North Road Rear North Hampton	Elmer Sewell 340 Breakfast Hill Road Greenland NH 03840	Book 1340 Page 524
Map 21 Lot 46	8A Lafayette Terrace, North Hampton	Darleena Wylie 8 Lafayette Terrace North Hampton NH 03862	Book 3219 Page 2588
*Map R1 Lot 13	340 Breakfast Hill Rd Greenland	Elmer Sewell, Rev. Tr. 96 340 Breakfast Hill Road, Greenland NH 03840	Book 3159 Page 928
Map R1 Lot 9B	560 Breakfast Hill Rd Greenland	Town of Greenland PO Box 100 Greenland NH 03840	Book 3454 Page 1131

*A portion of the Sewall parcel (Tax Map R1, Lot #13) is included as within the GMZ and is described as follows:

Commencing at a point at the intersection of the westerly sideline of the Boston and Maine Railroad right of way and the town line of Greenland and North Hampton, thence; N80º19'25"W four hundred sixty-six and fourteen hundredths feet (466.14') by the town line of North Hampton to a point, thence; N79º55'00"W eighteen and ninety-nine hundredths feet (18.99') by the town line of North Hampton to a point, thence; N17º29'30"E one thousand ninety-seven and eighty hundredths feet (1097.80') by other land of the Barbara E. Sewall Revocable Trust to a point, thence; S76º51'30"E four hundred thirty-four and zero hundredths feet (434.00') by other land of the Barbara E. Sewall Revocable Trust to a point, thence; S13º08'30"W one hundred sixty-three and twenty-one hundredths feet (163.21') by land of the Boston and Maine Railroad right of way to a point, thence; S35º09'35"W eighty-eight and two hundredths feet (88.02') by land of the Boston and Maine Railroad right of way to a point, thence; S13º08'30"W eight hundred twenty and sixty-four hundredths feet (820.64') by land of the Boston and Maine Railroad right of way to the point of beginning.

13. All monitoring wells at the site shall be properly maintained and secured from unauthorized access or surface water infiltration.

14. UNDEVELOPED LOTS WITHIN THE GROUNDWATER MANAGEMENT ZONE:

A) Consistent with Env-Or 607.06(d), for each undeveloped lot which is included (in whole or part) in the groundwater management zone and which lacks access to a public water system, the permittee shall inquire of the property owner at least once each year as to whether there are any new drinking water supply well(s) on the property. The permittee shall include a report on this inquiry in the Annual Summary Report required in Standard Permit Condition # 7.

B) Upon discovery of a new drinking water supply well(s), whether as a result of the annual inquiry, upon notice from the lot owner or by any other means, the permittee shall provide written notification to the Department and, to ensure compliance with Env-Or 607.06(a), prepare a contingency plan to provide potable drinking water in the event a well is or becomes contaminated above the drinking water standards. The potable water supply shall meet applicable federal and state water quality criteria. This plan shall be submitted to the Department for approval within 15 days of the date of discovery.

C) Consistent with Env-Or 607.06(e), the permittee shall cause all new drinking water supply well(s) to be sampled within 30 days of discovery. The well(s) shall be sampled for all the parameters included in Standard Condition # 7, unless otherwise specified in writing by the Department. The permittee shall forward all analytical results to the Department and the owner of the drinking water supply well within 7 days of receipt of the results.

Based on the results:

i. If the new well is not contaminated as defined in Env-Or 603.01, the permittee shall continue to sample the new wells annually as part of the permit.

ii. If analytical results indicate the water is contaminated above applicable federal and state water quality criteria, the permittee shall:

a. Notify the owner immediately;

b. Obtain a confirmation set of analytical samples within 14 days of receipt of the original results indicating a groundwater quality standard exceedence; and

c. Following confirmation of groundwater quality standard exceedence, immediately implement the contingency plan submitted for approval pursuant to Special Permit Condition # 14B, above.

Carl W. Baxter, P.E., Administrator
Hazardous Waste Remediation Bureau
Waste Management Division

Under RSA 21-0:14 and 21-0:9-V, any person aggrieved by any terms or conditions of this permit may appeal to the Waste Management Council in accordance with RSA 541-A and N.H. Admin. Rules, Env-WMC 200. Such appeal must be made to the Council within 30 days and must be addressed to the Chairman of the Waste Management Council, c/o Appeals Clerk, Department of Environmental Services Legal Unit, 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

SECTION 2

eastern analytical

professional laboratory services

Kevin McKibben
Provan & Lorber (Co)
PO Box 389
Contoocook , NH 03229

ACCREDITED IN ACCORDANCE WITH nela

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 81984
Client Identification: Coakley Landfill / M9081
Date Received: 8/18/2009

Dear Mr. McKibben :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — Date: 9.2.09 — # of pages (excluding cover letter): 25

SAMPLE CONDITIONS PAGE

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Temperature upon receipt (°C): 3 **Received on ice or cold packs (Yes/No): Y**

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
81984.01	GW-MW-9-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.02	GW-MW-10-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.03	GW-AE-2A-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.04	GW-AE-2B-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.05	GW-AE-2B-DUP-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.06	GW-AE-4A-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.07	GW-AE-4B-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.08	GW-FPC-2A-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.09	GW-FPC-2B-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.1	GW-FPC-4B-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.11	GW-FPC-6A-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.12	GW-FPC-6B-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.13	GW-FPC-7A-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.14	GW-FPC-7B-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.15	GW-FPC-7B-FB-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.16	GW-FPC-9A-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.17	GW-FPC-11A-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.18	GW-FPC-11B-0809	8/18/09	8/17/09	aqueous		Adheres to Sample Acceptance Policy
81984.19	GW-GZ-123-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.2	GW-GZ-125-0809	8/18/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
81984.21	Trip Blank	8/18/09	7/20/09	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater : Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 2nd edition, 1992

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-2A-0809	GW-AE-2B-0809	GW-AE-2B-DUP-0809	GW-AE-4A-0809	GW-AE-4B-0809	GW-FPC-2A-0809	GW-FPC-2B-0809
Lab Sample ID:	81984.03	81984.04	81984.05	81984.06	81984.07	81984.08	81984.09
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/18/09	8/18/09	8/18/09	8/17/09	8/17/09	8/17/09	8/17/09
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 5	**6**	**7**	< 5	< 5	< 5	< 5
Trichlorofluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Diethyl Ether	**6**	**39**	**38**	< 5	< 5	< 5	< 5
Acetone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30	< 30	< 30	< 30
Methylene chloride	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethyl-t-butyl ether(ETBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Isopropyl ether(DIPE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
tert-amyl methyl ether(TAME)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	**10**	**50**	**50**	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Benzene	< 1	**2**	**2**	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dibromoethane(EDB)	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	**2**	**3**	**3**	< 2	< 2	< 2	< 2
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-2A-0809	GW-AE-2B-0809	GW-AE-2B-DUP-0809	GW-AE-4A-0809	GW-AE-4B-0809	GW-FPC-2A-0809	GW-FPC-2B-0809
Lab Sample ID:	81984.03	81984.04	81984.05	81984.06	81984.07	81984.08	81984.09
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/18/09	8/18/09	8/18/09	8/17/09	8/17/09	8/17/09	8/17/09
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09	8/21/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
mp-Xylene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
4-Bromofluorobenzene (surr)	**97 %R**	**97 %R**	**97 %R**	**95 %R**	**94 %R**	**95 %R**	**94 %R**
1,2-Dichlorobenzene-d4 (surr)	**99 %R**	**102 %R**	**101 %R**	**100 %R**	**101 %R**	**100 %R**	**101 %R**
Toluene-d8 (surr)	**100 %R**	**100 %R**	**100 %R**	**101 %R**	**101 %R**	**101 %R**	**100 %R**

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Lan**

Sample ID:	GW-FPC-4B-0809	GW-FPC-6A-0809	GW-FPC-6B-0809	GW-FPC-7B-FB-0809	~~GW-GZ-123-0809~~ GW-GZ-125-0809	~~GW-GZ-125-0809~~ GW-GZ-123-0809	Trip Blank
Lab Sample ID:	81984.1	81984.11	81984.12	81984.15	81984.19	81984.2	81984.21
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/17/09	8/17/09	8/17/09	8/18/09	8/18/09	8/18/09	7/20/09
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/21/09	8/22/09	8/22/09	8/22/09	8/22/09	8/21/09	8/21/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 5	**5**	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Diethyl Ether	< 5	**10**	**10**	< 5	< 5	< 5	< 5
Acetone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30	< 30	< 30	< 30
Methylene chloride	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethyl-t-butyl ether(ETBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Isopropyl ether(DIPE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
tert-amyl methyl ether(TAME)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Benzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dibromoethane(EDB)	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	**3**	**3**	< 2	< 2	< 2	< 2
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Lan**

Sample ID:	GW-FPC-4B-0809	GW-FPC-6A-0809	GW-FPC-6B-0809	GW-FPC-7B-FB-0809	~~GW-GZ-123-0809~~ GW-GZ-125-0809	~~GW-GZ-125-0809~~ GW-GZ-123-0809	Trip Blank
Lab Sample ID:	81984.1	81984.11	81984.12	81984.15	81984.19	81984.2	81984.21
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/17/09	8/17/09	8/17/09	8/18/09	8/18/09	8/18/09	7/20/09
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09	8/18/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/21/09	8/22/09	8/22/09	8/22/09	8/22/09	8/21/09	8/21/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
mp-Xylene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
4-Bromofluorobenzene (surr)	**94 %R**	**96 %R**	**95 %R**	**94 %R**	**94 %R**	**94 %R**	**93 %R**
1,2-Dichlorobenzene-d4 (surr)	**101 %R**	**101 %R**	**102 %R**	**103 %R**	**102 %R**	**103 %R**	**102 %R**
Toluene-d8 (surr)	**99 %R**	**101 %R**	**101 %R**	**100 %R**	**101 %R**	**99 %R**	**99 %R**

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/21/2009	ug/l			8260B
Chloromethane	< 2			8/21/2009	ug/l			8260B
Vinyl chloride	< 2			8/21/2009	ug/l			8260B
Bromomethane	< 2			8/21/2009	ug/l			8260B
Chloroethane	< 5			8/21/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/21/2009	ug/l			8260B
Diethyl Ether	< 5			8/21/2009	ug/l			8260B
Acetone	< 10			8/21/2009	ug/l			8260B
1,1-Dichloroethene	< 1	22 (109 %R)	22 (110 %R) (1 RPD)	8/21/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/21/2009	ug/l			8260B
Methylene chloride	< 5			8/21/2009	ug/l			8260B
Carbon disulfide	< 5			8/21/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/21/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/21/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/21/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/21/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/21/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/21/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/21/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/21/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/21/2009	ug/l			8260B
Bromochloromethane	< 2			8/21/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/21/2009	ug/l			8260B
Chloroform	< 2			8/21/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/21/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/21/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/21/2009	ug/l			8260B
Benzene	< 1	20 (101 %R)	20 (101 %R) (0 RPD)	8/21/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/21/2009	ug/l			8260B
Trichloroethene	< 2	20 (98 %R)	20 (98 %R) (0 RPD)	8/21/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/21/2009	ug/l			8260B
Dibromomethane	< 2			8/21/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/21/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/21/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/21/2009	ug/l			8260B
Toluene	< 1	20 (100 %R)	20 (99 %R) (1 RPD)	8/21/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/21/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/21/2009	ug/l			8260B
2-Hexanone	< 10			8/21/2009	ug/l			8260B
Tetrachloroethene	< 2			8/21/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/21/2009	ug/l			8260B
Dibromochloromethane	< 2			8/21/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/21/2009	ug/l			8260B
Chlorobenzene	< 2	19 (95 %R)	19 (95 %R) (0 RPD)	8/21/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 2			8/21/2009	ug/l			8260B
Ethylbenzene	< 1			8/21/2009	ug/l			8260B
mp-Xylene	< 1			8/21/2009	ug/l			8260B
o-Xylene	< 1			8/21/2009	ug/l			8260B
Styrene	< 1			8/21/2009	ug/l			8260B
Bromoform	< 2			8/21/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/21/2009	ug/l			8260B
Bromobenzene	< 2			8/21/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/21/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/21/2009	ug/l			8260B
n-Propylbenzene	< 1			8/21/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/21/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/21/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/21/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/21/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/21/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
n-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/21/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/21/2009	ug/l			8260B
Naphthalene	< 5			8/21/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	95 %R	103 %R	101 %R	8/21/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	102 %R	99 %R	98 %R	8/21/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	101 %R	99 %R	98 %R	8/21/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/21/2009	ug/l			8260B
Chloromethane	< 2			8/21/2009	ug/l			8260B
Vinyl chloride	< 2			8/21/2009	ug/l			8260B
Bromomethane	< 2			8/21/2009	ug/l			8260B
Chloroethane	< 5			8/21/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/21/2009	ug/l			8260B
Diethyl Ether	< 5			8/21/2009	ug/l			8260B
Acetone	< 10			8/21/2009	ug/l			8260B
1,1-Dichloroethene	< 1	20 (102 %R)	21 (104 %R) (2 RPD)	8/21/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/21/2009	ug/l			8260B
Methylene chloride	< 5			8/21/2009	ug/l			8260B
Carbon disulfide	< 5			8/21/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/21/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/21/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/21/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/21/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/21/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/21/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/21/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/21/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/21/2009	ug/l			8260B
Bromochloromethane	< 2			8/21/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/21/2009	ug/l			8260B
Chloroform	< 2			8/21/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/21/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/21/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/21/2009	ug/l			8260B
Benzene	< 1	19 (97 %R)	20 (100 %R) (3 RPD)	8/21/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/21/2009	ug/l			8260B
Trichloroethene	< 2	19 (93 %R)	19 (96 %R) (3 RPD)	8/21/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/21/2009	ug/l			8260B
Dibromomethane	< 2			8/21/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/21/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/21/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/21/2009	ug/l			8260B
Toluene	< 1	19 (96 %R)	20 (99 %R) (3 RPD)	8/21/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/21/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/21/2009	ug/l			8260B
2-Hexanone	< 10			8/21/2009	ug/l			8260B
Tetrachloroethene	< 2			8/21/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/21/2009	ug/l			8260B
Dibromochloromethane	< 2			8/21/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/21/2009	ug/l			8260B
Chlorobenzene	< 2	19 (95 %R)	19 (97 %R) (2 RPD)	8/21/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 2			8/21/2009	ug/l			8260B
Ethylbenzene	< 1			8/21/2009	ug/l			8260B
mp-Xylene	< 1			8/21/2009	ug/l			8260B
o-Xylene	< 1			8/21/2009	ug/l			8260B
Styrene	< 1			8/21/2009	ug/l			8260B
Bromoform	< 2			8/21/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/21/2009	ug/l			8260B
Bromobenzene	< 2			8/21/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/21/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/21/2009	ug/l			8260B
n-Propylbenzene	< 1			8/21/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/21/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/21/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/21/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/21/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/21/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/21/2009	ug/l			8260B
n-Butylbenzene	< 1			8/21/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/21/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/21/2009	ug/l			8260B
Naphthalene	< 5			8/21/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/21/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	95 %R	102 %R	103 %R	8/21/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	101 %R	98 %R	98 %R	8/21/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	99 %R	100 %R	100 %R	8/21/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/22/2009	ug/l			8260B
Dichlorodifluoromethane	< 5			8/22/2009	ug/l			8260B
Chloromethane	< 2			8/22/2009	ug/l			8260B
Vinyl chloride	< 2			8/22/2009	ug/l			8260B
Bromomethane	< 2			8/22/2009	ug/l			8260B
Chloroethane	< 5			8/22/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/22/2009	ug/l			8260B
Diethyl Ether	< 5			8/22/2009	ug/l			8260B
Acetone	< 10			8/22/2009	ug/l			8260B
1,1-Dichloroethene	< 1	21 (105 %R)	20 (100 %R) (5 RPD)	8/22/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/22/2009	ug/l			8260B
Methylene chloride	< 5			8/22/2009	ug/l			8260B
Carbon disulfide	< 5			8/22/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/22/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/22/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/22/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/22/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/22/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/22/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/22/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/22/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/22/2009	ug/l			8260B
Bromochloromethane	< 2			8/22/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/22/2009	ug/l			8260B
Chloroform	< 2			8/22/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/22/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/22/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/22/2009	ug/l			8260B
Benzene	< 1	20 (100 %R)	19 (97 %R) (3 RPD)	8/22/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/22/2009	ug/l			8260B
Trichloroethene	< 2	19 (95 %R)	19 (93 %R) (2 RPD)	8/22/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/22/2009	ug/l			8260B
Dibromomethane	< 2			8/22/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/22/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/22/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/22/2009	ug/l			8260B
Toluene	< 1	20 (100 %R)	19 (97 %R) (3 RPD)	8/22/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/22/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/22/2009	ug/l			8260B
2-Hexanone	< 10			8/22/2009	ug/l			8260B
Tetrachloroethene	< 2			8/22/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/22/2009	ug/l			8260B
Dibromochloromethane	< 2			8/22/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/22/2009	ug/l			8260B

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Chlorobenzene	< 2	19 (97 %R)	19 (95 %R) (2 RPD)	8/22/2009	ug/l	75 - 130	20	8260B
1,1,1,2-Tetrachloroethane	< 2			8/22/2009	ug/l			8260B
Ethylbenzene	< 1			8/22/2009	ug/l			8260B
mp-Xylene	< 1			8/22/2009	ug/l			8260B
o-Xylene	< 1			8/22/2009	ug/l			8260B
Styrene	< 1			8/22/2009	ug/l			8260B
Bromoform	< 2			8/22/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/22/2009	ug/l			8260B
Bromobenzene	< 2			8/22/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/22/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/22/2009	ug/l			8260B
n-Propylbenzene	< 1			8/22/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/22/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/22/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/22/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/22/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/22/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/22/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/22/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/22/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/22/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/22/2009	ug/l			8260B
n-Butylbenzene	< 1			8/22/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/22/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/22/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/22/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/22/2009	ug/l			8260B
Naphthalene	< 5			8/22/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/22/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	94 %R	101 %R	102 %R	8/22/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	100 %R	99 %R	97 %R	8/22/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	101 %R	100 %R	100 %R	8/22/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: **81984** **Batch ID:**

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	81984.04				8/21/2009	ug/l			8260B
Chloromethane	81984.04				8/21/2009	ug/l			8260B
Vinyl chloride	81984.04				8/21/2009	ug/l			8260B
Bromomethane	81984.04				8/21/2009	ug/l			8260B
Chloroethane	81984.04				8/21/2009	ug/l			8260B
Trichlorofluoromethane	81984.04				8/21/2009	ug/l			8260B
Diethyl Ether	81984.04				8/21/2009	ug/l			8260B
Acetone	81984.04				8/21/2009	ug/l			8260B
1,1-Dichloroethene	81984.04	< 1	24 (120 %R)	23 (113 %R) (6 RPD)	8/21/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	81984.04				8/21/2009	ug/l			8260B
Methylene chloride	81984.04				8/21/2009	ug/l			8260B
Carbon disulfide	81984.04				8/21/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	81984.04				8/21/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	81984.04				8/21/2009	ug/l			8260B
Isopropyl ether(DIPE)	81984.04				8/21/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	81984.04				8/21/2009	ug/l			8260B
trans-1,2-Dichloroethene	81984.04				8/21/2009	ug/l			8260B
1,1-Dichloroethane	81984.04				8/21/2009	ug/l			8260B
2,2-Dichloropropane	81984.04				8/21/2009	ug/l			8260B
cis-1,2-Dichloroethene	81984.04				8/21/2009	ug/l			8260B
2-Butanone(MEK)	81984.04				8/21/2009	ug/l			8260B
Bromochloromethane	81984.04				8/21/2009	ug/l			8260B
Tetrahydrofuran(THF)	81984.04				8/21/2009	ug/l			8260B
Chloroform	81984.04				8/21/2009	ug/l			8260B
1,1,1-Trichloroethane	81984.04				8/21/2009	ug/l			8260B
Carbon tetrachloride	81984.04				8/21/2009	ug/l			8260B
1,1-Dichloropropene	81984.04				8/21/2009	ug/l			8260B
Benzene	81984.04	2	25 (111 %R)	24 (106 %R) (5 RPD)	8/21/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	81984.04				8/21/2009	ug/l			8260B
Trichloroethene	81984.04	< 2	22 (108 %R)	21 (103 %R) (5 RPD)	8/21/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	81984.04				8/21/2009	ug/l			8260B
Dibromomethane	81984.04				8/21/2009	ug/l			8260B
Bromodichloromethane	81984.04				8/21/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	81984.04				8/21/2009	ug/l			8260B
cis-1,3-Dichloropropene	81984.04				8/21/2009	ug/l			8260B
Toluene	81984.04	< 1	22 (110 %R)	21 (105 %R) (5 RPD)	8/21/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	81984.04				8/21/2009	ug/l			8260B
1,1,2-Trichloroethane	81984.04				8/21/2009	ug/l			8260B
2-Hexanone	81984.04				8/21/2009	ug/l			8260B
Tetrachloroethene	81984.04				8/21/2009	ug/l			8260B
1,3-Dichloropropane	81984.04				8/21/2009	ug/l			8260B
Dibromochloromethane	81984.04				8/21/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	81984.04				8/21/2009	ug/l			8260B
Chlorobenzene	81984.04	3	25 (109 %R)	23 (102 %R) (7 RPD)	8/21/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: **81984** **Batch ID:**

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	81984.04				8/21/2009	ug/l			8260B
Ethylbenzene	81984.04				8/21/2009	ug/l			8260B
mp-Xylene	81984.04				8/21/2009	ug/l			8260B
o-Xylene	81984.04				8/21/2009	ug/l			8260B
Styrene	81984.04				8/21/2009	ug/l			8260B
Bromoform	81984.04				8/21/2009	ug/l			8260B
IsoPropylbenzene	81984.04				8/21/2009	ug/l			8260B
Bromobenzene	81984.04				8/21/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	81984.04				8/21/2009	ug/l			8260B
1,2,3-Trichloropropane	81984.04				8/21/2009	ug/l			8260B
n-Propylbenzene	81984.04				8/21/2009	ug/l			8260B
2-Chlorotoluene	81984.04				8/21/2009	ug/l			8260B
4-Chlorotoluene	81984.04				8/21/2009	ug/l			8260B
1,3,5-Trimethylbenzene	81984.04				8/21/2009	ug/l			8260B
tert-Butylbenzene	81984.04				8/21/2009	ug/l			8260B
1,2,4-Trimethylbenzene	81984.04				8/21/2009	ug/l			8260B
sec-Butylbenzene	81984.04				8/21/2009	ug/l			8260B
1,3-Dichlorobenzene	81984.04				8/21/2009	ug/l			8260B
p-Isopropyltoluene	81984.04				8/21/2009	ug/l			8260B
1,4-Dichlorobenzene	81984.04				8/21/2009	ug/l			8260B
1,2-Dichlorobenzene	81984.04				8/21/2009	ug/l			8260B
n-Butylbenzene	81984.04				8/21/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	81984.04				8/21/2009	ug/l			8260B
1,3,5-Trichlorobenzene	81984.04				8/21/2009	ug/l			8260B
1,2,4-Trichlorobenzene	81984.04				8/21/2009	ug/l			8260B
Hexachlorobutadiene	81984.04				8/21/2009	ug/l			8260B
Naphthalene	81984.04				8/21/2009	ug/l			8260B
1,2,3-Trichlorobenzene	81984.04				8/21/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	81984.04	97 %R	103 %R	101 %R	8/21/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	81984.04	102 %R	99 %R	98 %R	8/21/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	81984.04	100 %R	100 %R	100 %R	8/21/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-9-0809	GW-AE-2A-0809	GW-AE-2B-0809	GW-AE-2B-DUP-0809					
Lab Sample ID:	81984.01	81984.03	81984.04	81984.05					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/18/09	8/18/09	8/18/09	8/18/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09					
Aluminum	< 0.05	< 0.05	< 0.05	< 0.05	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	**0.078**	**0.24**	**0.026**	**0.026**	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.058**	**0.028**	**0.16**	**0.16**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**39**	**24**	**52**	**51**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	< 0.001	**0.001**	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	**0.003**	**0.010**	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Iron	**37**	**14**	**13**	**12**	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**12**	**9.0**	**35**	**36**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	**2.1**	**0.65**	**1.7**	**1.6**	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	**0.004**	**0.010**	**0.010**	**0.010**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**9.7**	**16**	**13**	**13**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	< 0.001	< 0.001	**0.002**	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**19**	**33**	**190**	**200**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Zinc	< 0.005	**0.007**	< 0.005	< 0.005	AqTot	mg/L	8/28/09	200.8	DS
Iron	**45**	**17**	**13**	**13**	AqDis	mg/L	8/27/09	200.8	DS
Manganese	**2.3**	**0.71**	**1.7**	**1.8**	AqDis	mg/L	8/27/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-4A-0809	GW-AE-4B-0809	GW-FPC-2A-0809	GW-FPC-2B-0809					
Lab Sample ID:	81984.06	81984.07	81984.08	81984.09					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/17/09	8/17/09	8/17/09	8/17/09					
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Aluminum	**0.10**	**0.53**	< 0.05	**0.36**	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	**0.002**	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	**0.003**	< 0.001	**0.002**	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.013**	**0.012**	**0.014**	**0.017**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**6.3**	**7.3**	**19**	**7.7**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	**0.001**	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	**0.002**	< 0.001	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Iron	**9.5**	**0.72**	**4.4**	**1.1**	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**5.8**	**5.7**	**11**	**1.3**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	**0.32**	**0.26**	**0.73**	**0.084**	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	< 0.001	**0.001**	< 0.001	**0.002**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**2.3**	**4.2**	**4.4**	**4.8**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**8**	**21**	**13**	**40**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	< 0.001	< 0.001	**0.001**	AqTot	mg/L	8/28/09	200.8	DS
Zinc	< 0.005	< 0.005	< 0.005	**0.014**	AqTot	mg/L	8/28/09	200.8	DS
Iron	**3.5**	< 0.05	**4.2**	< 0.05	AqDis	mg/L	8/27/09	200.8	DS
Manganese	**0.35**	**0.042**	**0.77**	**0.026**	AqDis	mg/L	8/27/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-FPC-4B-0809	GW-FPC-6A-0809	GW-FPC-6B-0809	GW-FPC-7A-0809					
Lab Sample ID:	81984.1	81984.11	81984.12	81984.13					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/17/09	8/17/09	8/17/09	8/18/09					
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Aluminum	< 0.05	**0.06**	< 0.05	< 0.05	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	< 0.001	**0.013**	**0.002**	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.004**	**0.029**	**0.049**	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**3.9**	**24**	**13**	**14**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	< 0.001	**0.005**	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Iron	< 0.05	**1.9**	**6.5**	< 0.05	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**2.5**	**10**	**6.6**	**4.1**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	< 0.005	**2.4**	**0.34**	< 0.005	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	< 0.001	**0.005**	**0.003**	**0.004**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**1.6**	**6.2**	**4.8**	**2.1**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**6**	**79**	**78**	**9**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Zinc	< 0.005	< 0.005	< 0.005	< 0.005	AqTot	mg/L	8/28/09	200.8	DS
Iron	< 0.05	**2.2**	**5.6**	< 0.05	AqDis	mg/L	8/27/09	200.8	DS
Manganese	< 0.005	**2.6**	**0.36**	< 0.005	AqDis	mg/L	8/27/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-FPC-7B-0809	GW-FPC-7B-FB-0809	GW-FPC-9A-0809	GW-FPC-11A-0809					
Lab Sample ID:	81984.14	81984.15	81984.16	81984.17					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/18/09	8/18/09	8/17/09	8/17/09					
Date Received:	8/18/09	8/18/09	8/18/09	8/18/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Aluminum	**0.06**	< 0.05	< 0.05	< 0.05	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	< 0.001	< 0.001	**0.034**	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.004**	< 0.001	**0.088**	**0.010**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**16**	< 0.05	**51**	**17**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Iron	**0.50**	< 0.05	**6.3**	**0.10**	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**4.5**	< 0.05	**25**	**3.8**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	**0.11**	< 0.005	**0.27**	**0.010**	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	**0.002**	< 0.001	**0.003**	**0.003**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**2.1**	< 0.05	**9.2**	**2.4**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	< 0.001	< 0.001	**0.002**	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**10**	< 5	**89**	**37**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Zinc	**0.008**	< 0.005	**0.005**	**0.006**	AqTot	mg/L	8/28/09	200.8	DS
Iron	< 0.05	< 0.05	**6.3**	< 0.05	AqDis	mg/L	8/27/09	200.8	DS
Manganese	< 0.005	< 0.005	**0.27**	< 0.005	AqDis	mg/L	8/27/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

		GW-GZ-125 -0809	GW-GZ-123 -0809					
Sample ID:	GW-FPC-11B-0809	~~GW-GZ-123-0809~~	~~GW-GZ-125-0809~~					
Lab Sample ID:	81984.18	81984.19	81984.2					
Matrix:	aqueous	aqueous	aqueous					
Date Sampled:	8/17/09	8/18/09	8/18/09					
Date Received:	8/18/09	8/18/09	8/18/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Aluminum	**0.09**	< 0.05	< 0.05	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	**0.010**	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.048**	**0.003**	**0.005**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**56**	**15**	**16**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	**0.001**	< 0.001	**0.005**	AqTot	mg/L	8/28/09	200.8	DS
Iron	**1.9**	**1.4**	**2.3**	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**19**	**8.9**	**4.5**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	**0.71**	**0.081**	**3.0**	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	**0.003**	< 0.001	**0.005**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**5.8**	**2.6**	**2.1**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	**0.001**	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**88**	**19**	**17**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	< 0.001	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Zinc	**0.008**	**0.006**	< 0.005	AqTot	mg/L	8/28/09	200.8	DS
Iron	**1.9**	< 0.05	**2.5**	AqDis	mg/L	8/27/09	200.8	DS
Manganese	**0.78**	**0.088**	**3.2**	AqDis	mg/L	8/27/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID: GW-MW-10-0809

Lab Sample ID: 81984.02
Matrix: aqueous
Date Sampled: 8/18/09
Date Received: 8/18/09

		Analytical Matrix	Units	Date of Analysis	Method	Analyst
Aluminum	**0.05**	AqTot	mg/L	8/28/09	200.8	DS
Antimony	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Arsenic	**0.017**	AqTot	mg/L	8/28/09	200.8	DS
Barium	**0.046**	AqTot	mg/L	8/28/09	200.8	DS
Beryllium	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Calcium	**45**	AqTot	mg/L	8/28/09	200.8	DS
Cadmium	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Chromium	**0.002**	AqTot	mg/L	8/28/09	200.8	DS
Copper	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Cobalt	**0.005**	AqTot	mg/L	8/28/09	200.8	DS
Iron	**29**	AqTot	mg/L	8/28/09	200.8	DS
Lead	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Magnesium	**11**	AqTot	mg/L	8/28/09	200.8	DS
Manganese	**2.2**	AqTot	mg/L	8/28/09	200.8	DS
Mercury	< 0.0001	AqTot	mg/L	8/28/09	200.8	DS
Nickel	**0.005**	AqTot	mg/L	8/28/09	200.8	DS
Potassium	**8.6**	AqTot	mg/L	8/28/09	200.8	DS
Selenium	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Silver	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Sodium	**31**	AqTot	mg/L	8/28/09	200.8	DS
Thallium	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Vanadium	< 0.001	AqTot	mg/L	8/28/09	200.8	DS
Zinc	**0.006**	AqTot	mg/L	8/28/09	200.8	DS

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Iron	< 0.05	12 (114 %R)		mg/L	8/27/09	85 - 115	20	200.8
Manganese	< 0.005	1.1 (112 %R)		mg/L	8/27/09	85 - 115	20	200.8

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Iron	81984.04	13	25 (101 %R)	24 (98 %R) (3 RPD)	mg/L	8/27/09	70-130	20	200.8
Manganese	81984.04	1.7	2.6 (88 %R)	2.7 (95 %R) (8 RPD)	mg/L	8/27/09	70-130	20	200.8

dissolved metals

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	< 0.05	11 (104 %R)		mg/L	8/28/09	85 - 115	20	200.8
Antimony	< 0.001	1.1 (108 %R)		mg/L	8/28/09	85 - 115	20	200.8
Arsenic	< 0.001	1.1 (108 %R)		mg/L	8/28/09	85 - 115	20	200.8
Barium	< 0.001	1.1 (112 %R)		mg/L	8/28/09	85 - 115	20	200.8
Beryllium	< 0.001	1.2 (123 %R)		mg/L	8/28/09	85 - 115	20	200.8
Calcium	< 0.05	11 (103 %R)		mg/L	8/28/09	85 - 115	20	200.8
Cadmium	< 0.001	1.1 (114 %R)		mg/L	8/28/09	85 - 115	20	200.8
Chromium	< 0.001	1.1 (108 %R)		mg/L	8/28/09	85 - 115	20	200.8
Copper	< 0.001	1.1 (108 %R)		mg/L	8/28/09	85 - 115	20	200.8
Cobalt	< 0.001	1.1 (114 %R)		mg/L	8/28/09	85 - 115	20	200.8
Iron	< 0.05	12 (107 %R)		mg/L	8/28/09	85 - 115	20	200.8
Lead	< 0.001	1.1 (109 %R)		mg/L	8/28/09	85 - 115	20	200.8
Magnesium	< 0.05	12 (106 %R)		mg/L	8/28/09	85 - 115	20	200.8
Manganese	< 0.005	1.1 (112 %R)		mg/L	8/28/09	85 - 115	20	200.8
Mercury	< 0.0001	0.0011 (112 %R)		mg/L	8/28/09	85 - 115	20	200.8
Nickel	< 0.001	1.1 (108 %R)		mg/L	8/28/09	85 - 115	20	200.8
Potassium	< 0.05	12 (106 %R)		mg/L	8/28/09	85 - 115	20	200.8
Selenium	< 0.001	1.1 (106 %R)		mg/L	8/28/09	85 - 115	20	200.8
Silver	< 0.001	0.10 (104 %R)		mg/L	8/28/09	85 - 115	20	200.8
Sodium	< 5	12 (107 %R)		mg/L	8/28/09	85 - 115	20	200.8
Thallium	< 0.001	1.1 (109 %R)		mg/L	8/28/09	85 - 115	20	200.8
Vanadium	< 0.001	1.1 (114 %R)		mg/L	8/28/09	85 - 115	20	200.8
Zinc	< 0.005	1.1 (110 %R)		mg/L	8/28/09	85 - 115	20	200.8

total metals

The laboratory control sample for Beryllium did not meet the acceptance criteria. The high bias has no impact on the data reported as no Beryllium was found in the field samples.

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 81984

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	81984.04	< 0.05	11 (101 %R)	11 (100 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Antimony	81984.04	< 0.001	1.3 (125 %R)	1.3 (125 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Arsenic	81984.04	0.026	1.1 (108 %R)	1.1 (109 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Barium	81984.04	0.16	1.3 (112 %R)	1.3 (111 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Beryllium	81984.04	< 0.001	0.82 (82 %R)	0.80 (80 %R) (2 RPD)	mg/L	8/28/09	70-130	20	200.8
Calcium	81984.04	52	63 (104 %R)	64 (115 %R) (10 RPD)	mg/L	8/28/09	70-130	20	200.8
Cadmium	81984.04	< 0.001	1.1 (110 %R)	1.1 (111 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Chromium	81984.04	< 0.001	0.88 (88 %R)	0.89 (89 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Copper	81984.04	0.001	0.83 (83 %R)	0.82 (82 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Cobalt	81984.04	< 0.001	0.89 (89 %R)	0.89 (89 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Iron	81984.04	13	24 (97 %R)	24 (95 %R) (2 RPD)	mg/L	8/28/09	70-130	20	200.8
Lead	81984.04	< 0.001	0.98 (98 %R)	1.0 (102 %R) (4 RPD)	mg/L	8/28/09	70-130	20	200.8
Magnesium	81984.04	35	48 (112 %R)	47 (109 %R) (3 RPD)	mg/L	8/28/09	70-130	20	200.8
Manganese	81984.04	1.7	2.6 (94 %R)	2.6 (94 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Mercury	81984.04	< 0.0001	0.0010 (101 %R)	0.0011 (103 %R) (2 RPD)	mg/L	8/28/09	70-130	20	200.8
Nickel	81984.04	0.010	0.83 (82 %R)	0.83 (82 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Potassium	81984.04	13	24 (103 %R)	24 (103 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Selenium	81984.04	0.002	0.99 (98 %R)	1.0 (100 %R) (2 RPD)	mg/L	8/28/09	70-130	20	200.8
Silver	81984.04	< 0.001	0.086 (86 %R)	0.083 (83 %R) (4 RPD)	mg/L	8/28/09	70-130	20	200.8
Sodium	81984.04	190	1400 (106 %R)	1400 (107 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8
Thallium	81984.04	< 0.001	0.98 (98 %R)	1.0 (103 %R) (5 RPD)	mg/L	8/28/09	70-130	20	200.8
Vanadium	81984.04	< 0.001	0.96 (96 %R)	0.96 (96 %R) (0 RPD)	mg/L	8/28/09	70-130	20	200.8
Zinc	81984.04	< 0.005	0.80 (80 %R)	0.80 (79 %R) (1 RPD)	mg/L	8/28/09	70-130	20	200.8

total metals

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

Page 1 of 3

CHAIN-OF-CUSTODY RECORD

PO 81984

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

	Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 BTEX	VOC: 524.2 MTBE only	VOC: 524.2 BTEX 624 VTICs	VOC: 8260B 1,4-Dioxane EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICs	SVOC: ABN A BN PAH	SVOC: TPH8100 LI L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals VOC Pest Herb	Metals: Dissolved Metals (List Below)	Metals: Total Metals (List Below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br Cl F SO4 NO2 NO3/NO2	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH3 T. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: COD Phenols TOC	Inorganics: Total Cyanide Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide Flashpoint Ignitability	Micro: T. Coliform E. Coli	Micro: E. Coliform	Micro: Enterococci Heterotrophic Plate Count	Other: 1,4-Dioxane	Other: EDB, DBCP		# of Containers	Notes MeOH Vial #
1	GW-MW-9-0809	8-19-09/ 12:30																X	X													X		2	
2	GW-MW-10-0809	14:20																	X															1	
3	GW-AE-2A-0809	12:30					X											X	X															4	
4	GW-AE-2B-0809	13:30					X											X	X															4	2
5	GW-AE-2B-DUP-0809	13:30					X											X	X															4	
6	GW-AE-4A-0809	8-17-09/ 15:00					X											X	X															4	
7	GW-AE-4B-0809	14:00					X											X	X															4	
8	GW-FPC-2A-0809	17:00					X											X	X															4	
9	GW-FPC-2B-0809	18:00					X											X	X															4	
10	GW-FPC-4B-0809	12:05					X											X	X															4	
	Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste water						14											N	N													-	1		
	Preservative: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH																																		

3

Project Manager: Kevin McKibben
Company: Provan + Lorber
Address: P.O. Box 389
City: Contoocook **State:** NH **Zip:** 03229
Phone: 603-746-3220 **Ext.:**
Fax: 746-5642
E-Mail: kmckibben@provan-lorber.com
Site Name: Coakley Landfill
Project #: M9081
State: (NH) MA ME VT **Other:** EPA
Regulatory Program: **NPDES:** RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:
Quote #: 1007109 **PO #:**

Date Needed: Standard T.A.T.
QA/QC (Special)
Reporting Level A B C OR MA MCP Presumptive Certainty

Reporting Options
Prelims: Yes or No
If Yes: Fax or PDF

Electronic Options
No Fax E-Mail (PDF) Equis

Temp. 3 °C
Ice? (Yes) No

Sampler(s): K. McKibben, J. Tanguay

Relinquished By:	Date:	Time:	Received By:
Thomas McKibben	8-18-09	14:30	Thomas Johnson
[illegible]	8/18/09	4:28	Thomas Johnson
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Metals: 8 RCRA 13 PP (Dissolved) Fe, Mn Pb, Cu
Other Metals: Total 23 TAL metals
Dissolved Metals Field Filtered? (Yes) No
Notes: (ie: Special Detection Limits, Billing Info, If Different)
MS + MSD samples supplied for GW-AE-2B-0809

Site History:
Suspected Contamination:
Field Readings:

eastern analytical, inc.
professional laboratory services
25 Chenell Drive | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customer_service@eailabs.com | www.eailabs.com

(WHITE: Original GREEN: Project Manager)

Chain-of-Custody Record

For Lab Use Only: 81984

Bold Fields Required. Please Circle Requested Analysis.

#	Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 / 524.2 BTEX / 524.2 MTBE only	VOC: 8260B / 624 / VTICS / 1,4 Dioxane / EDB / DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICS ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals VOC Pest Herb	Metals: Dissolved Metals (list below)	Metals: Total Metals (list below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br Cl F SO_4 NO_2 NO_3 NO_2/NO_3	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH_3 T. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: COD Phenols TOC	Inorganics: Total Cyanide Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide Flashpoint Ignitability	Micro: T. Coliform E. Coli F. Coliform	Micro: Enterococci Heterotrophic Plate Count	Other: 1,4-Dioxane	Other: EDB, DBCP	Other	# of Containers	Notes MeOH Vial #
11	GW-FPC-6A-0809	9-17-09/18:55				X									X	X														4	
12	GW-FPC-6B-0809	↓ 17:25				X									X	X														4	
13	GW-FPC-7A-0809	8-18-09/9:00													X	X														2	
14	GW-FPC-7B-0809	10:00													X	X														2	
15	GW-FPC-7B-FB-0809	↓ 10:50				X									X	X														4	
16	GW-FPC-9A-0809	8-17-09/11:20													X	X														2	
17	GW-FPC-11A-0809	14:00													X	X														2	
18	GW-FPC-11B-0809	↓ 15:05													X	X														2	
19	GW-GZ-123-0809	8-18-09 / 9:20				X									X	X														4	
20	GW-GZ-125-0809	↓ 10:15				X									X	X														4	
	Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste water / Preservative: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH					H									N	N											–	–			

In the VOC column group, 8260B is circled.

Project Manager: Kevin McKibben
Company: Provan & Lorber, Inc.
Address: P.O. Box 389
City: Contoocook State: NH Zip: 03229
Phone: 603-746-3220 Ext.:
Fax: 746-5642
E-Mail:
Site Name: Coakley Landfill
Project #: M9081
State: (NH circled) MA ME VT Other: EPA
Regulatory Program: **NPDES:** RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:
Quote #: 1007109 PO #:

Date Needed: Standard T.A.T.

QA/QC Reporting Level: (Special circled) A B C or MA MCP Presumptive Certainty

Reporting Options: Prelims: Yes or No; If Yes: Fax or PDF

Electronic Options: No Fax E-Mail (PDF circled) Equis

Temp. 3 °C; Ice? (Yes circled) No

Sampler(s): K. McKibben, J. Tauquay (?)

Relinquished By:	Date:	Time:	Received By:
[signature]	8-18-09	14:30 (?)	[signature]
[signature]	8/18/09 (?)	4:28	[signature]

Metals: 8 RCRA 13 PP Fe, Mn (Dissolved) Pb, Cu
Other Metals: Total 23 TAL metals
Dissolved Metals Field Filtered? (Yes circled) No
Notes: (ie: Special Detection Limits, Billing Info, If Different)
Site History:
Suspected Contamination:
Field Readings:

eastern analytical, inc. professional laboratory services | 25 Chenell Drive | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | Fax: 603.228.4591 | E-Mail: customer_service@eailabs.com | www.eailabs.com

(WHITE: Original GREEN: Project Manager)

CHAIN-OF-CUSTODY RECORD

FOR LAB USE ONLY 81984

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 / 524.2 BTEX / 524.2 MTBE only	VOC: 8260B 624 VTICs 1,4 Dioxane EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICs ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals VOC Pest Herb	Metals: Dissolved Metals (list below)	Metals: Total Metals (list below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br Cl F SO_4 NO_2 NO_3 NO_2/NO_3	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH_3 T. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: COD Phenols TOC	Inorganics: Total Cyanide Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide Flashpoint Ignitability	Micro: T. Coliform E. Coli F. Coliform	Micro: Enterococci Heterotrophic Plate Count	Other: 1,4-Dioxane	Other: EDB, DBCP	Other	# of Containers	Notes MeOH Vial #
21 Trip Blank					X																								2	
Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste water. Preservative: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH					H									N	N											–	–			

PROJECT MANAGER: Kevin McKibben
COMPANY: Provan + Lorber
ADDRESS: P.O. Box 389
CITY: Contoocook STATE: NH ZIP: 03229
PHONE: 603-746-3220 EXT.:
FAX: 746-5642
E-MAIL:
SITE NAME: Coakley Landfill
PROJECT #: M9081
STATE: (NH) MA ME VT OTHER:
REGULATORY PROGRAM: **NPDES:** RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: 1007109 PO #:

DATE NEEDED: Standard T.A.T.
QA/QC (Special)
REPORTING LEVEL A B C OR MA MCP PRESUMPTIVE CERTAINTY

REPORTING OPTIONS
PRELIMS: YES OR NO
IF YES: FAX OR PDF

ELECTRONIC OPTIONS
NO FAX E-MAIL (PDF) EQUIS

TEMP. 3 °C
ICE? (YES) NO

SAMPLER(S): K. McKibben

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
[signature]	8-18-09	14:30	[signature]
[signature]	8/18/09	4:28	[signature]

METALS: 8 RCRA 13 PP (Dissolved Fe, Mn) Pb, Cu
OTHER METALS: Total 23 TAL metals
DISSOLVED METALS FIELD FILTERED? (YES) NO
NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)
(3)
SITE HISTORY:
SUSPECTED CONTAMINATION:
FIELD READINGS:

eastern analytical, inc.
professional laboratory services

81984

Volatile Organic Analysis
Support Data
Initial Calibration

Response Factor Report VOAMS5

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Initial Calibration

Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081110.D 20 =SA081119.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
1)	I	Fluorobenzene IS	ISTD							
2)		dichlorodifluor							0.235	11.79
3)	P	chloromethane							0.259	12.69
4)	C	vinyl chloride							0.218	18.67
5)		bromomethane							0.133	15.24
6)		chloroethane							0.153	12.77
7)		trichlorofluoro							0.313	10.42
8)		diethyl ether	0.176	0.162	0.165	0.161	0.159	0.166	0.165	3.31
9)		1,1,2-Trichloro	0.186	0.170	0.178	0.161	0.162	0.170	0.171	5.23
10)		acrolein							0.000#	-1.00
11)		acetone			0.075	0.063	0.058	0.055	0.061#	13.62
12)	CM	1,1-dichloroeth	0.216	0.202	0.196	0.179	0.178	0.186	0.192	7.17
13)		tert-Butyl Alco		0.020	0.020	0.019	0.018	0.018	0.019#	4.26
14)		methylene chlor		0.274	0.239	0.214	0.203	0.215	0.226	11.58
15)		carbon disulfid		0.289	0.283	0.265	0.258	0.284	0.277	4.37
16)		acrylonitrile	0.065	0.062	0.063	0.060	0.059	0.061	0.062#	3.10
17)		Methyl-t-butyl	0.576	0.533	0.539	0.526	0.519	0.546	0.545	3.66
18)		trans-1,2-dichl	0.217	0.204	0.200	0.191	0.189	0.198	0.200	4.71
19)		hexane	0.172	0.162	0.159	0.148	0.149	0.162	0.159	5.31
20)		Isopropyl ether		0.641	0.654	0.639	0.632	0.668	0.651	2.54
21)		vinyl acetate							0.221	11.51
22)	P	1,1-dichloroeth	0.395	0.362	0.368	0.350	0.349	0.365	0.365	4.18
23)		Ethyl-t-butyl e			0.597	0.578	0.571	0.608	0.593	2.99
24)		2,2-dichloropro	0.310	0.303	0.300	0.288	0.284	0.316	0.302	3.94
25)		cis-1,2-dichlor	0.305	0.288	0.287	0.279	0.273	0.287	0.287	3.41
26)		2-butanone (MEK		0.093	0.088	0.086	0.081	0.084	0.086#	4.79
27)		bromochlorometh	0.106	0.102	0.103	0.101	0.099	0.104	0.103	2.47
28)		Tetrahydrofuran			0.057	0.055	0.053	0.053	0.054#	2.84
29)	C	chloroform	0.384	0.359	0.362	0.349	0.342	0.360	0.359	3.65
30)	S	SS Dibromofluor	0.245	0.242	0.243	0.245	0.242	0.242	0.243	0.80
31)		1,1,1-trichloro	0.319	0.299	0.310	0.287	0.293	0.316	0.307	4.33
32)		carbon tetrachl	0.219	0.217	0.225	0.216	0.230	0.259	0.234	9.47
33)		1,1-dichloropro	0.307	0.282	0.295	0.271	0.274	0.294	0.289	4.76
34)	S	SS 1,2-DCA-d4_M	0.307	0.307	0.305	0.308	0.303	0.297	0.305	1.28
35)		tert-amyl methy		0.542	0.557	0.539	0.536	0.569	0.554	3.31
36)	M	benzene	0.878	0.835	0.847	0.809	0.804	0.859	0.845	3.62
37)		1,2-dichloroeth	0.328	0.314	0.315	0.303	0.295	0.307	0.309	3.41
38)	M	trichloroethene	0.241	0.218	0.219	0.205	0.210	0.217	0.219	5.22
39)	C	1,2-dichloropro	0.223	0.210	0.216	0.205	0.201	0.214	0.212	3.45
40)		dibromomethane	0.135	0.130	0.128	0.126	0.123	0.130	0.129	2.82
41)		bromodichlorome	0.262	0.243	0.250	0.252	0.257	0.280	0.262	5.83
42)		2-Chloroethoxye							0.104	11.37
43)		4-methyl-2-pent		0.061	0.063	0.063	0.064	0.068	0.065#	5.87
44)		cis-1,3-dichlor	0.320	0.306	0.320	0.320	0.324	0.360	0.330	6.58
45)	I	Chlorobenzene-D5	IS		ISTD					
46)	S	SS Toluene-d8_M	1.298	1.298	1.311	1.310	1.291	1.293	1.300	0.66
47)	CM	toluene	1.222	1.140	1.176	1.120	1.123	1.204	1.172	3.85
48)		trans-1,3-dichl	0.384	0.364	0.395	0.395	0.403	0.449	0.406	8.07
49)		1,1,2-trichloro	0.213	0.196	0.202	0.198	0.195	0.207	0.203	3.66
50)		2-hexanone		0.167	0.174	0.168	0.167	0.175	0.172	3.39
51)		tetrachloroethe	0.311	0.280	0.288	0.267	0.271	0.291	0.286	5.24
52)		1,3-dichloropro	0.436	0.416	0.423	0.408	0.403	0.429	0.422	3.07
53)		dibromochlorome	0.195	0.185	0.204	0.213	0.224	0.263	0.214	12.81
54)		1,2-dibromoetha	0.248	0.232	0.243	0.237	0.235	0.249	0.243	3.40

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report VOAMS5

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Initial Calibration

Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081110.D 20 =SA081119.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
55)	PM	chlorobenzene	0.824	0.765	0.787	0.756	0.751	0.805	0.787	3.83
56)		1,1,1,2-tetrach	0.234	0.220	0.236	0.236	0.246	0.280	0.249	10.49
57)	C	ethylbenzene	1.352	1.259	1.329	1.263	1.291	1.410	1.336	5.37
58)		mp-xylene	0.529	0.491	0.523	0.506	0.508	0.562	0.528	5.16
59)		o-xylene	0.492	0.468	0.500	0.482	0.489	0.537	0.503	5.90
60)		styrene	0.821	0.809	0.856	0.849	0.855	0.941	0.870	6.70
61)	P	bromoform	0.103	0.094	0.109	0.113	0.128	0.161	0.127	25.26
62)		iso-propylbenze	1.139	1.079	1.144	1.085	1.117	1.225	1.149	5.92
63)	S	SS 4-BFB_MS	0.493	0.497	0.499	0.505	0.504	0.508	0.497	1.50
64)	I	1,4-Dichlorobenzene-D	ISTD							
65)		bromobenzene	0.684	0.617	0.635	0.599	0.590	0.630	0.628	4.97
66)	P	1,1,2,2-tetrach	0.574	0.512	0.533	0.508	0.482	0.531	0.527	5.66
67)		1,2,3-trichloro	0.197	0.174	0.175	0.167	0.162	0.169	0.174	6.43
68)		trans-1,4-dichl							0.000#	-1.00
69)		n-propylbenzene	2.763	2.646	2.689	2.544	2.558	2.749	2.677	3.72
70)		2-chlorotoluene	1.884	1.751	1.801	1.700	1.683	1.790	1.772	3.86
71)		4-chlorotoluene	1.913	1.749	1.823	1.718	1.712	1.849	1.803	4.29
72)		1,3,5-trimethyl	1.922	1.827	1.920	1.813	1.829	1.972	1.900	4.17
73)		tert-butylbenze	1.601	1.484	1.561	1.473	1.483	1.608	1.550	4.48
74)		1,2,4-trimethyl	2.020	1.916	2.020	1.930	1.934	1.973	1.973	2.35
75)		sec-butylbenzen	2.249	2.103	2.180	2.057	2.090	2.278	2.181	4.62
76)		1,3-dichloroben	1.227	1.103	1.170	1.107	1.093	1.180	1.152	4.47
77)		p-isopropyltolu	1.878	1.764	1.870	1.775	1.792	1.976	1.862	4.87
78)		1,4-dichloroben	1.263	1.158	1.185	1.136	1.121	1.198	1.181	4.08
79)		1,2-dichloroben	1.246	1.081	1.129	1.069	1.052	1.127	1.122	5.81
80)		n-butylbenzene	1.675	1.562	1.625	1.544	1.547	1.699	1.623	4.47
81)	S	SS 1,2-DCB-D4_M	0.923	0.913	0.920	1.000	0.904	0.905	0.921	2.56
82)		1,2-dibromo-3-c	0.101	0.081	0.095	0.093	0.097	0.112	0.100#	12.36
83)		1,3,5-trichloro	0.793	0.704	0.735	0.697	0.682	0.739	0.728	5.20
84)		1,2,4-trichloro	0.747	0.646	0.685	0.643	0.642	0.688	0.679	5.68
85)		hexachlorobutad	0.295	0.270	0.261	0.244	0.243	0.264	0.270	9.80
86)		naphthaleneV	1.708	1.429	1.593	1.527	1.527	1.643	1.592	6.59
87)		1,2,3-trichloro	0.694	0.592	0.630	0.593	0.586	0.631	0.624	6.14
88)	S	SS 2,5-DBT_MS	0.233	0.194	0.216	0.203	0.208	0.230	0.217	7.48

Compound List Report VOAMS5

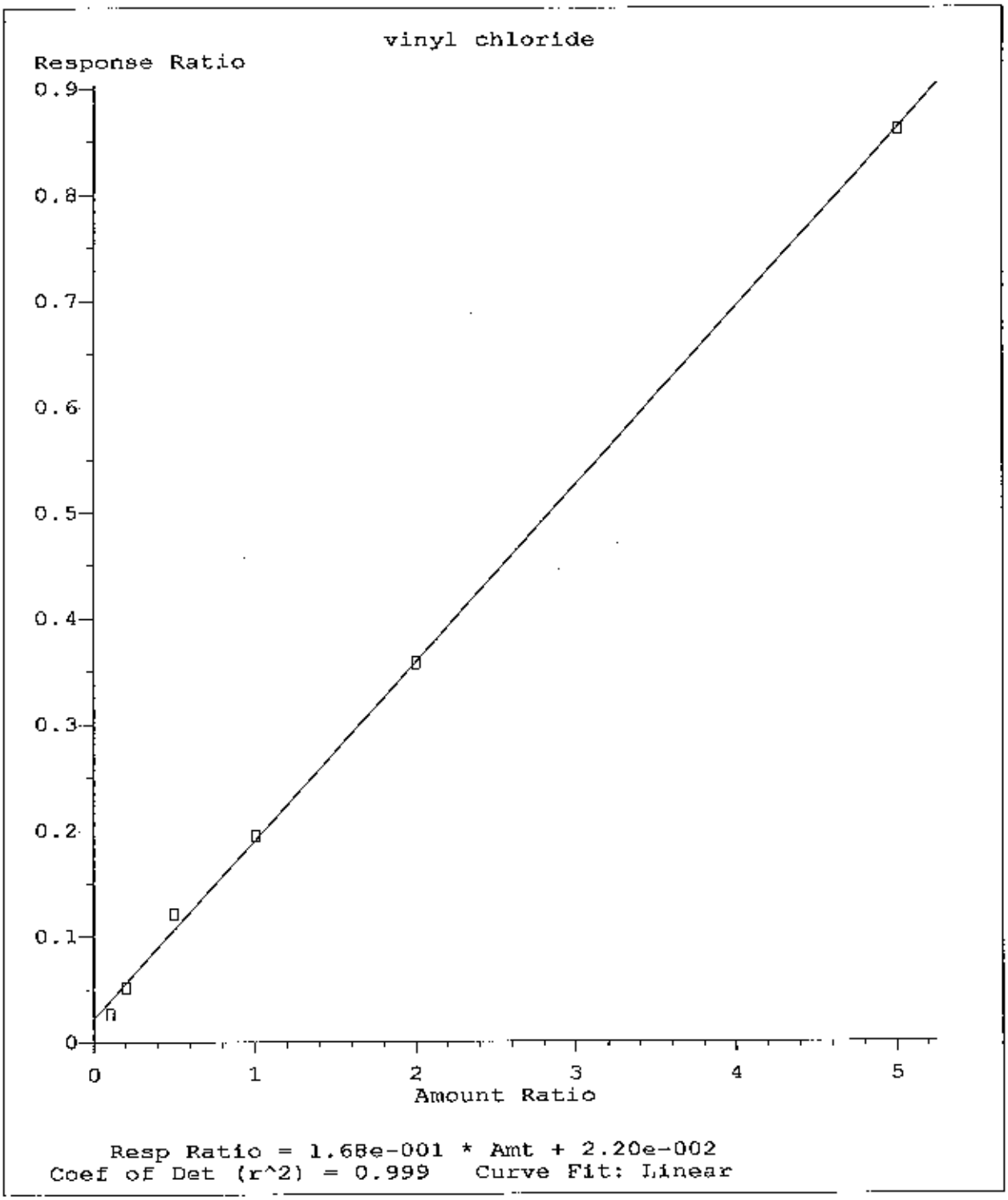
Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Initial Calibration
Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene IS	96	12.24	1.000	A	2	A	B
2		dichlorodifluoromethane	85	2.97	0.243	A	2	A	B
3	P	chloromethane	50	3.32	0.272	A	1	A	B
4	C	vinyl chloride	62	3.48	0.284	L	1	A	B
5		bromomethane	94	4.17	0.341	A	2	A	B
6		chloroethane	64	4.29	0.350	A	2	A	B
7		trichlorofluoromethane	101	4.71	0.384	A	2	A	B
8		diethyl ether	59	5.22	0.427	A	2	A	B
9		1,1,2-Trichlorotrifluoroethane	101	5.48	0.448	A	2	A	B
10		acrolein	56	5.46	0.446	A	1	A	B
11		acetone	43	5.60	0.458	A	1	A	B
12	CM	1,1-dichloroethene	96	5.83	0.477	A	3	A	B
13		tert-Butyl Alcohol (TBA)	59	6.00	0.490	A	1	A	B
14		methylene chloride	84	6.80	0.556	A	2	A	B
15		carbon disulfide	76	6.82	0.557	A	1	A	B
16		acrylonitrile	53	7.07	0.577	A	2	A	B
17		Methyl-t-butyl ether (MTBE)	73	7.10	0.580	A	3	A	B
18		trans-1,2-dichloroethene	96	7.40	0.605	A	3	A	B
19		hexane	57	7.53	0.615	A	3	A	B
20		Isopropyl ether (DIPE)	45	8.07	0.659	A	3	A	B
21		vinyl acetate	43	8.32	0.680	A	1	A	B
22	P	1,1-dichloroethane	63	8.31	0.679	A	2	A	B
23		Ethyl-t-butyl ether (ETBE)	59	8.96	0.732	A	3	A	B
24		2,2-dichloropropane	77	9.53	0.779	A	3	A	B
25		cis-1,2-dichloroethene	61	9.64	0.788	A	3	A	B
26		2-butanone (MEK)	43	9.24	0.755	A	2	A	B
27		bromochloromethane	128	10.36	0.847	A	3	A	B
28		Tetrahydrofuran (THF)	42	10.44	0.853	A	2	A	B
29	C	chloroform	83	9.99	0.817	A	2	A	B
30	S	SS Dibromofluoromethane_MS	111	10.49	0.857	A	2	A	B
31		1,1,1-trichloroethane	97	10.89	0.890	A	3	A	B
32		carbon tetrachloride	117	11.45	0.936	A	3	A	B
33		1,1-dichloropropene	75	11.25	0.919	A	3	A	B
34	S	SS 1,2-DCA-d4_MS	65	11.60	0.948	A	2	A	B
35		tert-amyl methyl ether (TAME)	73	11.51	0.940	A	3	A	B
36	M	benzene	78	11.82	0.966	A	3	A	B
37		1,2-dichloroethane	62	11.80	0.964	A	2	A	B
38	M	trichloroethene	95	12.96	1.059	A	3	A	B
39	C	1,2-dichloropropane	63	13.27	1.085	A	3	A	B
40		dibromomethane	93	13.75	1.123	A	3	A	B
41		bromodichloromethane	83	13.65	1.116	A	3	A	B
42		2-Chloroethoxyethene	63	14.15	1.156	A	3	A	B
43		4-methyl-2-pentanone (MIBK)	58	14.18	1.159	A	3	A	B
44		cis-1,3-dichloropropene	75	14.50	1.185	A	3	A	B
45	I	Chlorobenzene-D5 IS	117	16.88	1.000	A	2	A	B
46	S	SS Toluene-d8_MS	98	14.85	0.880	A	2	A	B
47	CM	toluene	91	14.97	0.887	A	3	A	B
48		trans-1,3-dichloropropene	75	15.22	0.902	A	3	A	B
49		1,1,2-trichloroethane	83	15.44	0.915	A	3	A	B
50		2-hexanone	43	15.44	0.915	A	2	A	B
51		tetrachloroethene	166	15.87	0.940	A	3	A	B
52		1,3-dichloropropane	76	15.78	0.935	A	2	A	B
53		dibromochloromethane	129	16.14	0.956	A	3	A	B
54		1,2-dibromoethane	107	16.40	0.972	A	3	A	B
55	PM	chlorobenzene	112	16.93	1.003	A	2	A	B
56		1,1,1,2-tetrachloroethane	131	16.97	1.005	A	3	A	B
57	C	ethylbenzene	91	16.98	1.006	A	3	A	B
58		mp-xylene	106	17.07	1.011	A	3	A	B
59		o-xylene	106	17.60	1.043	A	3	A	B
60		styrene	104	17.64	1.045	A	3	A	B
61	P	bromoform	173	18.07	1.071	L	3	A	B
62		iso-propylbenzene	105	18.00	1.067	A	3	A	B
63	S	SS 4-BFB_MS	95	18.31	1.085	A	3	A	B

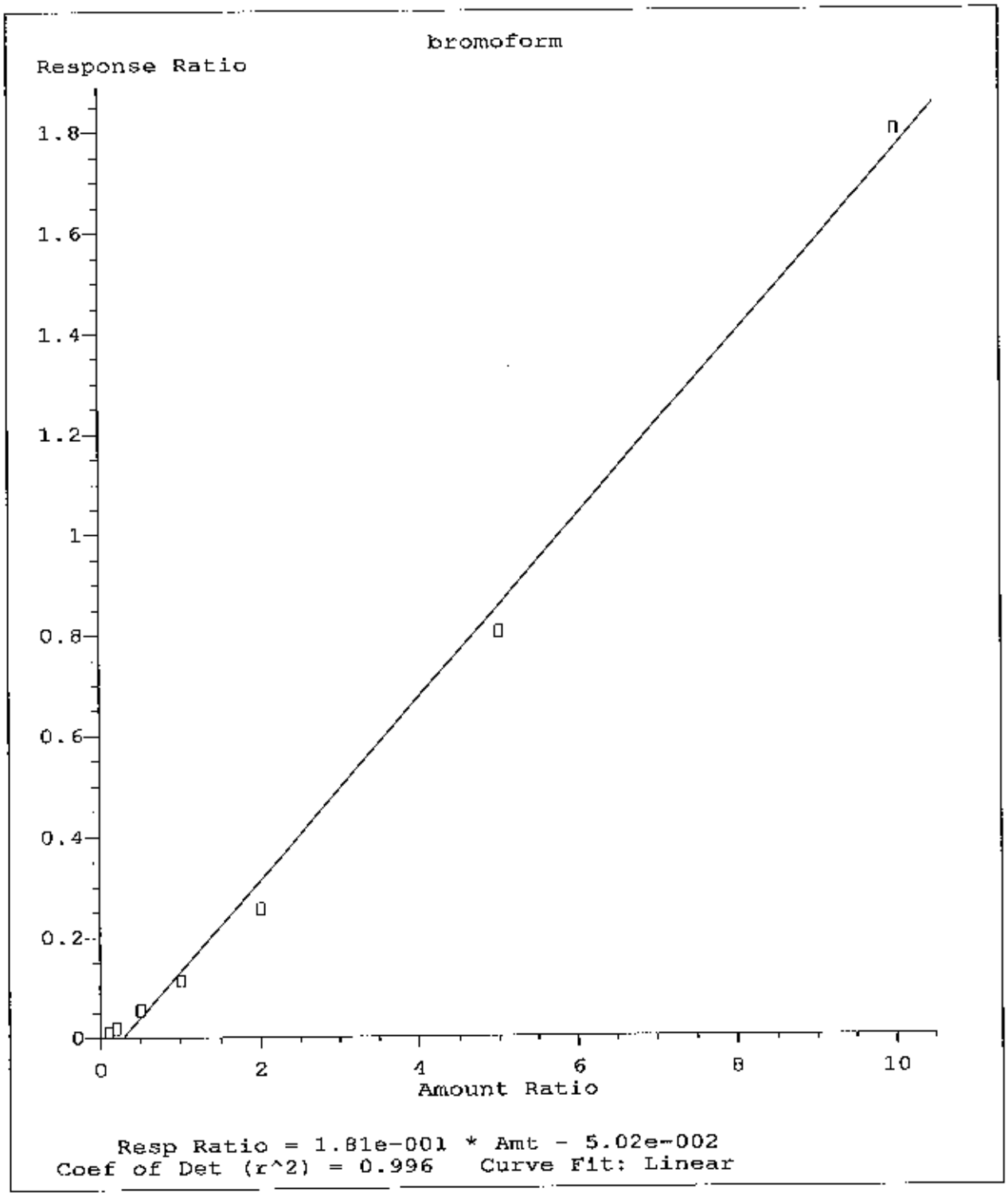
64	I	1,4-Dichlorobenzene-D4 IS	152	19.55	1.000	A	3	A	B
65		bromobenzene	156	18.56	0.949	A	3	A	B
66	P	1,1,2,2-tetrachloroethane	83	18.21	0.932	A	3	A	B
67		1,2,3-trichloropropane	110	18.38	0.940	A	3	A	B
68		trans-1,4-dichloro-2-butene	75	18.31	0.937	A	3	A	B
69		n-propylbenzene	91	18.47	0.945	A	1	A	B
70		2-chlorotoluene	91	18.69	0.956	A	2	A	B
71		4-chlorotoluene	91	18.73	0.958	A	2	A	B
72		1,3,5-trimethylbenzene	105	18.63	0.953	A	3	A	B
73		tert-butylbenzene	119	19.01	0.973	A	3	A	B
74		1,2,4-trimethylbenzene	105	19.05	0.974	A	3	A	B
75		sec-butylbenzene	105	19.23	0.984	A	3	A	B
76		1,3-dichlorobenzeneV	146	19.48	0.997	A	3	A	B
77		p-isopropyltoluene	119	19.35	0.990	A	3	A	B
78		1,4-dichlorobenzeneV	146	19.58	1.002	A	3	A	B
79		1,2-dichlorobenzeneV	146	19.94	1.020	A	3	A	B
80		n-butylbenzene	91	19.73	1.009	A	3	A	B
81	S	SS 1,2-DCB-D4_MS	152	19.91	1.019	A	3	A	B
82		1,2-dibromo-3-chloropropane	157	20.70	1.059	A	3	A	B
83		1,3,5-trichlorobenzV	180	20.93	1.071	A	3	A	B
84		1,2,4-trichlorobenzV	180	21.64	1.107	A	3	A	B
85		hexachlorobutadieneV	225	21.77	1.114	A	3	A	B
86		naphthaleneV	128	21.98	1.124	A	3	A	B
87		1,2,3-trichlorobenzV	180	22.28	1.139	A	3	A	B
88	S	SS 2,5-DBT_MS	250	23.63	1.208	A	3	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

5VID0811.M Mon Aug 31 11:40:36 2009



Method Name: W:\1\METHODS\2009\5VID0811.M
Calibration Table Last Updated: Mon Aug 24 10:10:47 2009



Method Name: W:\1\METHODS\2009\5VID0811.M
Calibration Table Last Updated: Mon Aug 24 10:10:47 2009

IS/SS ID= V- 3522
Standard ID= V- 3518B
Gas Standard ID= V- 3520
LCS/LCSD and/or MS/MSD Standard ID= V- 3521, 3514

Analyst: [illegible]

Date: 8/20/09

EM Volts @ 1541

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	S408Z0 01	BFB 25ng					VOCMS		Auto Tune		✓
2		STD10					VOCMS	5L1D0811			✓
3		STD 0.6					VOCMS				✓
4		MB					VOCMS		TB 8/20/09 0900 BAM = OK		✓
5		81403.13	✓	✓			VOCMS				
6		81982.01		/		x1	VOCMS				
7		" .02		✓			VOCMS		TB		
8		81983.01		✓			VOCMS				
9		" .02		✓			VOCMS		TB		
10		819 82009.01		✓			VOCMS				
11		82009.02		✓			VOCMS				
12		" .03		✓			VOCMS				
13		" .04		✓			VOCMS		TB		
14		82030.01		✓			VOCMS				
15		" .02		✓			VOCMS				
16		" .03		✓			VOCMS				
17		" .04		✓			VOCMS				
18		" .05		✓			VOCMS				
19		" .06		✓			VOCMS				
20		LCS 10					VOCMS		0521 22DCP ✓	✓	✓
21		LCSD 10					VOCMS	"	" "	✓	✓
22		BFB					VOCMS		Auto Tune		✓
23		STD 20					VOCMS	5V1D0811	22DCP ✓	✓	✓
24		STD 2					VOCMS			✓	✓
25		MB					VOCMS				✓
26		82010.01		✓		x1	VOCMS				
27		" .02		✓		"	VOCMS				
28		" .03		✓		"	VOCMS				
29		" .04		✓		x5	VOCMS				
30		" .05		✓		x2	VOCMS				
31		81984.21		✓		x1	VOCMS				
32		" .20		✓		"	VOCMS				
33		81998.01		✓		x10	VOCMS		Highly [illegible] at x1		
34		" .03		✓		x1	VOCMS		TB		
35		81979.01		✓			VOCMS				
36		" .02		✓			VOCMS				
37		" .03		✓			VOCMS				
38		" .04		✓			VOCMS		TB		
39		81980.01		✓			VOCMS				
40		" .02		✓			VOCMS		TB		
41		LCS 20					VOCMS			✓	✓
42		LCSD 20					VOCMS			✓	✓

Samples removed from autosampler, order and pH verified by [illegible] 8/21/09 1442

IS/SS ID= V- 3522 Added 8/25

Standard ID= V- 3518B

Analyst: [signature]

Gas Standard ID= V- 3520

LCS/LCSD and/or MS/MSD Standard ID= V- 3521, 3514

Date: 8/24/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	S2082101	BFB					VOCMS		Auto Final		✓
2		STD 20					VOCMS	S1D0811	OK		✓
3		STD 2					VOCMS				✓
4		MB					VOCMS				✓
5		81979.04	✓	✓		x1	VOCMS				
6		81980.01	✓	✓			VOCMS				
7		81951.04	✓	✓			VOCMS				
8		81951.05	✓	✓			VOCMS				
9		.07	✓	✓		x10	VOCMS				
10		81979.03	✓	✓		x20	VOCMS		Rex 100 for toluene		
11		81984.03		✓		x1	VOCMS				
12		.04		✓			VOCMS				
13		.04 MS		✓			VOCMS				
14		.04 MSD		✓			VOCMS				
15		.05		✓			VOCMS				
16		.06		✓			VOCMS				
17		.07		✓			VOCMS				
18		.08		✓			VOCMS				
19		.09		✓			VOCMS				
20		LCS 20					VOCMS			✓	✓
21		LCSD 20					VOCMS			✓	✓
22		BFB					VOCMS				
23		STD 20					VOCMS				
24		STD 2					VOCMS				
25		MB					VOCMS				
26		81984.10		✓		x1	VOCMS				
27		.11		✓			VOCMS				
28		.12		✓			VOCMS				
29		.15		✓			VOCMS				
30		.19		✓			VOCMS				
31		81992.02		✓			VOCMS				
32		.03		✓			VOCMS				
33		.04		✓			VOCMS				
34		.06		✓			VOCMS				
35		.08		✓			VOCMS				
36		.10		✓			VOCMS				
37		.11		✓			VOCMS				
38		.12		✓		x2	VOCMS				
39		.05		✓		x5	VOCMS				
40		.13		✓		x1	VOCMS		TB		
41		LCS 20					VOCMS				
42		LCSD 20					VOCMS				

Samples removed from autosampler, order and pH verified by [signature] 8/24/09 1-42

BFB

Data File : C:\MSDCHEM\1\DATA\AUG2109\SA082101.D
Acq On : 21 Aug 2009 8:55 am
Sample : BFB
Misc : x1; 5mL
MS Integration Params: rteint.p

Vial: 1
Operator: BAM
Inst : VOAMS5
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	13576	PASS
75	95	30	60	51.9	35893	PASS
95	95	100	100	100.0	69200	PASS
96	95	5	9	7.0	4859	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	81.5	56432	PASS
175	174	5	9	7.3	4124	PASS
176	174	95	101	99.0	55869	PASS
177	176	5	9	6.6	3664	PASS

SA082101.D 5VID0811.M Mon Aug 24 11:55:32 2009

BFB

Data File : C:\MSDCHEM\1\DATA\AUG2109\SA082122.D
Acq On : 21 Aug 2009 9:34 pm
Sample : BFB
Misc : x1; 5mL;
MS Integration Params: rteint.p

Vial: 22
Operator: BAM
Inst : VOAMS5
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	13222	PASS
75	95	30	60	51.6	34504	PASS
95	95	100	100	100.0	66813	PASS
96	95	5	9	7.0	4646	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.1	53520	PASS
175	174	5	9	7.4	3953	PASS
176	174	95	101	99.9	53490	PASS
177	176	5	9	6.3	3390	PASS

SA082122.D 5VID0811.M Mon Aug 24 14:18:05 2009

BFB

Data File : C:\MSDCHEM\1\DATA\AUG2009\SA082022.D
Acq On : 20 Aug 2009 8:19 pm
Sample : BFB
Misc : x1; 5mL;
MS Integration Params: rteint.p

Vial: 22
Operator: BAM
Inst : VOAMS5
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	12837	PASS
75	95	30	60	53.0	32656	PASS
95	95	100	100	100.0	61669	PASS
96	95	5	9	7.2	4429	PASS
173	174	0.00	2	0.2	111	PASS
174	95	50	100	81.2	50048	PASS
175	174	5	9	7.2	3600	PASS
176	174	95	101	99.5	49784	PASS
177	176	5	9	6.3	3136	PASS

SA082022.D 5VID0811.M Mon Aug 31 10:07:57 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2009\SA082023.D Vial: 23
Acq On : 20 Aug 2009 8:54 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	97	0.00
2		dichlorodifluoromethane	-1.000	19.958	0.0	0	0.00
3	P	chloromethane	-1.000	20.399	0.0	0	0.00
4	C	vinyl chloride	-1.000	23.546	0.0	0	0.00
5		bromomethane	-1.000	19.628	0.0	0	0.00
6		chloroethane	-1.000	21.327	0.0	0	0.00
7		trichlorofluoromethane	-1.000	22.333	0.0	0	0.00
8		diethyl ether	20.000	21.468	-7.3	107	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.686	-13.4	116	0.00
10		acrolein	-1.000	0.000	0.0	0	0.04
11		acetone	20.000	20.986	-4.9	108	0.00
12	CM	1,1-dichloroethene	20.000	21.463	-7.3	112	0.00
13		tert-Butyl Alcohol (TBA)	100.000	92.062	7.9	93	0.00
14		methylene chloride	20.000	21.787	-8.9	117	0.00
15		carbon disulfide	20.000	22.970	-14.8	119	0.00
16		acrylonitrile	20.000	20.528	-2.6	104	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	35.960	10.1	91	0.00
18		trans-1,2-dichloroethene	20.000	19.325	3.4	99	0.00
19		hexane	20.000	17.527	12.4	91	0.00
20		Isopropyl ether (DIPE)	20.000	19.195	4.0	96	0.00
21		vinyl acetate	-1.000	20.507	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	20.311	-1.6	103	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	17.980	10.1	90	0.00
24		2,2-dichloropropane	20.000	13.633	31.8#	70	0.00
25		cis-1,2-dichloroethene	20.000	20.080	-0.4	102	0.00
26		2-butanone (MEK)	20.000	18.008	10.0	93	0.00
27		bromochloromethane	20.000	20.158	-0.8	101	0.00
28		Tetrahydrofuran (THF)	20.000	17.526	12.4	87	0.00
29	C	chloroform	20.000	20.249	-1.2	103	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.298	-3.0	100	0.00
31		1,1,1-trichloroethane	20.000	18.104	9.5	92	0.00
32		carbon tetrachloride	20.000	17.077	14.6	84	0.00
33		1,1-dichloropropene	20.000	19.473	2.6	99	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.571	-5.7	103	0.00
35		tert-amyl methyl ether (TAM	20.000	17.747	11.3	89	0.00
36	M	benzene	20.000	20.247	-1.2	103	0.00
37		1,2-dichloroethane	20.000	20.918	-4.6	106	0.00
38	M	trichloroethene	20.000	19.424	2.9	98	0.00
39	C	1,2-dichloropropane	20.000	19.607	2.0	100	0.00
40		dibromomethane	20.000	20.235	-1.2	102	0.00
41		bromodichloromethane	20.000	19.833	0.8	98	0.00
42		2-Chloroethoxyethene	20.000	0.013	99.9#	0	0.04
43		4-methyl-2-pentanone (MIBK)	20.000	17.567	12.2	86	0.00
44		cis-1,3-dichloropropene	20.000	18.163	9.2	90	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	99	0.00
46	S	SS Toluene-d8_MS	10.000	9.947	0.5	99	0.00
47	CM	toluene	20.000	19.890	0.5	103	0.00
48		trans-1,3-dichloropropene	20.000	17.249	13.8	86	0.00
49		1,1,2-trichloroethane	20.000	19.842	0.8	103	0.00
50		2-hexanone	20.000	17.976	10.1	92	0.00
51		tetrachloroethene	20.000	19.381	3.1	101	0.00
52		1,3-dichloropropane	20.000	19.673	1.6	102	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2009\SA082023.D Vial: 23
Acq On : 20 Aug 2009 8:54 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	20.032	-0.2	95	0.00
54		1,2-dibromoethane	20.000	19.193	4.0	98	0.00
55	PM	chlorobenzene	20.000	20.006	-0.0	104	0.00
56		1,1,1,2-tetrachloroethane	20.000	18.385	8.1	92	0.00
57	C	ethylbenzene	20.000	20.308	-1.5	104	0.00
58		mp-xylene	40.000	40.787	-2.0	105	0.00
59		o-xylene	20.000	20.033	-0.2	102	0.00
60		styrene	20.000	20.213	-1.1	102	0.00
61	P	bromoform	20.000	15.994	20.0#	93	0.00
62		iso-propylbenzene	20.000	20.277	-1.4	103	0.00
63	S	SS 4-BFB_MS	10.000	10.320	-3.2	101	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	104	0.00
65		bromobenzene	20.000	19.019	4.9	105	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.227	8.9	103	0.00
67		1,2,3-trichloropropane	20.000	18.367	8.2	103	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	19.214	3.9	104	0.00
70		2-chlorotoluene	20.000	19.256	3.7	105	0.00
71		4-chlorotoluene	20.000	19.212	3.9	105	0.00
72		1,3,5-trimethylbenzene	20.000	19.338	3.3	104	0.00
73		tert-butylbenzene	20.000	19.280	3.6	105	0.00
74		1,2,4-trimethylbenzene	20.000	18.623	6.9	99	-0.42#
75		sec-butylbenzene	20.000	19.424	2.9	105	0.00
76		1,3-dichlorobenzeneV	20.000	19.065	4.7	104	0.00
77		p-isopropyltoluene	20.000	19.443	2.8	105	0.00
78		1,4-dichlorobenzeneV	20.000	19.144	4.3	105	0.00
79		1,2-dichlorobenzeneV	20.000	19.135	4.3	106	0.00
80		n-butylbenzene	20.000	19.277	3.6	105	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.776	2.2	104	0.00
82		1,2-dibromo-3-chloropropane	20.000	16.487	17.6	88	0.00
83		1,3,5-trichlorobenzV	20.000	18.727	6.4	104	0.00
84		1,2,4-trichlorobenzV	20.000	18.257	8.7	100	0.00
85		hexachlorobutadieneV	20.000	17.513	12.4	101	0.00
86		naphthaleneV	20.000	17.951	10.2	97	0.00
87		1,2,3-trichlorobenzV	20.000	18.337	8.3	101	0.00
88	S	SS 2,5-DBT_MS	20.000	16.665	16.7	90	0.00

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2009\SA082023.D Vial: 23
Acq On : 20 Aug 2009 8:54 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	101	0.00
2		dichlorodifluoromethane	20.000	19.958	0.2	119	0.00
3	P	chloromethane	20.000	20.399	-2.0	119	0.00
4	C	vinyl chloride	20.000	23.546	-17.7	119	0.00
5		bromomethane	20.000	19.628	1.9	113	0.00
6		chloroethane	20.000	21.327	-6.6	125	0.00
7		trichlorofluoromethane	20.000	22.333	-11.7	131	0.00
8		diethyl ether	20.000	21.468	-7.3	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.686	-13.4	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.04
11		acetone	20.000	20.986	-4.9	0	0.00
12	CM	1,1-dichloroethene	20.000	21.463	-7.3	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	92.062	-360.3#	0	0.00
14		methylene chloride	20.000	21.787	-8.9	0	0.00
15		carbon disulfide	20.000	22.970	-14.8	0	0.00
16		acrylonitrile	20.000	20.528	-2.6	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	35.960	-79.8#	0	0.00
18		trans-1,2-dichloroethene	20.000	19.325	3.4	0	0.00
19		hexane	20.000	17.527	12.4	0	0.00
20		Isopropyl ether (DIPE)	20.000	19.195	4.0	0	0.00
21		vinyl acetate	20.000	20.507	-2.5	107	0.00
22	P	1,1-dichloroethane	20.000	20.311	-1.6	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	17.980	10.1	0	0.00
24		2,2-dichloropropane	20.000	13.633	31.8#	0	0.00
25		cis-1,2-dichloroethene	20.000	20.080	-0.4	0	0.00
26		2-butanone (MEK)	20.000	18.008	10.0	0	0.00
27		bromochloromethane	20.000	20.158	-0.8	0	0.00
28		Tetrahydrofuran (THF)	20.000	17.526	12.4	0	0.00
29	C	chloroform	20.000	20.249	-1.2	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.298	-3.0	104	0.00
31		1,1,1-trichloroethane	20.000	18.104	9.5	0	0.00
32		carbon tetrachloride	20.000	17.077	14.6	0	0.00
33		1,1-dichloropropene	20.000	19.473	2.6	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.571	-5.7	105	0.00
35		tert-amyl methyl ether (TAM	20.000	17.747	11.3	0	0.00
36	M	benzene	20.000	20.247	-1.2	0	0.00
37		1,2-dichloroethane	20.000	20.918	-4.6	0	0.00
38	M	trichloroethene	20.000	19.424	2.9	0	0.00
39	C	1,2-dichloropropane	20.000	19.607	2.0	0	0.00
40		dibromomethane	20.000	20.235	-1.2	0	0.00
41		bromodichloromethane	20.000	19.833	0.8	0	0.00
42		2-Chloroethoxyethene	20.000	0.013	99.9#	0	0.04
43		4-methyl-2-pentanone (MIBK)	20.000	17.567	12.2	0	0.00
44		cis-1,3-dichloropropene	20.000	18.163	9.2	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	103	0.00
46	S	SS Toluene-d8_MS	10.000	9.947	0.5	103	0.00
47	CM	toluene	20.000	19.890	0.5	0	0.00
48		trans-1,3-dichloropropene	20.000	17.249	13.8	0	0.00
49		1,1,2-trichloroethane	20.000	19.842	0.8	0	0.00
50		2-hexanone	20.000	17.976	10.1	0	0.00
51		tetrachloroethene	20.000	19.381	3.1	0	0.00
52		1,3-dichloropropane	20.000	19.673	1.6	0	0.00

Use for gases

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2009\SA082023.D Vial: 23
Acq On : 20 Aug 2009 8:54 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	20.032	-0.2	0	0.00
54		1,2-dibromoethane	20.000	19.193	4.0	0	0.00
55	PM	chlorobenzene	20.000	20.006	-0.0	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	18.385	8.1	0	0.00
57	C	ethylbenzene	20.000	20.308	-1.5	0	0.00
58		mp-xylene	20.000	40.787	-103.9#	0	0.00
59		o-xylene	20.000	20.033	-0.2	0	0.00
60		styrene	20.000	20.213	-1.1	0	0.00
61	P	bromoform	20.000	16.994	20.0#	0	0.00
62		iso-propylbenzene	20.000	20.277	-1.4	0	0.00
63	S	SS 4-BFB_MS	10.000	10.320	-3.2	107	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	113	0.00
65		bromobenzene	20.000	19.019	4.9	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.227	8.9	0	0.00
67		1,2,3-trichloropropane	20.000	18.367	8.2	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	19.214	3.9	0	0.00
70		2-chlorotoluene	20.000	19.256	3.7	0	0.00
71		4-chlorotoluene	20.000	19.212	3.9	0	0.00
72		1,3,5-trimethylbenzene	20.000	19.338	3.3	0	0.00
73		tert-butylbenzene	20.000	19.280	3.6	0	0.00
74		1,2,4-trimethylbenzene	20.000	18.623	6.9	0	-0.42#
75		sec-butylbenzene	20.000	19.424	2.9	0	0.00
76		1,3-dichlorobenzeneV	20.000	19.065	4.7	0	0.00
77		p-isopropyltoluene	20.000	19.443	2.8	0	0.00
78		1,4-dichlorobenzeneV	20.000	19.144	4.3	0	0.00
79		1,2-dichlorobenzeneV	20.000	19.135	4.3	0	0.00
80		n-butylbenzene	20.000	19.277	3.6	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.776	2.2	111	0.00
82		1,2-dibromo-3-chloropropane	20.000	16.487	17.6	0	0.00
83		1,3,5-trichlorobenzV	20.000	18.727	6.4	0	0.00
84		1,2,4-trichlorobenzV	20.000	18.257	8.7	0	0.00
85		hexachlorobutadieneV	20.000	17.513	12.4	0	0.00
86		naphthaleneV	20.000	17.951	10.2	0	0.00
87		1,2,3-trichlorobenzV	20.000	18.337	8.3	0	0.00
88	S	SS 2,5-DBT_MS	20.000	16.665	16.7	0	0.00

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082102.D Vial: 2
Acq On : 21 Aug 2009 9:36 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	105	0.00
2		dichlorodifluoromethane	-1.000	20.241	0.0	0	0.00
3	P	chloromethane	-1.000	19.682	0.0	0	0.00
4	C	vinyl chloride	-1.000	22.536	0.0	0	0.00
5		bromomethane	-1.000	16.559	0.0	0	0.00
6		chloroethane	-1.000	20.974	0.0	0	0.00
7		trichlorofluoromethane	-1.000	22.499	0.0	0	0.00
8		diethyl ether	20.000	21.994	-10.0	120	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	23.493	-17.5	131	0.00
10		acrolein	-1.000	0.000	0.0	0	0.02
11		acetone	20.000	20.253	-1.3	113	0.00
12	CM	1,1-dichloroethene	20.000	22.259	-11.3	127	0.00
13		tert-Butyl Alcohol (TBA)	100.000	100.077	-0.1	111	0.00
14		methylene chloride	20.000	20.542	-2.7	120	0.00
15		carbon disulfide	20.000	21.664	-8.3	122	0.00
16		acrylonitrile	20.000	20.911	-4.6	116	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	37.570	6.1	104	0.00
18		trans-1,2-dichloroethene	20.000	20.051	-0.3	112	0.00
19		hexane	20.000	20.654	-3.3	116	0.00
20		Isopropyl ether (DIPE)	20.000	19.528	2.4	106	0.00
21		vinyl acetate	-1.000	23.687	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	20.166	-0.8	111	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.684	6.6	102	0.00
24		2,2-dichloropropane	20.000	17.812	10.9	99	0.00
25		cis-1,2-dichloroethene	20.000	20.366	-1.8	113	0.00
26		2-butanone (MEK)	20.000	19.313	3.4	109	0.00
27		bromochloromethane	20.000	20.227	-1.1	111	0.00
28		Tetrahydrofuran (THF)	20.000	19.608	2.0	106	0.00
29	C	chloroform	20.000	20.187	-0.9	112	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.037	-0.4	106	0.00
31		1,1,1-trichloroethane	20.000	18.771	6.1	103	0.00
32		carbon tetrachloride	20.000	18.500	7.5	99	0.00
33		1,1-dichloropropene	20.000	20.554	-2.8	114	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.255	-2.6	108	0.00
35		tert-amyl methyl ether (TAM	20.000	18.603	7.0	101	0.00
36	M	benzene	20.000	20.448	-2.2	113	0.00
37		1,2-dichloroethane	20.000	20.692	-3.5	114	0.00
38	M	trichloroethene	20.000	19.920	0.4	109	0.00
39	C	1,2-dichloropropane	20.000	19.765	1.2	110	0.00
40		dibromomethane	20.000	20.317	-1.6	112	0.00
41		bromodichloromethane	20.000	19.942	0.3	107	0.00
42		2-Chloroethoxyethene	20.000	19.968	0.2	0	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.815	-4.1	111	0.00
44		cis-1,3-dichloropropene	20.000	19.257	3.7	103	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	105	0.00
46	S	SS Toluene-d8_MS	10.000	10.170	-1.7	108	0.00
47	CM	toluene	20.000	20.925	-4.6	115	0.00
48		trans-1,3-dichloropropene	20.000	18.876	5.6	100	0.00
49		1,1,2-trichloroethane	20.000	20.245	-1.2	111	0.00
50		2-hexanone	20.000	19.574	2.1	107	0.00
51		tetrachloroethene	20.000	20.546	-2.7	114	0.00
52		1,3-dichloropropane	20.000	20.491	-2.5	113	0.00
53		dibromochloromethane	20.000	21.095	-5.5	106	0.00
54		1,2-dibromoethane	20.000	20.192	-1.0	110	0.00
55	PM	chlorobenzene	20.000	20.481	-2.4	113	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.128	4.4	102	0.00

57	C	ethylbenzene	20.000	20.999	-5.0	114	0.00
58		mp-xylene	40.000	42.373	-5.9	116	0.00
59		o-xylene	20.000	21.043	-5.2	114	0.00
60		styrene	20.000	20.908	-4.5	112	0.00
61	P	bromoform	20.000	16.962	15.2	106	0.00
62		iso-propylbenzene	20.000	21.194	-6.0	115	0.00
63	S	SS 4-BFB_MS	10.000	10.164	-1.6	106	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	107	0.00
65		bromobenzene	20.000	20.095	-0.5	114	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	19.355	3.2	113	0.00
67		1,2,3-trichloropropane	20.000	19.687	1.6	113	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.716	-3.6	116	0.00
70		2-chlorotoluene	20.000	20.310	-1.5	114	0.00
71		4-chlorotoluene	20.000	20.029	-0.1	113	0.00
72		1,3,5-trimethylbenzene	20.000	20.766	-3.8	115	0.00
73		tert-butylbenzene	20.000	20.536	-2.7	115	0.00
74		1,2,4-trimethylbenzene	20.000	21.074	-5.4	115	0.00
75		sec-butylbenzene	20.000	20.893	-4.5	117	0.00
76		1,3-dichlorobenzeneV	20.000	20.175	-0.9	114	0.00
77		p-isopropyltoluene	20.000	20.926	-4.6	116	0.00
78		1,4-dichlorobenzeneV	20.000	19.949	0.3	112	0.00
79		1,2-dichlorobenzeneV	20.000	19.877	0.6	113	0.00
80		n-butylbenzene	20.000	20.837	-4.2	117	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.790	2.1	107	0.00
82		1,2-dibromo-3-chloropropane	20.000	18.511	7.4	102	0.00
83		1,3,5-trichlorobenzV	20.000	20.166	-0.8	115	0.00
84		1,2,4-trichlorobenzV	20.000	19.628	1.9	111	0.00
85		hexachlorobutadieneV	20.000	19.617	1.9	117	0.00
86		naphthaleneV	20.000	19.834	0.8	110	0.00
87		1,2,3-trichlorobenzV	20.000	19.703	1.5	112	0.00
88	S	SS 2,5-DBT_MS	20.000	18.606	7.0	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
SA081119.D 5VID0811.M Mon Aug 31 11:54:11 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082102.D Vial: 2
Acq On : 21 Aug 2009 9:36 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

use for gases

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	110	0.00
2		dichlorodifluoromethane	20.000	20.241	-1.2	131	0.00
3	P	chloromethane	20.000	19.682	1.6	125	0.00
4	C	vinyl chloride	20.000	22.536	-12.7	124	0.00
5		bromomethane	20.000	16.559	17.2	103	0.00
6		chloroethane	20.000	20.974	-4.9	134	0.00
7		trichlorofluoromethane	20.000	22.499	-12.5	144	0.00
8		diethyl ether	20.000	21.994	-10.0	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	23.493	-17.5	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.02
11		acetone	20.000	20.253	-1.3	0	0.00
12	CM	1,1-dichloroethene	20.000	22.259	-11.3	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	100.077	-400.4#	0	0.00
14		methylene chloride	20.000	20.542	-2.7	0	0.00
15		carbon disulfide	20.000	21.664	-8.3	0	0.00
16		acrylonitrile	20.000	20.911	-4.6	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	37.570	-87.9#	0	0.00
18		trans-1,2-dichloroethene	20.000	20.051	-0.3	0	0.00
19		hexane	20.000	20.654	-3.3	0	0.00
20		Isopropyl ether (DIPE)	20.000	19.528	2.4	0	0.00
21		vinyl acetate	20.000	23.687	-18.4	134	0.00
22	P	1,1-dichloroethane	20.000	20.166	-0.8	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.684	6.6	0	0.00
24		2,2-dichloropropane	20.000	17.812	10.9	0	0.00
25		cis-1,2-dichloroethene	20.000	20.366	-1.8	0	0.00
26		2-butanone (MEK)	20.000	19.313	3.4	0	0.00
27		bromochloromethane	20.000	20.227	-1.1	0	0.00
28		Tetrahydrofuran (THF)	20.000	19.608	2.0	0	0.00
29	C	chloroform	20.000	20.187	-0.9	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.037	-0.4	110	0.00
31		1,1,1-trichloroethane	20.000	18.771	6.1	0	0.00
32		carbon tetrachloride	20.000	18.500	7.5	0	0.00
33		1,1-dichloropropene	20.000	20.554	-2.8	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.255	-2.6	111	0.00
35		tert-amyl methyl ether (TAM	20.000	18.603	7.0	0	0.00
36	M	benzene	20.000	20.448	-2.2	0	0.00
37		1,2-dichloroethane	20.000	20.692	-3.5	0	0.00
38	M	trichloroethene	20.000	19.920	0.4	0	0.00
39	C	1,2-dichloropropane	20.000	19.765	1.2	0	0.00
40		dibromomethane	20.000	20.317	-1.6	0	0.00
41		bromodichloromethane	20.000	19.942	0.3	0	0.00
42		2-Chloroethoxyethene	20.000	19.968	0.2	109	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.815	-4.1	0	0.00
44		cis-1,3-dichloropropene	20.000	19.257	3.7	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	110	0.00
46	S	SS Toluene-d8_MS	10.000	10.170	-1.7	112	0.00
47	CM	toluene	20.000	20.925	-4.6	0	0.00
48		trans-1,3-dichloropropene	20.000	18.876	5.6	0	0.00
49		1,1,2-trichloroethane	20.000	20.245	-1.2	0	0.00
50		2-hexanone	20.000	19.574	2.1	0	0.00
51		tetrachloroethene	20.000	20.546	-2.7	0	0.00
52		1,3-dichloropropane	20.000	20.491	-2.5	0	0.00
53		dibromochloromethane	20.000	21.095	-5.5	0	0.00
54		1,2-dibromoethane	20.000	20.192	-1.0	0	0.00
55	PM	chlorobenzene	20.000	20.481	-2.4	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.128	4.4	0	0.00

57	C	ethylbenzene	20.000	20.999	-5.0	0	0.00
58		mp-xylene	20.000	42.373	-111.9#	0	0.00
59		o-xylene	20.000	21.043	-5.2	0	0.00
60		styrene	20.000	20.908	-4.5	0	0.00
61	P	bromoform	20.000	16.962	15.2	0	0.00
62		iso-propylbenzene	20.000	21.194	-6.0	0	0.00
63	S	SS 4-BFB_MS	10.000	10.164	-1.6	112	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	117	0.00
65		bromobenzene	20.000	20.095	-0.5	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	19.355	3.2	0	0.00
67		1,2,3-trichloropropane	20.000	19.687	1.6	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.716	-3.6	0	0.00
70		2-chlorotoluene	20.000	20.310	-1.5	0	0.00
71		4-chlorotoluene	20.000	20.029	-0.1	0	0.00
72		1,3,5-trimethylbenzene	20.000	20.766	-3.8	0	0.00
73		tert-butylbenzene	20.000	20.536	-2.7	0	0.00
74		1,2,4-trimethylbenzene	20.000	21.074	-5.4	0	0.00
75		sec-butylbenzene	20.000	20.893	-4.5	0	0.00
76		1,3-dichlorobenzeneV	20.000	20.175	-0.9	0	0.00
77		p-isopropyltoluene	20.000	20.926	-4.6	0	0.00
78		1,4-dichlorobenzeneV	20.000	19.949	0.3	0	0.00
79		1,2-dichlorobenzeneV	20.000	19.877	0.6	0	0.00
80		n-butylbenzene	20.000	20.837	-4.2	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.790	2.1	114	0.00
82		1,2-dibromo-3-chloropropane	20.000	18.511	7.4	0	0.00
83		1,3,5-trichlorobenzV	20.000	20.166	-0.8	0	0.00
84		1,2,4-trichlorobenzV	20.000	19.628	1.9	0	0.00
85		hexachlorobutadieneV	20.000	19.617	1.9	0	0.00
86		naphthaleneV	20.000	19.834	0.8	0	0.00
87		1,2,3-trichlorobenzV	20.000	19.703	1.5	0	0.00
88	S	SS 2,5-DBT_MS	20.000	18.606	7.0	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
SA081119.D SVID0811.M Mon Aug 31 11:54:57 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082123.D Vial: 23
Acq On : 21 Aug 2009 10:10 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	104	0.00
2		dichlorodifluoromethane	-1.000	20.324	0.0	0	0.00
3	P	chloromethane	-1.000	18.103	0.0	0	0.00
4	C	vinyl chloride	-1.000	22.314	0.0	0	0.00
5		bromomethane	-1.000	11.442	0.0	0	0.00
6		chloroethane	-1.000	21.204	0.0	0	0.00
7		trichlorofluoromethane	-1.000	22.658	0.0	0	0.00
8		diethyl ether	20.000	21.943	-9.7	118	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.831	-14.2	125	0.00
10		acrolein	-1.000	0.000	0.0	0	0.03
11		acetone	20.000	23.702	-18.5	131	0.00
12	CM	1,1-dichloroethene	20.000	22.028	-10.1	124	0.00
13		tert-Butyl Alcohol (TBA)	100.000	102.927	-2.9	112	0.00
14		methylene chloride	20.000	21.431	-7.2	124	0.00
15		carbon disulfide	20.000	22.936	-14.7	127	0.00
16		acrylonitrile	20.000	21.073	-5.4	115	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	37.226	6.9	101	0.00
18		trans-1,2-dichloroethene	20.000	19.990	0.1	110	0.00
19		hexane	20.000	17.602	12.0	98	0.00
20		Isopropyl ether (DIPE)	20.000	19.464	2.7	104	0.00
21		vinyl acetate	-1.000	20.726	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	20.510	-2.6	111	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.645	6.8	100	0.00
24		2,2-dichloropropane	20.000	11.170	44.1#	61	0.00
25		cis-1,2-dichloroethene	20.000	20.468	-2.3	112	0.00
26		2-butanone (MEK)	20.000	19.484	2.6	108	0.00
27		bromochloromethane	20.000	20.335	-1.7	110	0.00
28		Tetrahydrofuran (THF)	20.000	19.588	2.1	104	0.00
29	C	chloroform	20.000	20.208	-1.0	110	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.165	-1.6	106	0.00
31		1,1,1-trichloroethane	20.000	19.347	3.3	105	0.00
32		carbon tetrachloride	20.000	19.268	3.7	102	0.00
33		1,1-dichloropropene	20.000	20.704	-3.5	113	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.387	-3.9	108	0.00
35		tert-amyl methyl ether (TAM	20.000	18.502	7.5	99	0.00
36	M	benzene	20.000	20.548	-2.7	112	0.00
37		1,2-dichloroethane	20.000	20.844	-4.2	113	0.00
38	M	trichloroethene	20.000	20.335	-1.7	110	0.00
39	C	1,2-dichloropropane	20.000	20.101	-0.5	110	0.00
40		dibromomethane	20.000	20.629	-3.1	112	0.00
41		bromodichloromethane	20.000	20.441	-2.2	108	0.00
42		2-Chloroethoxyethene	20.000	0.016	99.9#	0	0.04
43		4-methyl-2-pentanone (MIBK)	20.000	19.967	0.2	105	0.00
44		cis-1,3-dichloropropene	20.000	17.994	10.0	95	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	105	0.00
46	S	SS Toluene-d8_MS	10.000	10.007	-0.1	106	0.00
47	CM	toluene	20.000	20.490	-2.4	113	0.00
48		trans-1,3-dichloropropene	20.000	17.555	12.2	93	0.00
49		1,1,2-trichloroethane	20.000	20.278	-1.4	112	0.00
50		2-hexanone	20.000	20.015	-0.1	109	0.00
51		tetrachloroethene	20.000	20.012	-0.1	111	0.00
52		1,3-dichloropropane	20.000	20.248	-1.2	112	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082123.D Vial: 23
Acq On : 21 Aug 2009 10:10 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	21.483	-7.4	108	0.00
54		1,2-dibromoethane	20.000	20.132	-0.7	109	0.00
55	PM	chlorobenzene	20.000	20.385	-1.9	113	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.692	1.5	105	0.00
57	C	ethylbenzene	20.000	20.965	-4.8	114	0.00
58		mp-xylene	40.000	42.134	-5.3	115	0.00
59		o-xylene	20.000	20.672	-3.4	112	0.00
60		styrene	20.000	20.671	-3.4	111	0.00
61	P	bromoform	20.000	17.658	11.7	111	0.00
62		iso-propylbenzene	20.000	21.053	-5.3	114	0.00
63	S	SS 4-BFB_MS	10.000	10.173	-1.7	106	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	108	0.00
65		bromobenzene	20.000	19.843	0.8	114	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	19.442	2.8	115	0.00
67		1,2,3-trichloropropane	20.000	19.461	2.7	113	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.179	-0.9	114	0.00
70		2-chlorotoluene	20.000	19.986	0.1	114	0.00
71		4-chlorotoluene	20.000	19.642	1.8	112	0.00
72		1,3,5-trimethylbenzene	20.000	20.270	-1.3	114	0.00
73		tert-butylbenzene	20.000	20.371	-1.9	115	0.00
74		1,2,4-trimethylbenzene	20.000	20.536	-2.7	113	0.00
75		sec-butylbenzene	20.000	20.418	-2.1	115	0.00
76		1,3-dichlorobenzeneV	20.000	19.692	1.5	112	0.00
77		p-isopropyltoluene	20.000	20.314	-1.6	114	0.00
78		1,4-dichlorobenzeneV	20.000	19.728	1.4	112	0.00
79		1,2-dichlorobenzeneV	20.000	19.840	0.8	114	0.00
80		n-butylbenzene	20.000	19.944	0.3	113	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.896	1.0	109	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.055	4.7	106	0.00
83		1,3,5-trichlorobenzV	20.000	19.175	4.1	111	0.00
84		1,2,4-trichlorobenzV	20.000	19.080	4.6	109	0.00
85		hexachlorobutadieneV	20.000	17.937	10.3	108	0.00
86		naphthaleneV	20.000	19.757	1.2	111	0.00
87		1,2,3-trichlorobenzV	20.000	19.426	2.9	112	0.00
88	S	SS 2,5-DBT_MS	20.000	17.517	12.4	99	0.00

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082123.D Vial: 23
Acq On : 21 Aug 2009 10:10 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	109	0.00
2		dichlorodifluoromethane	20.000	20.324	-1.6	130	0.00
3	P	chloromethane	20.000	18.103	9.5	114	0.00
4	C	vinyl chloride	20.000	22.314	-11.6	121	0.00
5		bromomethane	20.000	11.442	42.8#	70	0.00
6		chloroethane	20.000	21.204	-6.0	134	0.00
7		trichlorofluoromethane	20.000	22.658	-13.3	143	0.00
8		diethyl ether	20.000	21.943	-9.7	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.831	-14.2	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.03
11		acetone	20.000	23.702	-18.5	0	0.00
12	CM	1,1-dichloroethene	20.000	22.028	-10.1	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	102.927	-414.6#	0	0.00
14		methylene chloride	20.000	21.431	-7.2	0	0.00
15		carbon disulfide	20.000	22.936	-14.7	0	0.00
16		acrylonitrile	20.000	21.073	-5.4	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	37.226	-86.1#	0	0.00
18		trans-1,2-dichloroethene	20.000	19.990	0.1	0	0.00
19		hexane	20.000	17.602	12.0	0	0.00
20		Isopropyl ether (DIPE)	20.000	19.464	2.7	0	0.00
21		vinyl acetate	20.000	20.726	-3.6	116	0.00
22	P	1,1-dichloroethane	20.000	20.510	-2.6	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.645	6.8	0	0.00
24		2,2-dichloropropane	20.000	11.170	44.1#	0	0.00
25		cis-1,2-dichloroethene	20.000	20.468	-2.3	0	0.00
26		2-butanone (MEK)	20.000	19.484	2.6	0	0.00
27		bromochloromethane	20.000	20.335	-1.7	0	0.00
28		Tetrahydrofuran (THF)	20.000	19.588	2.1	0	0.00
29	C	chloroform	20.000	20.208	-1.0	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.165	-1.6	110	0.00
31		1,1,1-trichloroethane	20.000	19.347	3.3	0	0.00
32		carbon tetrachloride	20.000	19.268	3.7	0	0.00
33		1,1-dichloropropene	20.000	20.704	-3.5	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	10.387	-3.9	111	0.00
35		tert-amyl methyl ether (TAM	20.000	18.502	7.5	0	0.00
36	M	benzene	20.000	20.548	-2.7	0	0.00
37		1,2-dichloroethane	20.000	20.844	-4.2	0	0.00
38	M	trichloroethene	20.000	20.335	-1.7	0	0.00
39	C	1,2-dichloropropane	20.000	20.101	-0.5	0	0.00
40		dibromomethane	20.000	20.629	-3.1	0	0.00
41		bromodichloromethane	20.000	20.441	-2.2	0	0.00
42		2-Chloroethoxyethene	20.000	0.016	99.9#	0	0.04
43		4-methyl-2-pentanone (MIBK)	20.000	19.967	0.2	0	0.00
44		cis-1,3-dichloropropene	20.000	17.994	10.0	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	110	0.00
46	S	SS Toluene-d8_MS	10.000	10.007	-0.1	110	0.00
47	CM	toluene	20.000	20.490	-2.4	0	0.00
48		trans-1,3-dichloropropene	20.000	17.555	12.2	0	0.00
49		1,1,2-trichloroethane	20.000	20.278	-1.4	0	0.00
50		2-hexanone	20.000	20.015	-0.1	0	0.00
51		tetrachloroethene	20.000	20.012	-0.1	0	0.00
52		1,3-dichloropropane	20.000	20.248	-1.2	0	0.00

use for gases

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\AUG 09\AUG2109\SA082123.D Vial: 23
Acq On : 21 Aug 2009 10:10 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 24 10:10:47 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	21.483	-7.4	0	0.00
54		1,2-dibromoethane	20.000	20.132	-0.7	0	0.00
55	PM	chlorobenzene	20.000	20.385	-1.9	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.692	1.5	0	0.00
57	C	ethylbenzene	20.000	20.965	-4.8	0	0.00
58		mp-xylene	20.000	42.134	-110.7#	0	0.00
59		o-xylene	20.000	20.672	-3.4	0	0.00
60		styrene	20.000	20.671	-3.4	0	0.00
61	P	bromoform	20.000	17.658	11.7	0	0.00
62		iso-propylbenzene	20.000	21.053	-5.3	0	0.00
63	S	SS 1-BFB_MS	10.000	10.173	-1.7	112	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	118	0.00
65		bromobenzene	20.000	19.843	0.8	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	19.442	2.8	0	0.00
67		1,2,3-trichloropropane	20.000	19.461	2.7	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.179	-0.9	0	0.00
70		2-chlorotoluene	20.000	19.986	0.1	0	0.00
71		4-chlorotoluene	20.000	19.642	1.8	0	0.00
72		1,3,5-trimethylbenzene	20.000	20.270	-1.3	0	0.00
73		tert-butylbenzene	20.000	20.371	-1.9	0	0.00
74		1,2,4-trimethylbenzene	20.000	20.536	-2.7	0	0.00
75		sec-butylbenzene	20.000	20.418	-2.1	0	0.00
76		1,3-dichlorobenzeneV	20.000	19.692	1.5	0	0.00
77		p-isopropyltoluene	20.000	20.314	-1.6	0	0.00
78		1,4-dichlorobenzeneV	20.000	19.728	1.4	0	0.00
79		1,2-dichlorobenzeneV	20.000	19.840	0.8	0	0.00
80		n-butylbenzene	20.000	19.944	0.3	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.896	1.0	117	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.055	4.7	0	0.00
83		1,3,5-trichlorobenzV	20.000	19.175	4.1	0	0.00
84		1,2,4-trichlorobenzV	20.000	19.080	4.6	0	0.00
85		hexachlorobutadieneV	20.000	17.937	10.3	0	0.00
86		naphthaleneV	20.000	19.757	1.2	0	0.00
87		1,2,3-trichlorobenzV	20.000	19.426	2.9	0	0.00
88	S	SS 2,5-DBT_MS	20.000	17.517	12.4	0	0.00

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2009\SA082022.D
Tune Time : 20 Aug 2009 8:19 pm

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2009\SA082023.D

							296190	227006	129375
File	Sample	Surrogate Recovery %				Internal Standard Responses			
SA082023.D	STD 20	103	106	99	103		296190	227006	129375
		98	42*						
SA082024.D	STD 2	102	108	100	99		299456	227803	123005
		99	5*						
SA082025.D	MB	104	108	101	95		286766	220188	112711
		102	0*						
SA082026.D	82010.01	106	109	100	95		283862	219559	110955
		104	0*						
SA082027.D	82010.02	104	108	99	94		284482	220809	113140
		102	0*						
SA082028.D	82010.03	105	109	99	93		282465	219449	110176
		103	0*						
SA082029.D	82010.04	103	109	100	95		281421	217306	110754
		102	0*						
SA082030.D	82010.05	105	109	99	95		282708	218438	111431
		102	0*						
SA082031.D	81984.21	104	108	99	93		279125	219295	111253
		102	0*						
SA082032.D	81984.20	105	109	99	94		279178	218996	110494
		103	0*						
SA082033.D	81993.01	105	109	99	94		272255	211158	107764
		101	0*						
SA082034.D	81993.03	105	110	99	94		276725	215449	109936
		103	0*						
SA082035.D	81979.01	105	109	99	95		277552	215122	110018
		103	0*						
SA082036.D	81979.02	106	109	98	93		271053	213117	108975
		101	0*						
SA082037.D	81979.03	85	103	96	111		408010	295916	168384
		97	0*						
SA082038.D	81979.04	95	98	99	98		362286	272272	142009
		99	0*						
SA082039.D	81980.01	98	103	99	98		335128	256116	133628
		100	0*						
SA082040.D	81980.02	98	102	99	97		325460	249489	128964
		101	0*						
SA082041.D	LCS 20	102	103	99	103		321054	249837	138105
		99	0*						
SA082042.D	LCSD 20	101	103	98	101		327330	257224	140809
		98	0*						

t - fails 12hr time check * - fails criteria

Created: Fri Aug 21 08:44:13 2009 VOAMS5

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2109\SA082102.D
Tune Time : 21 Aug 2009 9:36 am

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2109\SA082102.D

						322141	241368	133098

File	Sample	Surrogate Recovery %				Internal Standard Responses		
SA082102.D	STD 20	100	103	102	102	322141	241368	133098
		98	47*					
SA082103.D	STD 2	99	104	100	97	317055	236696	123754
		100	5*					
SA082104.D	MB	100	105	99	95	310093	232260	117143
		101	0*					
SA082105.D	81979.04	100	106	101	95	301376	226804	115441
		100	0*					
SA082106.D	81980.01	102	108	100	95	294224	222178	112605
		101	0*					
SA082107.D	81951.04	102	106	100	97	298842	223822	118223
		103	0*					
SA082108.D	81951.05	98	105	100	99	317130	235315	127609
		103	0*					
SA082109.D	81951.07	94	100	101	101	347279	250499	143924
		98	0*					
SA082110.D	81979.03	95	101	99	100	345341	256591	142696
		98	0*					
SA082111.D	81984.03	98	102	100	97	336534	250117	127471
		99	0*					
SA082112.D	81984.04	101	103	100	97	326491	244154	124089
		102	0*					
SA082113.D	81984.04 MS	102	103	100	103	331668	248908	135376
		99	0*					
SA082114.D	81984.04 MSD	100	102	100	101	335805	253679	137752
		98	0*					
SA082115.D	81984.05	101	102	100	97	328735	245448	124522
		101	0*					
SA082116.D	81984.06	100	103	101	95	320043	238526	121043
		100	0*					
SA082117.D	81984.07	100	104	101	94	311576	234481	118060
		101	0*					
SA082118.D	81984.08	100	102	101	95	305591	229169	116001
		100	0*					
SA082119.D	81984.09	101	105	100	94	298733	227490	114137
		101	0*					
SA082120.D	LCS 20	101	103	100	102	311548	236701	130330
		98	0*					
SA082121.D	LCSD 20	100	102	100	103	318933	241458	132417
		98	0*					

t - fails 12hr time check * - fails criteria

Created: Mon Aug 24 11:58:07 2009 VOAM55

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2109\SA082122.D
Tune Time : 21 Aug 2009 9:34 pm

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2109\SA082123.D

317752 241518 134527

File	Sample	Surrogate Recovery %				Internal Standard Responses		
SA082123.D	STD 20	102	104	100	102	317752	241518	134527
		99	44*					
SA082124.D	STD 2	100	105	101	98	312662	233855	123414
		99	4*					
SA082125.D	MB	100	104	101	94	308814	229593	116300
		100	0*					
SA082126.D	81984.10	101	104	99	94	301382	228844	113628
		101	0*					
SA082127.D	81984.11	101	105	101	96	298969	224209	113370
		101	0*					
SA082128.D	81984.12	102	106	101	95	295909	224283	113170
		102	0*					
SA082129.D	81984.15	101	106	100	94	295528	222281	110847
		103	0*					
SA082130.D	81984.19	102	106	101	94	293270	221351	110569
		102	0*					
SA082131.D	81992.02	103	107	101	96	290991	220988	111781
		102	0*					
SA082132.D	81992.03	103	106	100	95	290020	220014	113396
		101	0*					
SA082133.D	81992.04	103	107	100	94	288912	218497	110933
		102	0*					
SA082134.D	81992.06	102	106	103	96	297744	225734	115334
		103	0*					
SA082135.D	81992.08	96	102	101	100	326178	239815	137543
		99	0*					
SA082136.D	81992.10	97	104	100	99	329333	249881	134185
		101	0*					
SA082137.D	81992.11	99	103	100	96	327171	245992	123470
		102	0*					
SA082138.D	81992.12	96	101	100	99	328307	245057	133351
		100	0*					
SA082139.D	81992.05	97	100	101	100	341140	254438	141859
		101	0*					
SA082140.D	81992.13	96	100	101	98	336520	248452	126652
		100	0*					
SA082141.D	LCS 20	98	100	100	101	332861	249729	134061
		99	0*					
SA082142.D	LCSD 20	98	99	100	102	337183	252961	136227
		97	0*					

t - fails 12hr time check * - fails criteria

Created: Mon Aug 24 14:18:59 2009 VOAMS5

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Metals Analysis
Support Data
Dissolved Iron and Manganese

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_August272009B.sam
Report Date/Time: Wednesday, September 02, 2009 16:31:28

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Min100CS		Sample					
13		Min1000CS		Sample					
14		Min5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		BLK		Sample					
29		Ag LCS		Sample					
30		LCS	rerun	Sample					
31		flush		Sample					
32		flush		Sample					
33		flush		Sample					
34		81984.01	34	Sample					
35		81984.02	34	Sample					
36		81984.03	34	Sample					
37		81984.04	34	Sample					
38		81984.04 MS	34	Sample					
39		81984.04 MSD	34	Sample					
40		flush		Sample					
41		flush		Sample					
42		flush		Sample					
43		81984.05	34	Sample					
44		81984.06	34	Sample					
45		81984.07	34	Sample					
46		81984.08	34	Sample					
47		81984.09	34	Sample					
48		81984.10	34	Sample					
49		81984.11	34	Sample					

50	81984.12	34	Sample
51	81984.13	34	Sample
52	81984.14	34	Sample
53	81984.14 MS	34	Sample
54	81984.14 MSI	34	Sample
55	flush		Sample
56	flush		Sample
57	flush		Sample
58	81984.15	34	Sample
59	81984.16	34	Sample
60	81984.17	34	Sample
61	81984.18	34	Sample
62	81984.19	34	Sample
63	81984.20	34	Sample
64	flush		Sample
65	81984.01	30	Sample
66	81984.03	30	Sample
67	81984.04	30	Sample
68	81984.04 MS	30	Sample
69	81984.04 MSI	30	Sample
70	flush		Sample
71	flush		Sample
72	flush		Sample
73	81984.05	30	Sample
74	81984.06	30	Sample
75	81984.07	30	Sample
76	81984.08	30	Sample
77	81984.09	30	Sample
78	81984.10	30	Sample
79	81984.11	30	Sample
80	81984.12	30	Sample
81	81984.13	30	Sample
82	81984.14	30	Sample
83	81984.14 MS	30	Sample
84	81984.14 MSI	30	Sample
85	flush		Sample
86	flush		Sample
87	flush		Sample
88	81984.15	30	Sample
89	81984.16	30	Sample
90	81984.17	30	Sample
91	81984.18	30	Sample
92	81984.19	30	Sample
93	81984.20	30	Sample
94	flush		Sample
95	Soil BLK	1:25	Sample
96	Soil LCS	1:25	Sample
97	Soil Ag LCS	1:10	Sample
98	flush		Sample
99	flush		Sample
100	82195.01	1:25	Sample
101	82195.02	1:25	Sample
102	82195.03	1:25	Sample
103	82195.04	1:25	Sample
104	82195.05	1:25	Sample
105	82195.06	1:25	Sample
106	82195.07	1:25	Sample
107	82082.01	1:25	Sample
108	82082.01 MS	1:25	Sample
109	82082.01 MSI	1:25	Sample

110	flush		Sample
111	flush		Sample
112	flush		Sample
113	82098.01	1:25	Sample
114	82098.02	1:50	Sample
115	82099.01	1:25	Sample
116	82146.01	1:50	Sample
117	82170.01	1:25	Sample
118	82179.01	1:25	Sample
119	flush		Sample
120	82231.01	1:50	Sample
121	flush		Sample
122	BLK		Sample
123	Ag LCS		Sample
124	LCS		Sample
125	flush		Sample
126	flush		Sample
127	flush		Sample
128	82132.01		Sample
129	82132.02		Sample
130	82132.03		Sample
131	82132.04		Sample
132	82132.05		Sample
133	82132.06		Sample
134	82132.07		Sample
135	82132.08		Sample
136	82132.09		Sample
137	82132.10		Sample
138	82132.11		Sample
139	82123.01	1:100	Sample
140	82128.02		Sample
141	82128.02 MS		Sample
142	82128.02 MSD		Sample
143	flush		Sample
144	flush		Sample
145	flush		Sample
146	TCLP BLK	1:100	Sample
147	TCLP LCS	1:100	Sample
148	TCLP Ag LCS	1:10	Sample
149	flush		Sample
150	flush		Sample
151	81991.01	1:100	Sample
152	82146.01	1:100	Sample
153	82164.01	1:100	Sample
154	82232.01	1:100	Sample
155	82232.01 MS	1:100	Sample
156	82232.01 MSI	1:100	Sample
157	flush		Sample
158	flush		Sample
159	flush		Sample
160			Sample

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, August 27, 2009 14:05:33
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.003
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual

Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	37863.1	37863.064	167.516	0.4
	Rh	102.9	281144.4	281144.426	4413.020	1.6
	In	114.9	361853.5	361853.472	7504.023	2.1
	Pb	208.0	222304.1	222304.112	2790.904	1.3
[>	Ba	137.9	352112.6	352112.569	2676.827	0.8
[	Ba++	69.0	3706.9	0.011	0.000	1.2
[>	Ce	139.9	412398.8	412398.774	1624.314	0.4
[	CeO	155.9	11251.5	0.027	0.001	2.1
	Bkgd	220.0	11.4	11.401	3.210	28.2

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.00	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	3.8	1942.2
Co	59	9	4.5	98838.4
In	115	9	5.3	382166.4

Instrument Tuning Report

File Name: EPA.tun
File Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.974	582	2087	0.630	
Mg	23.985	23.979	5733	2024	0.631	
Rh	102.905	102.879	25059	1900	0.652	
Ce	139.905	139.929	34045	1961	0.647	
Pb	207.977	207.977	50454	2247	0.601	

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Blank Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID:	QC Std 1
Sample Date/Time:	Thursday, August 27, 2009 17:17:58
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	101.559
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	100.087
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	< 1	ug/L	
Ag	< 1	ug/L	
Cd	< 1	ug/L	
In		ug/L	101.501
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	101.673
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Sample ID:	QC Std 1
Sample Date/Time:	Thursday, August 27, 2009 18:58:32
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	86.801
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	87.95
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	< 1	ug/L	
Ag	< 1	ug/L	
Cd	< 1	ug/L	
In		ug/L	88.549
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	90.63
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Sample ID:	QC Std 1
Sample Date/Time:	Thursday, August 27, 2009 20:31:46
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	88.125
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	91.568
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	2.748502	ug/L	
Ag	2.798695	ug/L	
Cd	< 1	ug/L	
In		ug/L	90.153
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	89.482
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

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Blank Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID:	QC Std 1	Sample ID:	QC Std 1
Sample Date/Time:	Thursday, August 27, 2009 22:05:00	Sample Date/Time:	Thursday, August 27, 2009 23:38:22
Sample Description:	CCB	Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	84.217
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	89.216
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	< 1	ug/L	
Ag	< 1	ug/L	
Cd	< 1	ug/L	
In		ug/L	87.905
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	89.954
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	75.426
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	78.678
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	1.084776	ug/L	
Ag	1.087983	ug/L	
Cd	< 1	ug/L	
In		ug/L	77.041
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	80.506
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Sample ID:	QC Std 1		
Sample Date/Time:	Friday, August 28, 2009 01:12:12		
Sample Description:	CCB		

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	76.267
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	82.15
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	< 1	ug/L	
Ag	< 1	ug/L	
Cd	< 1	ug/L	
In		ug/L	79.355
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	80.72
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

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Blank Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID:	QC Std 1
Sample Date/Time:	Friday, August 28, 2009 02:46:10
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	79.671
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	82.504
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	1.309537	ug/L	
Ag	1.290008	ug/L	
Cd	< 1	ug/L	
In		ug/L	82.251
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	86.16
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Sample ID:	QC Std 1
Sample Date/Time:	Friday, August 28, 2009 04:20:16
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	76.869
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	82.752
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	5.578687	ug/L	
Ag	5.660455	ug/L	
Cd	< 1	ug/L	
In		ug/L	83.202
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	84.362
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

Sample ID:	QC Std 1
Sample Date/Time:	Friday, August 28, 2009 05:53:50
Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Units	%R
Be	< 1	ug/L	
Na	< 5000	ug/L	
Mg	< 50	ug/L	
Al	< 50	ug/L	
K	< 50	ug/L	
Ca	< 50	ug/L	
Sc		ug/L	74.734
V	< 1	ug/L	
Cr	< 1	ug/L	
Mn	< 5	ug/L	
Fe	< 50	ug/L	
Co	< 1	ug/L	
Ni	< 1	ug/L	
Cu	< 1	ug/L	
Zn	< 5	ug/L	
Ge		ug/L	81.3
As	< 1	ug/L	
Se	< 1	ug/L	
Ag	0.738208	ug/L	
Ag	0.757208	ug/L	
Cd	< 1	ug/L	
In		ug/L	83.093
Sb	< 1	ug/L	
Sb	< 1	ug/L	
Ba	< 1	ug/L	
Ho		ug/L	85.424
Hg	< 0.1	ug/L	
Tl	< 1	ug/L	
Pb	< 1	ug/L	

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Calibration Verification (CV) Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 27, 2009 17:25:00
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std %R	Int Std %R
Sc			ug/L		96.174
Mn	100	97.835566	ug/L	98.625	
Ge			ug/L		98.825
In			ug/L		95.527
Ho			ug/L		97.182

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 27, 2009 19:05:34
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std %R	Int Std %R
Sc			ug/L		90.866
Mn	100	97.965883	ug/L	98.766	
Ge			ug/L		91.09
In			ug/L		91.793
Ho			ug/L		96.04

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 27, 2009 17:46:08
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std %R	Int Std %R
Fe	10000	10313.4196	ug/L	103.134196	
Sc			ug/L		93.108
Ge			ug/L		96.323
In			ug/L		94.883
Ho			ug/L		96.121

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 27, 2009 19:19:41
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std %R	Int Std %R
Fe	10000	10625.0688	ug/L	106.250688	
Sc			ug/L		86.342
Ge			ug/L		89.758
In			ug/L		86.657
Ho			ug/L		88.871

Calibration Verification (CV) Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 27, 2009 20:38:48
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		83.886
Mn	100	101.970002	ug/L	102.792	
Ge			ug/L		86.1
In			ug/L		84.302
Ho			ug/L		86.96

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 27, 2009 22:12:02
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		82.704
Mn	100	101.186263	ug/L	102.002	
Ge			ug/L		86.366
In			ug/L		85.454
Ho			ug/L		85.418

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 27, 2009 20:52:56
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10339.3575	ug/L	103.393575	
Sc			ug/L		85.709
Ge			ug/L		90.955
In			ug/L		87.751
Ho			ug/L		90.64

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 27, 2009 22:26:09
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10223.9265	ug/L	102.239265	
Sc			ug/L		82.844
Ge			ug/L		86.721
In			ug/L		82.003
Ho			ug/L		84.093

Calibration Verification (CV) Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 27, 2009 23:45:24
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		74.621
Mn	100	104.210503	ug/L	105.051	
Ge			ug/L		79.422
In			ug/L		79.116
Ho			ug/L		81.117

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 01:19:14
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		77.873
Mn	100	102.072417	ug/L	102.896	
Ge			ug/L		81.796
In			ug/L		81.631
Ho			ug/L		83.174

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 27, 2009 23:59:32
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10512.9084	ug/L	105.129084	
Sc			ug/L		74.278
Ge			ug/L		79.346
In			ug/L		76.223
Ho			ug/L		79.285

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 01:33:22
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10461.5754	ug/L	104.615754	
Sc			ug/L		74.989
Ge			ug/L		81.261
In			ug/L		77.936
Ho			ug/L		80.933

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Calibration Verification (CV) Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 02:53:12
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		76.48
Mn	100	102.005805	ug/L	102.828	
Ge			ug/L		79.721
In			ug/L		79.068
Ho			ug/L		81.48

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 04:27:18
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		74.732
Mn	100	102.799291	ug/L	103.628	
Ge			ug/L		80.761
In			ug/L		78.315
Ho			ug/L		82.681

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 03:07:19
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10805.425	ug/L	108.05425	
Sc			ug/L		74.297
Ge			ug/L		77.94
In			ug/L		76.472
Ho			ug/L		81.01

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 04:41:25
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10718.2312	ug/L	107.182312	
Sc			ug/L		73.837
Ge			ug/L		80.594
In			ug/L		78.424
Ho			ug/L		82.131

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Calibration Verification (CV) Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 06:00:52
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Sc			ug/L		75.303
Mn	100	99.070629	ug/L	99.87	
Ge			ug/L		79.146
In			ug/L		81.35
Ho			ug/L		84.087

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 06:14:59
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	%R	%R
Fe	10000	10368.0663	ug/L	103.680663	
Sc			ug/L		74.472
Ge			ug/L		81.898
In			ug/L		83.671
Ho			ug/L		85.628

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Internal Standard Log
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Thursday, August 27, 2009 17:17:58	102	100	102	102
QC Std 2	Thursday, August 27, 2009 17:25:00	96	99	96	97
QC Std 3	Thursday, August 27, 2009 17:32:02	96	100	99	101
QC Std 5	Thursday, August 27, 2009 17:39:03	94	96	91	92
QC Std 6	Thursday, August 27, 2009 17:46:08	93	96	95	96
LLCS	Thursday, August 27, 2009 18:12:51	93	96	98	99
ICSA	Thursday, August 27, 2009 18:19:23	87	97	87	90
ICSAB	Thursday, August 27, 2009 18:25:57	85	97	90	92
5ppm LRC	Thursday, August 27, 2009 18:32:31	87	87	91	95
QC Std 1	Thursday, August 27, 2009 18:58:32	87	88	89	91
QC Std 2	Thursday, August 27, 2009 19:05:34	91	91	92	96
QC Std 5	Thursday, August 27, 2009 19:12:37	86	90	88	90
QC Std 6	Thursday, August 27, 2009 19:19:41	86	90	87	89
BLK	Thursday, August 27, 2009 19:39:39	86	90	91	92
Ag LCS	Thursday, August 27, 2009 19:46:09	88	90	92	93
LCS	Thursday, August 27, 2009 19:52:38	84	91	92	96
81984.01	Thursday, August 27, 2009 20:18:42	92	94	88	91
81984.02	Thursday, August 27, 2009 20:25:14	96	96	91	92
QC Std 1	Thursday, August 27, 2009 20:31:46	88	92	90	89
QC Std 2	Thursday, August 27, 2009 20:38:48	84	86	84	87
QC Std 5	Thursday, August 27, 2009 20:45:51	83	86	86	87
QC Std 6	Thursday, August 27, 2009 20:52:56	86	91	88	91
81984.03	Thursday, August 27, 2009 20:59:59	97	93	87	90
81984.04	Thursday, August 27, 2009 21:06:32	106	91	87	91
81984.04 MS	Thursday, August 27, 2009 21:13:06	104	89	86	90
81984.04 MSD	Thursday, August 27, 2009 21:19:39	101	86	82	85
81984.05	Thursday, August 27, 2009 21:46:32	98	86	79	84
81984.06	Thursday, August 27, 2009 21:52:01	98	90	87	88
81984.07	Thursday, August 27, 2009 21:58:29	92	86	82	85
QC Std 1	Thursday, August 27, 2009 22:05:00	84	89	88	90
QC Std 2	Thursday, August 27, 2009 22:12:02	83	86	85	85
QC Std 5	Thursday, August 27, 2009 22:19:05	84	86	85	88
QC Std 6	Thursday, August 27, 2009 22:26:09	83	87	82	84
81984.08	Thursday, August 27, 2009 22:33:12	93	90	86	88
81984.09	Thursday, August 27, 2009 22:39:41	89	87	84	86
81984.1	Thursday, August 27, 2009 22:46:12	89	87	85	89
81984.11	Thursday, August 27, 2009 22:52:42	87	86	81	87
81984.12	Thursday, August 27, 2009 22:59:14	93	88	85	85
81984.13	Thursday, August 27, 2009 23:05:45	88	86	86	88
81984.14	Thursday, August 27, 2009 23:12:18	83	82	80	83
81984.14 MS	Thursday, August 27, 2009 23:18:50	79	81	79	84
81984.14 MSD	Thursday, August 27, 2009 23:25:23	80	81	80	84
QC Std 1	Thursday, August 27, 2009 23:38:22	75	79	77	81
QC Std 2	Thursday, August 27, 2009 23:45:24	75	79	79	81
QC Std 5	Thursday, August 27, 2009 23:52:27	73	79	76	80
QC Std 6	Thursday, August 27, 2009 23:59:32	74	79	76	79
81984.15	Friday, August 28, 2009 00:19:41	77	82	82	87
81984.16	Friday, August 28, 2009 00:26:14	86	80	78	79
81984.17	Friday, August 28, 2009 00:32:47	82	82	79	82
81984.18	Friday, August 28, 2009 00:39:21	85	83	80	84
81984.19	Friday, August 28, 2009 00:45:55	84	84	82	83
81984.2	Friday, August 28, 2009 00:52:30	80	80	78	82
81984.01	Friday, August 28, 2009 01:05:41	84	85	79	80

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Internal Standard Log
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Friday, August 28, 2009 01:12:12	76	82	79	81
QC Std 2	Friday, August 28, 2009 01:19:14	78	82	82	83
QC Std 5	Friday, August 28, 2009 01:26:17	76	83	81	83
QC Std 6	Friday, August 28, 2009 01:33:22	75	81	78	81
81984.03	Friday, August 28, 2009 01:40:30	87	83	78	80
81984.04	Friday, August 28, 2009 01:47:06	94	81	78	79
81984.04 MS	Friday, August 28, 2009 01:53:44	91	82	78	80
81984.04 MSD	Friday, August 28, 2009 02:00:21	89	81	77	79
81984.05	Friday, August 28, 2009 02:26:36	92	81	75	78
81984.06	Friday, August 28, 2009 02:33:08	87	83	79	79
81984.07	Friday, August 28, 2009 02:39:40	84	83	79	80
QC Std 1	Friday, August 28, 2009 02:46:10	80	83	82	86
QC Std 2	Friday, August 28, 2009 02:53:12	76	80	79	81
QC Std 5	Friday, August 28, 2009 03:00:15	77	83	81	86
QC Std 6	Friday, August 28, 2009 03:07:19	74	78	78	81
81984.08	Friday, August 28, 2009 03:14:26	81	81	76	79
81984.09	Friday, August 28, 2009 03:20:59	77	80	76	79
81984.1	Friday, August 28, 2009 03:27:33	76	75	75	77
81984.11	Friday, August 28, 2009 03:34:07	77	80	77	81
81984.12	Friday, August 28, 2009 03:40:42	85	81	77	79
81984.13	Friday, August 28, 2009 03:47:18	77	78	75	78
81984.14	Friday, August 28, 2009 03:53:54	75	76	77	80
81984.14 MS	Friday, August 28, 2009 04:00:30	74	75	74	77
81984.14 MSD	Friday, August 28, 2009 04:07:07	76	74	76	78
QC Std 1	Friday, August 28, 2009 04:20:16	77	83	83	84
QC Std 2	Friday, August 28, 2009 04:27:18	75	81	78	83
QC Std 5	Friday, August 28, 2009 04:34:21	76	81	80	83
QC Std 6	Friday, August 28, 2009 04:41:25	74	81	78	82
81984.15	Friday, August 28, 2009 05:01:31	69	78	76	80
81984.16	Friday, August 28, 2009 05:08:02	86	80	78	81
81984.17	Friday, August 28, 2009 05:14:34	80	82	81	81
81984.18	Friday, August 28, 2009 05:21:06	82	80	79	83
81984.19	Friday, August 28, 2009 05:27:39	78	80	79	82
81984.2	Friday, August 28, 2009 05:34:12	80	80	80	84
QC Std 1	Friday, August 28, 2009 05:53:50	75	81	83	85
QC Std 2	Friday, August 28, 2009 06:00:52	75	79	81	84
QC Std 5	Friday, August 28, 2009 06:07:55	73	79	80	82
QC Std 6	Friday, August 28, 2009 06:14:59	74	82	84	86

ICSA / ICSB Summary
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: ICSA
Sample Date/Time: Thursday, August 27, 2009 18:19:23
Sample Description:

Concentration Results					QC Std	Int Std
Analyte	Mass		Conc. Mean	Report Unit	% R	% R
Be	< 1		0.013298	ug/L		
Na		50000	50551.6104	ug/L	101	
Mg		50000	48615.1359	ug/L	97	
Al		50000	47938.5304	ug/L	96	
K		50000	50350.3937	ug/L	101	
Ca		50000	48568.2014	ug/L	97	
Sc				ug/L		87.188
V	< 1		1.267019	ug/L		
Cr	< 1		0.473421	ug/L		
Fe		50000	49156.2823	ug/L	98	
Mn	< 5		0.145095	ug/L		
Co	< 1		0.215577	ug/L		
Ni	< 1		1.118457	ug/L		
Cu	< 1		0.497505	ug/L		
Zn	< 5		1.577556	ug/L		
Ge				ug/L		96.516
As	< 1		1.347597	ug/L		
Se	< 1		0.180477	ug/L		
Ag	< 1		-0.070535	ug/L		
Cd	< 1		0.007572	ug/L		
In				ug/L		86.949
Sb	< 1		0.01817	ug/L		
Ba	< 1		0.179764	ug/L		
Ho				ug/L		90.019
Hg	< 0.1		0.003794	ug/L		
Tl	< 1		-0.047356	ug/L		
Pb	< 1		0.065238	ug/L		

Sample ID: ICSAB
Sample Date/Time: Thursday, August 27, 2009 18:25:57
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	Mass	Conc. Mean	Report Unit	% R	% R
Be	10	11.143822	ug/L		
Na	50000	50658.4711	ug/L	101	
Mg	50000	49643.47	ug/L	99	
Al	50000	51080.3827	ug/L	102	
K	50000	52698.7889	ug/L	105	
Ca	50000	52545.2414	ug/L	105	
Sc			ug/L		84.92
V	10	11.944747	ug/L	119	
Cr	10	10.306283	ug/L	103	
Fe	50000	52518.4959	ug/L	105	
Mn	10	10.032683	ug/L	100	
Co	10	9.846969	ug/L	98	
Ni	10	10.95651	ug/L	110	
Cu	10	9.71181	ug/L	97	
Zn	10	11.71801	ug/L	117	
Ge			ug/L		97.232
As	10	10.792563	ug/L	108	
Se	10	9.709225	ug/L	97	
Ag	10	4.863318	ug/L	49	
Cd	10	9.424609	ug/L	94	
In			ug/L		90.315
Sb	10	10.539851	ug/L	105	
Ba	10	9.904012	ug/L	99	
Ho			ug/L		91.749
Hg	1	0.98414	ug/L	98	
Tl	10	9.025685	ug/L	90	
Pb	10	9.202319	ug/L	92	

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Linear Range Check
EAI SDG 81984
Dissolved Iron and Manganese

Sample ID: 5ppm LRC
Sample Date/Time: Thursday, August 27, 2009 18:32:31
Sample Description: Linear Range Check

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc. Mean	Unit	% R	% R
Be	5000	6165.61034	ug/L	123.31	
Na	5000	5562.86346	ug/L	111.26	
Mg	5000	5169.46044	ug/L	103.39	
Al	5000	5380.20025	ug/L	107.60	
P	NA	6.603062	ug/L		
K	5000	5439.42214	ug/L	108.79	
Ca	5000	5308.73176	ug/L	106.17	
Sc			ug/L		87.408
V	5000	5433.88597	ug/L	108.68	
Cr	5000	5059.32617	ug/L	101.19	
Mn	5000	5318.71534	ug/L	106.37	
Fe	5000	5207.2819	ug/L	104.15	
Co	5000	5268.1412	ug/L	105.36	
Ni	5000	5036.57192	ug/L	100.73	
Zn	5000	5434.77685	ug/L	108.70	
Cu	5000	4907.49116	ug/L	98.15	
Ge			ug/L		87.002
As	5000	5361.70863	ug/L	107.23	
Se	5000	5181.62816	ug/L	103.63	
Ag	5000	5239.69394	ug/L	104.79	
Cd	5000	5247.43956	ug/L	104.95	
In			ug/L		90.781
Sb	5000	5752.16893	ug/L	115.04	
Ba	5000	5097.80917	ug/L	101.96	
Ho			ug/L		94.909
Hg	NA	0.157005	ug/L		
Tl	5000	5464.2704	ug/L	109.29	
Pb	5000	5452.72892	ug/L	109.05	

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81984

Metals Analysis
Support Data
Total Metals

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_August282009.sam
Report Date/Time: Wednesday, September 02, 2009 16:31:35

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Mln100CS		Sample					
13		Mln1000CS		Sample					
14		Mln5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		BLK		Sample					
29		Ag LCS		Sample					
30		LCS		Sample					
31		flush		Sample					
32		flush		Sample					
33		flush		Sample					
34		81984.01	34	Sample					
35		81984.02		Sample					
36		81984.03		Sample					
37		81984.04		Sample					
38		81984.04 MS		Sample					
39		81984.04 MSD		Sample					
40		flush		Sample					
41		flush		Sample					
42		flush		Sample					
43		81984.05		Sample					
44		81984.06		Sample					
45		81984.07		Sample					
46		81984.08		Sample					
47		81984.09		Sample					
48		81984.10		Sample					
49		81984.11		Sample					

50	81984.12		Sample
51	81984.13		Sample
52	81984.14		Sample
53	81984.14 MS		Sample
54	81984.14 MSD		Sample
55	flush		Sample
56	flush		Sample
57	flush		Sample
58	81984.15		Sample
59	81984.16		Sample
60	81984.17		Sample
61	81984.18		Sample
62	81984.19		Sample
63	81984.20		Sample
64	flush		Sample
65	BLK		Sample
66	Ag LCS		Sample
67	LCS		Sample
68	flush		Sample
69	flush		Sample
70	flush		Sample
71	82190.01		Sample
72	82125.01		Sample
73	82125.02		Sample
74	82125.03		Sample
75	82224.01	34	Sample
76	82224.01	30	Sample
77	82224.02	34	Sample
78	82224.02	30	Sample
79	82224.03	34	Sample
80	82224.03	30	Sample
81	82224.03 MS	30	Sample
82	82224.03 MSD	30	Sample
83	flush		Sample
84	flush		Sample
85	flush		Sample
86	82224.04	34	Sample
87	82224.04	30	Sample
88	82224.05	34	Sample
89	82224.05	30	Sample
90	82224.06	34	Sample
91	82224.06	30	Sample
92	82224.07	34	Sample
93	82224.07	30	Sample
94	82224.08	30	Sample
95	82224.08	34	Sample
96	82224.08 MS	34	Sample
97	82224.08 MSD	34	Sample
98	flush		Sample
99	flush		Sample
100	flush		Sample
101	82220.01		Sample
102	82220.02		Sample
103	82220.03		Sample
104	82220.04		Sample
105	82220.05		Sample
106	82220.06		Sample
107	82220.07		Sample
108	82220.08		Sample
109	82220.09		Sample

110	82220.10	Sample
111	82220.10 MS	Sample
112	82220.10 MSD	Sample
113	flush	Sample
114	flush	Sample
115	flush	Sample
116	82118.01	Sample
117	82118.02	Sample
118	82227.01	Sample
119	82227.02	Sample
120	82240.01	Sample
121	82240.02	Sample
122	82240.03	Sample
123	82240.04	Sample
124	82240.05	Sample
125	82203.01	Sample
126	82203.01 MS	Sample
127	82203.01 MSD	Sample
128	flush	Sample
129	flush	Sample
130	flush	Sample
131	82197.01	Sample
132	82197.02	Sample
133		Sample
134		Sample
135		Sample
136		Sample
137		Sample
138		Sample
139		Sample
140		Sample
141		Sample
142		Sample
143		Sample
144		Sample
145		Sample
146		Sample
147		Sample
148		Sample
149		Sample
150		Sample
151		Sample
152		Sample
153		Sample
154		Sample
155		Sample
156		Sample
157		Sample
158		Sample
159		Sample
160		Sample

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, August 28, 2009 16:49:01
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.004
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	25602.8	25602.764	366.755	1.4
	Rh	102.9	248725.6	248725.631	5028.235	2.0
	In	114.9	331615.6	331615.613	4629.581	1.4
	Pb	208.0	199991.0	199990.981	4144.005	2.1
⌈>	Ba	137.9	292184.8	292184.810	2484.075	0.9
⌊	Ba++	69.0	2165.7	0.007	0.000	1.3
⌈>	Ce	139.9	343903.4	343903.442	4944.182	1.4
⌊	CeO	155.9	9223.0	0.027	0.001	3.3
	Bkgd	220.0	7.8	7.801	2.589	33.2

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
5.00	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
-1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Net Intens. Mean	Maximum Intensity	Net Intens. SD
Be	9	9	3.8	25602.764	1942.2	366.755
Co	59	9	4.5	248725.631	98838.4	5028.235
In	115	9	5.3	331615.613	382166.4	4629.581

Net Intens. Mean | Net Intens. SD
AC Value | Maximum Intensity
3.8 | 1942.2

Instrument Tuning Report

File Name: EPA.tun
File Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.027	584	2087	0.626	
Mg	23.985	23.979	5731	2024	0.632	
Rh	102.905	102.928	25064	1900	0.642	
Ce	139.905	139.929	34050	1961	0.640	
Pb	207.977	207.977	50454	2247	0.602	

Instrument Tuning Report

Instrument Tuning Report

Instrument Tuning Report

Eastern Analytical Inc.
Aqueous Digestion Logbook

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BatSamNum	Prep Date	Digestion Batch ID	Reagent/Chem Inv.	Temp. °C	Analyst	Notes
Blank	8/19/09	A	845529.6	83.5	SK	
LCS			34705.2 | 34007 H | 34013.1			
LCS Aq			34016.1			
81984.01						
.02						
.03						
.04						
MS			34705.2 | 34007 H | 34013.1			
MSd						
.05						
.06						
.07						
.08						
.09						
.1						
.11						
.12						
.13						
.14						
.15						
.16						
.17						
.18						
.19						
.2						

SK
8/19/09

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Blank Summary
EAI SDG 81984
Total Metals

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Friday, August 28, 2009 18:05:22			Sample Date/Time:	Friday, August 28, 2009 19:45:55			Sample Date/Time:	Friday, August 28, 2009 21:19:08		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Be	< 1	ug/L		Be	< 1	ug/L		Be	< 1	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L		Al	< 50	ug/L	
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L		Ca	< 50	ug/L	
Sc		ug/L	101.55	Sc		ug/L	90.415	Sc		ug/L	88.438
V	< 1	ug/L		V	< 1	ug/L		V	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L		Cr	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L		Co	< 1	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L		Ni	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L		Cu	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L		Zn	< 5	ug/L	
Ge		ug/L	104.067	Ge		ug/L	95.177	Ge		ug/L	92.057
As	< 1	ug/L		As	< 1	ug/L		As	< 1	ug/L	
Se	< 1	ug/L		Se	< 1	ug/L		Se	< 1	ug/L	
Ag	< 1	ug/L		Ag	< 1	ug/L		Ag	< 1	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L		Cd	< 1	ug/L	
In		ug/L	101.331	In		ug/L	92.767	In		ug/L	88.145
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L		Ba	< 1	ug/L	
Ho		ug/L	101.757	Ho		ug/L	92.079	Ho		ug/L	87.333
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L		Tl	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L		Pb	< 1	ug/L	

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Blank Summary
EAI SDG 81984
Total Metals

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Friday, August 28, 2009 22:52:22			Sample Date/Time:	Saturday, August 29, 2009 00:25:45			Sample Date/Time:	Saturday, August 29, 2009 01:59:34		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Be	< 1	ug/L		Be	< 1	ug/L		Be	< 1	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L		Al	< 50	ug/L	
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L		Ca	< 50	ug/L	
Sc		ug/L	88.062	Sc		ug/L	84.675	Sc		ug/L	88.096
V	< 1	ug/L		V	< 1	ug/L		V	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L		Cr	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L		Co	< 1	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L		Ni	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L		Cu	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L		Zn	< 5	ug/L	
Ge		ug/L	93.349	Ge		ug/L	90.559	Ge		ug/L	92.825
As	< 1	ug/L		As	< 1	ug/L		As	< 1	ug/L	
Se	< 1	ug/L		Se	< 1	ug/L		Se	< 1	ug/L	
Ag	< 1	ug/L		Ag	1.74654 *	ug/L		Ag	< 1	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L		Cd	< 1	ug/L	
In		ug/L	86.435	In		ug/L	84.092	In		ug/L	90.526
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L		Ba	< 1	ug/L	
Ho		ug/L	85.763	Ho		ug/L	85.793	Ho		ug/L	89.549
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L		Tl	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L		Pb	< 1	ug/L	

QC Std 1 (CCB) analyzed on Saturday, August 29, 2009 00:25:45 had silver (Ag) above the reporting limit due to carryover from the matrix spike sample analyzed immediately prior to the CCB.

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 18:12:24
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	96.147884	ug/L	96.826	
Na	100	104.248612	ug/L	104.772	
Mg	100	94.505037	ug/L	94.316	
Al	100	102.512584	ug/L	103.339	
K	1000	940.849435	ug/L	94.085	
Ca	100	101.847233	ug/L	102.256	
Sc			ug/L		94.602
V	100	96.764934	ug/L	97.154	
Cr	100	97.407936	ug/L	97.701	
Mn	100	98.108965	ug/L	98.9	
Fe	100	94.398508	ug/L	94.683	
Co	100	100.206026	ug/L	100.912	
Ni	100	98.706793	ug/L	99.603	
Zn	100	92.720124	ug/L	93.092	
Cu	100	99.369279	ug/L	100.07	
Ge			ug/L		97.39
As	100	100.159923	ug/L	100.663	
Se	100	96.931257	ug/L	97.615	
Ag	100	92.837895	ug/L	93.587	
Cd	100	99.693737	ug/L	99.994	
In			ug/L		95.168
Sb	100	102.968658	ug/L	103.59	
Ba	100	98.341733	ug/L	98.935	
Ho			ug/L		94.227
Hg	1	0.984589	ug/L	98.4589	
Tl	100	106.48145	ug/L	107.448	
Pb	100	100.718384	ug/L	100.718	

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 19:52:57
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	97.420235	ug/L	98.107	
Na	100	102.78944	ug/L	103.306	
Mg	100	92.710187	ug/L	92.525	
Al	100	100.869745	ug/L	101.683	
K	1000	942.402545	ug/L	94.24	
Ca	100	106.271604	ug/L	106.698	
Sc			ug/L		89.421
V	100	98.89771	ug/L	99.295	
Cr	100	99.14387	ug/L	99.442	
Mn	100	99.675217	ug/L	100.479	
Fe	100	95.028643	ug/L	95.315	
Co	100	101.483037	ug/L	102.198	
Ni	100	100.358764	ug/L	101.27	
Zn	100	95.373179	ug/L	95.756	
Cu	100	101.635073	ug/L	102.352	
Ge			ug/L		96.05
As	100	98.78086	ug/L	99.277	
Se	100	95.20718	ug/L	95.878	
Ag	100	91.554526	ug/L	92.293	
Cd	100	97.184747	ug/L	97.477	
In			ug/L		92.213
Sb	100	102.268375	ug/L	102.886	
Ba	100	97.216445	ug/L	97.803	
Ho			ug/L		92.452
Hg	1	0.944355	ug/L	94.4355	
Tl	100	102.537394	ug/L	103.469	
Pb	100	98.015041	ug/L	98.015	

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 21:26:10
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	100.707235	ug/L	101.417	
Na	100	111.724096	ug/L	112.286	
Mg	100	102.472037	ug/L	102.268	
Al	100	107.470883	ug/L	108.338	
K	1000	996.324279	ug/L	99.632	
Ca	100	114.798492	ug/L	115.26	
Sc			ug/L		87.932
V	100	100.955292	ug/L	101.361	
Cr	100	99.617554	ug/L	99.917	
Mn	100	100.604048	ug/L	101.415	
Fe	100	92.120764	ug/L	92.398	
Co	100	100.874326	ug/L	101.585	
Ni	100	98.692156	ug/L	99.588	
Zn	100	95.386204	ug/L	95.769	
Cu	100	100.192358	ug/L	100.899	
Ge			ug/L		89.64
As	100	102.953173	ug/L	103.471	
Se	100	98.812127	ug/L	99.509	
Ag	100	94.508376	ug/L	95.271	
Cd	100	100.591512	ug/L	100.894	
In			ug/L		87.881
Sb	100	106.731659	ug/L	107.376	
Ba	100	100.969884	ug/L	101.579	
Ho			ug/L		87.146
Hg	1	0.988854	ug/L	98.8854	
Tl	100	106.997837	ug/L	107.97	
Pb	100	100.846474	ug/L	100.846	

Sample ID: QC Std 2
Sample Date/Time: Friday, August 28, 2009 22:59:24
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	92.260613	ug/L	92.911	
Na	100	118.948718	ug/L	119.546	
Mg	100	97.399068	ug/L	97.205	
Al	100	104.294143	ug/L	105.135	
K	1000	964.451257	ug/L	96.445	
Ca	100	100.18454	ug/L	100.587	
Sc			ug/L		95.424
V	100	94.865014	ug/L	95.246	
Cr	100	95.794828	ug/L	96.083	
Mn	100	96.455325	ug/L	97.233	
Fe	100	88.393804	ug/L	88.66	
Co	100	96.972387	ug/L	97.656	
Ni	100	94.274284	ug/L	95.13	
Zn	100	90.16125	ug/L	90.523	
Cu	100	94.730566	ug/L	95.398	
Ge			ug/L		96.523
As	100	98.236914	ug/L	98.733	
Se	100	92.790397	ug/L	93.445	
Ag	100	91.672371	ug/L	92.412	
Cd	100	98.682815	ug/L	98.98	
In			ug/L		92.848
Sb	100	103.054624	ug/L	103.677	
Ba	100	98.193528	ug/L	98.786	
Ho			ug/L		93.057
Hg	1	0.921381	ug/L	92.1381	
Tl	100	100.530053	ug/L	101.443	
Pb	100	94.610524	ug/L	94.611	

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Saturday, August 29, 2009 00:32:47
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	100.883665	ug/L	101.595	
Na	100	109.059212	ug/L	109.607	
Mg	100	95.964347	ug/L	95.773	
Al	100	104.513437	ug/L	105.356	
K	1000	981.521902	ug/L	98.152	
Ca	100	114.779358	ug/L	115.24	
Sc			ug/L		86.145
V	100	98.297935	ug/L	98.693	
Cr	100	96.804627	ug/L	97.096	
Mn	100	98.181061	ug/L	98.973	
Fe	100	90.615802	ug/L	90.888	
Co	100	99.015596	ug/L	99.714	
Ni	100	98.014678	ug/L	98.905	
Zn	100	94.676184	ug/L	95.056	
Cu	100	100.84905	ug/L	101.56	
Ge			ug/L		92.072
As	100	97.527758	ug/L	98.018	
Se	100	92.352733	ug/L	93.004	
Ag	100	88.387864	ug/L	89.101	
Cd	100	95.88767	ug/L	96.176	
In			ug/L		87.288
Sb	100	102.923835	ug/L	103.545	
Ba	100	97.936878	ug/L	98.528	
Ho			ug/L		90.062
Hg	1	0.960802	ug/L	96.0802	
Tl	100	101.8035	ug/L	102.728	
Pb	100	95.455429	ug/L	95.455	

Sample ID: QC Std 2
Sample Date/Time: Saturday, August 29, 2009 02:06:36
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Be	100	107.74639	ug/L	108.506	
Na	100	111.37614	ug/L	111.936	
Mg	100	100.511151	ug/L	100.311	
Al	100	106.031954	ug/L	106.887	
K	1000	972.838503	ug/L	97.284	
Ca	100	107.479521	ug/L	107.911	
Sc			ug/L		84.224
V	100	96.807552	ug/L	97.196	
Cr	100	97.364795	ug/L	97.658	
Mn	100	96.747455	ug/L	97.528	
Fe	100	89.603985	ug/L	89.874	
Co	100	97.847207	ug/L	98.537	
Ni	100	96.99675	ug/L	97.878	
Zn	100	93.127222	ug/L	93.501	
Cu	100	97.235744	ug/L	97.921	
Ge			ug/L		86.772
As	100	99.965993	ug/L	100.468	
Se	100	94.800391	ug/L	95.469	
Ag	100	91.726599	ug/L	92.466	
Cd	100	99.811534	ug/L	100.112	
In			ug/L		83.244
Sb	100	106.523781	ug/L	107.167	
Ba	100	100.61135	ug/L	101.219	
Ho			ug/L		84.832
Hg	1	0.958662	ug/L	96.8662	
Tl	100	105.921218	ug/L	106.883	
Pb	100	101.467727	ug/L	101.468	

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 18:33:32
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Unit	QC Std % R	Int Std % R
Na	10000	9657.16974	ug/L	96.572	
Mg	10000	9343.61065	ug/L	93.436	
K	10000	9609.01031	ug/L	96.09	
Ca	10000	9126.17527	ug/L	91.262	
Al	10000	9727.85891	ug/L	97.28	
P	10000	9360.03604	ug/L	93.60	
Fe	10000	9440.84155	ug/L	94.41	
Sc			ug/L		95.392
Ge			ug/L		98.859
In			ug/L		96.209
Ho			ug/L		95.722

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 20:07:05
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Unit	QC Std % R	Int Std % R
Na	10000	9830.64253	ug/L	98.306	
Mg	10000	9274.62913	ug/L	92.746	
K	10000	9694.9888	ug/L	96.95	
Ca	10000	9590.53407	ug/L	95.905	
Al	10000	10017.6958	ug/L	100.18	
P	10000	9256.10781	ug/L	92.56	
Fe	10000	9690.94315	ug/L	96.91	
Sc			ug/L		86.256
Ge			ug/L		90.749
In			ug/L		87.006
Ho			ug/L		86.89

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 21:40:18
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Na	10000	10486.9699	ug/L	104.87	
Mg	10000	9957.49178	ug/L	99.575	
K	10000	10039.2745	ug/L	100.393	
Ca	10000	9697.57197	ug/L	96.976	
Al	10000	10532.2038	ug/L	105.32	
P	10000	9870.18858	ug/L	98.70	
Fe	10000	9581.82625	ug/L	95.82	
Sc			ug/L		87.636
Ge			ug/L		94.348
In			ug/L		86.119
Ho			ug/L		87.762

Sample ID: QC Std 6
Sample Date/Time: Friday, August 28, 2009 23:13:32
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Na	10000	10510.9192	ug/L	105.109	
Mg	10000	9916.77399	ug/L	99.168	
K	10000	9916.27963	ug/L	99.163	
Ca	10000	9359.34548	ug/L	93.593	
Al	10000	10392.8547	ug/L	103.93	
P	10000	9569.99665	ug/L	95.70	
Fe	10000	9191.98611	ug/L	91.92	
Sc			ug/L		92.2
Ge			ug/L		96.313
In			ug/L		87.408
Ho			ug/L		89.751

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Calibration Verification (CV) Summary
EAI SDG 81984
Total Metals

Sample ID: QC Std 6
Sample Date/Time: Saturday, August 29, 2009 00:46:54
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Na	10000	10669.7229	ug/L	106.697	
Mg	10000	10179.1791	ug/L	101.792	
K	10000	10154.2827	ug/L	101.543	
Ca	10000	9982.97063	ug/L	99.83	
Al	10000	10730.3792	ug/L	107.30	
P	10000	9991.68909	ug/L	99.92	
Fe	10000	9951.04146	ug/L	99.51	
Sc			ug/L		81.872
Ge			ug/L		89.147
In			ug/L		81.518
Ho			ug/L		84.55

Sample ID: QC Std 6
Sample Date/Time: Saturday, August 29, 2009 02:20:43
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Na	10000	10206.1484	ug/L	102.061	
Mg	10000	10005.6678	ug/L	100.057	
K	10000	9864.37072	ug/L	98.644	
Ca	10000	9468.14878	ug/L	94.681	
Al	10000	10301.6326	ug/L	103.02	
P	10000	9676.84196	ug/L	96.77	
Fe	10000	9501.32989	ug/L	95.01	
Sc			ug/L		83.978
Ge			ug/L		87.042
In			ug/L		81.157
Ho			ug/L		84.892

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Internal Standard Log
EAI SDG 81984
Total Metals

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Friday, August 28, 2009 18:05:22	102	104	101	102
QC Std 2	Friday, August 28, 2009 18:12:24	95	97	95	94
QC Std 3	Friday, August 28, 2009 18:19:25	94	95	93	93
QC Std 5	Friday, August 28, 2009 18:26:27	95	98	98	95
QC Std 6	Friday, August 28, 2009 18:33:32	95	99	96	96
LLCS	Friday, August 28, 2009 19:00:14	84	90	85	87
ICSA	Friday, August 28, 2009 19:06:47	86	94	85	87
ICSAB	Friday, August 28, 2009 19:13:20	89	98	87	90
5ppm LRC	Friday, August 28, 2009 19:19:54	92	94	92	89
QC Std 1	Friday, August 28, 2009 19:45:55	90	95	93	92
QC Std 2	Friday, August 28, 2009 19:52:57	89	95	92	92
QC Std 5	Friday, August 28, 2009 20:00:01	92	96	94	96
QC Std 6	Friday, August 28, 2009 20:07:05	86	91	87	87
BLK	Friday, August 28, 2009 20:27:02	86	90	88	88
Ag LCS	Friday, August 28, 2009 20:33:31	87	90	86	87
LCS	Friday, August 28, 2009 20:40:01	81	90	84	90
81984.01	Friday, August 28, 2009 21:06:04	97	95	90	91
81984.02	Friday, August 28, 2009 21:12:36	95	94	87	87
QC Std 1	Friday, August 28, 2009 21:19:08	88	92	88	87
QC Std 2	Friday, August 28, 2009 21:26:10	88	90	89	87
QC Std 5	Friday, August 28, 2009 21:33:13	88	90	87	86
QC Std 6	Friday, August 28, 2009 21:40:16	88	94	86	88
81984.03	Friday, August 28, 2009 21:47:21	103	94	86	89
81984.04	Friday, August 28, 2009 21:53:54	113	98	89	91
81984.04 MS	Friday, August 28, 2009 22:00:28	108	94	86	88
81984.04 MSD	Friday, August 28, 2009 22:07:02	112	97	89	88
81984.05	Friday, August 28, 2009 22:32:55	115	97	88	89
81984.06	Friday, August 28, 2009 22:39:23	110	99	91	90
81984.07	Friday, August 28, 2009 22:45:52	107	99	91	92
QC Std 1	Friday, August 28, 2009 22:52:22	88	93	86	86
QC Std 2	Friday, August 28, 2009 22:59:24	95	97	93	93
QC Std 5	Friday, August 28, 2009 23:06:27	92	93	88	88
QC Std 6	Friday, August 28, 2009 23:13:32	92	96	87	90
81984.08	Friday, August 28, 2009 23:20:34	100	94	89	89
81984.09	Friday, August 28, 2009 23:27:04	95	92	84	86
81984.1	Friday, August 28, 2009 23:33:34	96	95	91	90
81984.11	Friday, August 28, 2009 23:40:05	95	93	85	87
81984.12	Friday, August 28, 2009 23:46:36	103	95	88	91
81984.13	Friday, August 28, 2009 23:53:08	92	91	85	85
81984.14	Friday, August 28, 2009 23:59:41	86	85	78	81
81984.14 MSD	Saturday, August 29, 2009 00:12:46	86	85	80	82
QC Std 1	Saturday, August 29, 2009 00:25:45	85	91	84	86
QC Std 5	Saturday, August 29, 2009 00:39:50	87	88	85	87
QC Std 6	Saturday, August 29, 2009 00:46:54	82	89	82	85
81984.15	Saturday, August 29, 2009 01:07:03	90	96	92	92
81984.16	Saturday, August 29, 2009 01:13:36	98	88	83	84
81984.17	Saturday, August 29, 2009 01:20:09	94	91	84	87
81984.18	Saturday, August 29, 2009 01:26:43	101	93	89	91
81984.19	Saturday, August 29, 2009 01:33:17	97	94	89	88
81984.2	Saturday, August 29, 2009 01:39:52	93	90	85	88
BLK	Saturday, August 29, 2009 01:53:03	85	89	86	87
QC Std 1	Saturday, August 29, 2009 01:59:34	88	93	91	90

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Internal Standard Log
EAI SDG 81984
Total Metals

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 2	Saturday, August 29, 2009 02:06:36	84	87	83	85
QC Std 5	Saturday, August 29, 2009 02:13:39	86	89	88	88
QC Std 6	Saturday, August 29, 2009 02:20:43	84	87	81	85
Ag LCS	Saturday, August 29, 2009 02:27:51	82	87	86	86
LCS	Saturday, August 29, 2009 02:34:28	83	88	84	88

ICSA / ICSB Summary
EAI SDG 81984
Total Metals

Sample ID: ICSA
Sample Date/Time: Friday, August 28, 2009 19:06:47
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	Mass	Conc. Mea	Report Unit	% R	% R
Be	< 1	0.032278	ug/L		
Na	50000	47163.12	ug/L	94.32624	
Mg	50000	46700.35	ug/L	93.4007	
Al	50000	48048.69	ug/L	96.09737	
P	50000	49223.31	ug/L	98.44662	
K	50000	48556.56	ug/L	97.11311	
Ca	50000	49566.7	ug/L	99.1334	
Sc			ug/L		85.974
V	1.66276	1.662766	ug/L		
Cr	< 1	0.502289	ug/L		
Fe	50000	46620.67	ug/L	93.24134	
Mn	< 5	0.478393	ug/L		
Co	< 1	0.218638	ug/L		
Ni	1.053284	1.053284	ug/L		
Cu	< 1	0.477483	ug/L		
Zn	< 5	2.106863	ug/L		
Ge			ug/L		94.069
As	1.269815	1.269815	ug/L		
Se	< 1	-0.259713	ug/L		
Ag	< 1	-0.069815	ug/L		
Cd	< 1	0.010298	ug/L		
In			ug/L		84.7
Sb	< 1	-0.071451	ug/L		
Ba	< 1	0.223477	ug/L		
Ho			ug/L		86.563
Hg	< 0.1	0.019581	ug/L		
Tl	< 1	-0.018748	ug/L		
Pb	< 1	0.075398	ug/L		

Sample ID: ICSAB
Sample Date/Time: Friday, August 28, 2009 19:13:20
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	Mass	Conc. Mea	Report Unit	% R	% R
Be	10	9.465182	ug/L	94.65182	
Na	50000	48209.12	ug/L	96.41824	
Mg	50000	47983.54	ug/L	95.96707	
Al	50000	48881.18	ug/L	97.76236	
P	50000	50761.13	ug/L	101.5223	
K	50000	49128.4	ug/L	98.25681	
Ca	50000	50874.96	ug/L	101.7499	
Sc			ug/L		88.895
V	10	11.65693	ug/L	116.5693	
Cr	10	10.02456	ug/L	100.2456	
Fe	50000	48098.1	ug/L	96.19621	
Mn	10	9.999885	ug/L	99.99885	
Co	10	9.669994	ug/L	96.69994	
Ni	10	10.47151	ug/L	104.7151	
Cu	10	9.542305	ug/L	95.42305	
Zn	10	10.90479	ug/L	109.0479	
Ge			ug/L		98.444
As	10	11.00212	ug/L	110.0212	
Se	10	9.383858	ug/L	93.83858	
Ag	10	5.902638	ug/L	59.02638	
Cd	10	9.747617	ug/L	97.47617	
In			ug/L		87.229
Sb	10	10.5715	ug/L	105.715	
Ba	10	10.15203	ug/L	101.5203	
Ho			ug/L		89.949
Hg	1	1.013248	ug/L	101.3248	
Tl	10	9.030701	ug/L	90.30701	
Pb	10	9.209076	ug/L	92.09076	

Kevin McKibben
Provan & Lorber (Co)
PO Box 389
Contoocook , NH 03229

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 82084
Client Identification: Coakley Landfill / M9081
Date Received: 8/20/2009

Dear Mr. McKibben :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:
Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw — Lorraine Olashaw, Lab Director

9.11.09 — Date

230 — # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Temperature upon receipt (°C): 2 **Received on ice or cold packs (Yes/No): Y**

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
82084.01	GW-BP-4-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.02	GW-MW-4-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.03	GW-MW-5S-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.04	GW-MW-5S-Dup-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.05	GW-MW-5D-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.06	GW-MW-6-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.07	GW-MW-8-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.08	GW-MW-11-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.09	GW-OP-2-0809	8/20/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
82084.1	GW-OP-5-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.11	GW-AE-1A-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.12	GW-AE-1B-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.13	GW-AE-3A-0809	8/20/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
82084.14	GW-AE-3B-0809	8/20/09	8/18/09	aqueous		Adheres to Sample Acceptance Policy
82084.15	GW-FPC-5A-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.16	GW-FPC-5B-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.17	GW-FPC-8A-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.18	GW-FPC-8B-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.19	GW-GZ-105-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.2	SW-SW-4-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.21	SW-SW-5-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.22	LC-L-1-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.23	LC-L-1-Dup-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.24	SW-SW-103-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater : Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 2nd edition, 1992

SAMPLE CONDITIONS PAGE

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Temperature upon receipt (°C): 2 **Received on ice or cold packs (Yes/No): Y**

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
82084.25	S-SED-4-0809	8/20/09	8/19/09	soil	11.4	Adheres to Sample Acceptance Policy
82084.26	S-SED-5-0809	8/20/09	8/19/09	soil	60.1	Adheres to Sample Acceptance Policy
82084.27	S-SED-5-Dup-0809	8/20/09	8/19/09	soil	60.0	Adheres to Sample Acceptance Policy
82084.28	Bowl Equip Blank	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.29	GW-MW-4-FB-0809	8/20/09	8/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.3	DW-R-3-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.31	DW-R-5-0809	8/20/09	8/19/09	aqueous		Adheres to Sample Acceptance Policy
82084.32	Trip Blank	8/20/09	7/20/09	aqueous		Adheres to Sample Acceptance Policy
82084.33	Trip Blank	8/20/09	7/29/09	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

All results contained in this report relate only to the above listed samples.

References include:

1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater : Inorganics, 19th Edition, 1995; Microbiology, 20th Edition, 1998
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 2nd edition, 1992

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-5S-0809	GW-MW-5S-Dup-0809	GW-MW-5D-0809	GW-MW-6-0809	GW-MW-8-0809	GW-MW-11-0809	GW-AE-3A-0809
Lab Sample ID:	82084.03	82084.04	82084.05	82084.06	82084.07	82084.08	82084.13
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/20/09	8/20/09	8/20/09	8/19/09	8/19/09	8/19/09	8/18/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/24/09	8/25/09	8/25/09	8/25/09	8/25/09	8/25/09	8/25/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chloroethane	**8**	**7**	**32**	< 5	**18**	**19**	**11**
Trichlorofluoromethane	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Diethyl Ether	**37**	**34**	**100**	< 5	**99**	**34**	**15**
Acetone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butyl Alcohol (TBA)	< 30	< 30	**40**	< 30	**60**	< 30	< 30
Methylene chloride	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Ethyl-t-butyl ether(ETBE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Isopropyl ether(DIPE)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
tert-amyl methyl ether(TAME)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	**40**	**40**	**90**	< 10	**180**	**30**	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Benzene	**3**	**3**	**2**	< 1	**4**	**4**	**2**
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Toluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dibromoethane(EDB)	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	**2**	**2**	**3**	< 2	**3**	**2**	**7**
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-5S-0809	GW-MW-5S-Dup-0809	GW-MW-5D-0809	GW-MW-6-0809	GW-MW-8-0809	GW-MW-11-0809	GW-AE-3A-0809
Lab Sample ID:	82084.03	82084.04	82084.05	82084.06	82084.07	82084.08	82084.13
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/20/09	8/20/09	8/20/09	8/19/09	8/19/09	8/19/09	8/18/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/24/09	8/25/09	8/25/09	8/25/09	8/25/09	8/25/09	8/25/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1	1
mp-Xylene	< 1	< 1	< 1	< 1	**1**	**6**	< 1
o-Xylene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2	< 2	< 2	< 2
IsoPropylbenzene	**1**	**1**	< 1	< 1	**2**	**2**	< 1
Bromobenzene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1	**1**	**1**	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	**3**	**2**	**2**	< 1	**2**	**1**	**1**
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1	< 1
4-Bromofluorobenzene (surr)	**96 %R**	**96 %R**	**95 %R**	**95 %R**	**97 %R**	**97 %R**	**95 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**	**101 %R**	**101 %R**	**101 %R**	**98 %R**	**100 %R**	**101 %R**
Toluene-d8 (surr)	**101 %R**	**101 %R**	**100 %R**	**100 %R**	**101 %R**	**101 %R**	**101 %R**

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-3B-0809	GW-FPC-8A-0809	GW-FPC-8B-0809	GW-GZ-105-0809	GW-MW-4-FB-0809
Lab Sample ID:	82084.14	82084.17	82084.18	82084.19	82084.29
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/18/09	8/19/09	8/19/09	8/19/09	8/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/25/09	8/25/09	8/25/09	8/25/09	8/27/09
Analyst:	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	< 5	< 5	< 5
Chloromethane	< 2	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Chloroethane	**9**	< 5	< 5	**12**	< 5
Trichlorofluoromethane	< 5	< 5	< 5	< 5	< 5
Diethyl Ether	**14**	< 5	< 5	**62**	< 5
Acetone	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	< 1	< 1	< 1
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30	< 30
Methylene chloride	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5	< 5
Ethyl-t-butyl ether(ETBE)	< 5	< 5	< 5	< 5	< 5
Isopropyl ether(DIPE)	< 5	< 5	< 5	< 5	< 5
tert-amyl methyl ether(TAME)	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	< 10	< 10	< 10	**80**	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2	< 2
Benzene	**1**	< 1	< 1	**6**	< 1
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
Toluene	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
1,2-Dibromoethane(EDB)	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	**5**	< 2	< 2	**11**	< 2
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 1	< 1	< 1	< 1	< 1

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-3B-0809	GW-FPC-8A-0809	GW-FPC-8B-0809	GW-GZ-105-0809	GW-MW-4-FB-0809
Lab Sample ID:	82084.14	82084.17	82084.18	82084.19	82084.29
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/18/09	8/19/09	8/19/09	8/19/09	8/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/25/09	8/25/09	8/25/09	8/25/09	8/27/09
Analyst:	BAM	BAM	BAM	BAM	BAM
Method:	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1
mp-Xylene	< 1	< 1	< 1	**1**	< 1
o-Xylene	< 1	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2	< 2
IsoPropylbenzene	< 1	< 1	< 1	**2**	< 1
Bromobenzene	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	**5**	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2	< 2
1,3,5-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1
4-Bromofluorobenzene (surr)	**95 %R**	**94 %R**	**94 %R**	**97 %R**	**93 %R**
1,2-Dichlorobenzene-d4 (surr)	**102 %R**	**101 %R**	**101 %R**	**100 %R**	**100 %R**
Toluene-d8 (surr)	**101 %R**	**101 %R**	**101 %R**	**101 %R**	**100 %R**

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/24/2009	ug/l			8260B
Chloromethane	< 2			8/24/2009	ug/l			8260B
Vinyl chloride	< 2			8/24/2009	ug/l			8260B
Bromomethane	< 2			8/24/2009	ug/l			8260B
Chloroethane	< 5			8/24/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/24/2009	ug/l			8260B
Diethyl Ether	< 5			8/24/2009	ug/l			8260B
Acetone	< 10			8/24/2009	ug/l			8260B
1,1-Dichloroethene	< 1	21 (103 %R)	19 (96 %R) (7 RPD)	8/24/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/24/2009	ug/l			8260B
Methylene chloride	< 5			8/24/2009	ug/l			8260B
Carbon disulfide	< 5			8/24/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/24/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/24/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/24/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/24/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/24/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/24/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/24/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/24/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/24/2009	ug/l			8260B
Bromochloromethane	< 2			8/24/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/24/2009	ug/l			8260B
Chloroform	< 2			8/24/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/24/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/24/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/24/2009	ug/l			8260B
Benzene	< 1	21 (104 %R)	19 (96 %R) (8 RPD)	8/24/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/24/2009	ug/l			8260B
Trichloroethene	< 2	20 (98 %R)	18 (91 %R) (7 RPD)	8/24/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/24/2009	ug/l			8260B
Dibromomethane	< 2			8/24/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/24/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/24/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/24/2009	ug/l			8260B
Toluene	< 1	21 (103 %R)	19 (96 %R) (7 RPD)	8/24/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/24/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/24/2009	ug/l			8260B
2-Hexanone	< 10			8/24/2009	ug/l			8260B
Tetrachloroethene	< 2			8/24/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/24/2009	ug/l			8260B
Dibromochloromethane	< 2			8/24/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/24/2009	ug/l			8260B
Chlorobenzene	< 2	20 (100 %R)	19 (95 %R) (5 RPD)	8/24/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 2			8/24/2009	ug/l			8260B
Ethylbenzene	< 1			8/24/2009	ug/l			8260B
mp-Xylene	< 1			8/24/2009	ug/l			8260B
o-Xylene	< 1			8/24/2009	ug/l			8260B
Styrene	< 1			8/24/2009	ug/l			8260B
Bromoform	< 2			8/24/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/24/2009	ug/l			8260B
Bromobenzene	< 2			8/24/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/24/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/24/2009	ug/l			8260B
n-Propylbenzene	< 1			8/24/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/24/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/24/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/24/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/24/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/24/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
n-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/24/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/24/2009	ug/l			8260B
Naphthalene	< 5			8/24/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	95 %R	102 %R	103 %R	8/24/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	100 %R	99 %R	98 %R	8/24/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	101 %R	101 %R	100 %R	8/24/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/24/2009	ug/l			8260B
Chloromethane	< 2			8/24/2009	ug/l			8260B
Vinyl chloride	< 2			8/24/2009	ug/l			8260B
Bromomethane	< 2			8/24/2009	ug/l			8260B
Chloroethane	< 5			8/24/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/24/2009	ug/l			8260B
Diethyl Ether	< 5			8/24/2009	ug/l			8260B
Acetone	< 10			8/24/2009	ug/l			8260B
1,1-Dichloroethene	< 1	20 (98 %R)	20 (99 %R) (1 RPD)	8/24/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/24/2009	ug/l			8260B
Methylene chloride	< 5			8/24/2009	ug/l			8260B
Carbon disulfide	< 5			8/24/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/24/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/24/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/24/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/24/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/24/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/24/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/24/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/24/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/24/2009	ug/l			8260B
Bromochloromethane	< 2			8/24/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/24/2009	ug/l			8260B
Chloroform	< 2			8/24/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/24/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/24/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/24/2009	ug/l			8260B
Benzene	< 1	19 (97 %R)	20 (98 %R) (1 RPD)	8/24/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/24/2009	ug/l			8260B
Trichloroethene	< 2	19 (94 %R)	19 (95 %R) (1 RPD)	8/24/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/24/2009	ug/l			8260B
Dibromomethane	< 2			8/24/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/24/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/24/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/24/2009	ug/l			8260B
Toluene	< 1	20 (98 %R)	20 (99 %R) (1 RPD)	8/24/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/24/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/24/2009	ug/l			8260B
2-Hexanone	< 10			8/24/2009	ug/l			8260B
Tetrachloroethene	< 2			8/24/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/24/2009	ug/l			8260B
Dibromochloromethane	< 2			8/24/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/24/2009	ug/l			8260B
Chlorobenzene	< 2	19 (97 %R)	19 (97 %R) (0 RPD)	8/24/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 2			8/24/2009	ug/l			8260B
Ethylbenzene	< 1			8/24/2009	ug/l			8260B
mp-Xylene	< 1			8/24/2009	ug/l			8260B
o-Xylene	< 1			8/24/2009	ug/l			8260B
Styrene	< 1			8/24/2009	ug/l			8260B
Bromoform	< 2			8/24/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/24/2009	ug/l			8260B
Bromobenzene	< 2			8/24/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/24/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/24/2009	ug/l			8260B
n-Propylbenzene	< 1			8/24/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/24/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/24/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/24/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/24/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/24/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/24/2009	ug/l			8260B
n-Butylbenzene	< 1			8/24/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/24/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/24/2009	ug/l			8260B
Naphthalene	< 5			8/24/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/24/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	96 %R	102 %R	102 %R	8/24/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	99 %R	98 %R	100 %R	8/24/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	101 %R	101 %R	101 %R	8/24/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: **82084** **Batch ID:**

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	82084.03				8/24/2009	ug/l			8260B
Chloromethane	82084.03				8/24/2009	ug/l			8260B
Vinyl chloride	82084.03				8/24/2009	ug/l			8260B
Bromomethane	82084.03				8/24/2009	ug/l			8260B
Chloroethane	82084.03				8/24/2009	ug/l			8260B
Trichlorofluoromethane	82084.03				8/24/2009	ug/l			8260B
Diethyl Ether	82084.03				8/24/2009	ug/l			8260B
Acetone	82084.03				8/24/2009	ug/l			8260B
1,1-Dichloroethene	82084.03	< 1	23 (115 %R)	22 (111 %R) (4 RPD)	8/24/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	82084.03				8/24/2009	ug/l			8260B
Methylene chloride	82084.03				8/24/2009	ug/l			8260B
Carbon disulfide	82084.03				8/24/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	82084.03				8/24/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	82084.03				8/24/2009	ug/l			8260B
Isopropyl ether(DIPE)	82084.03				8/24/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	82084.03				8/24/2009	ug/l			8260B
trans-1,2-Dichloroethene	82084.03				8/24/2009	ug/l			8260B
1,1-Dichloroethane	82084.03				8/24/2009	ug/l			8260B
2,2-Dichloropropane	82084.03				8/24/2009	ug/l			8260B
cis-1,2-Dichloroethene	82084.03				8/24/2009	ug/l			8260B
2-Butanone(MEK)	82084.03				8/24/2009	ug/l			8260B
Bromochloromethane	82084.03				8/24/2009	ug/l			8260B
Tetrahydrofuran(THF)	82084.03				8/24/2009	ug/l			8260B
Chloroform	82084.03				8/24/2009	ug/l			8260B
1,1,1-Trichloroethane	82084.03				8/24/2009	ug/l			8260B
Carbon tetrachloride	82084.03				8/24/2009	ug/l			8260B
1,1-Dichloropropene	82084.03				8/24/2009	ug/l			8260B
Benzene	82084.03	3	25 (107 %R)	23 (100 %R) (7 RPD)	8/24/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	82084.03				8/24/2009	ug/l			8260B
Trichloroethene	82084.03	< 2	21 (107 %R)	20 (102 %R) (5 RPD)	8/24/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	82084.03				8/24/2009	ug/l			8260B
Dibromomethane	82084.03				8/24/2009	ug/l			8260B
Bromodichloromethane	82084.03				8/24/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	82084.03				8/24/2009	ug/l			8260B
cis-1,3-Dichloropropene	82084.03				8/24/2009	ug/l			8260B
Toluene	82084.03	< 1	22 (111 %R)	21 (106 %R) (5 RPD)	8/24/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	82084.03				8/24/2009	ug/l			8260B
1,1,2-Trichloroethane	82084.03				8/24/2009	ug/l			8260B
2-Hexanone	82084.03				8/24/2009	ug/l			8260B
Tetrachloroethene	82084.03				8/24/2009	ug/l			8260B
1,3-Dichloropropane	82084.03				8/24/2009	ug/l			8260B
Dibromochloromethane	82084.03				8/24/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	82084.03				8/24/2009	ug/l			8260B
Chlorobenzene	82084.03	2	24 (107 %R)	22 (99 %R) (8 RPD)	8/24/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: **82084** **Batch ID:**

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	82084.03				8/24/2009	ug/l			8260B
Ethylbenzene	82084.03				8/24/2009	ug/l			8260B
mp-Xylene	82084.03				8/24/2009	ug/l			8260B
o-Xylene	82084.03				8/24/2009	ug/l			8260B
Styrene	82084.03				8/24/2009	ug/l			8260B
Bromoform	82084.03				8/24/2009	ug/l			8260B
IsoPropylbenzene	82084.03				8/24/2009	ug/l			8260B
Bromobenzene	82084.03				8/24/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	82084.03				8/24/2009	ug/l			8260B
1,2,3-Trichloropropane	82084.03				8/24/2009	ug/l			8260B
n-Propylbenzene	82084.03				8/24/2009	ug/l			8260B
2-Chlorotoluene	82084.03				8/24/2009	ug/l			8260B
4-Chlorotoluene	82084.03				8/24/2009	ug/l			8260B
1,3,5-Trimethylbenzene	82084.03				8/24/2009	ug/l			8260B
tert-Butylbenzene	82084.03				8/24/2009	ug/l			8260B
1,2,4-Trimethylbenzene	82084.03				8/24/2009	ug/l			8260B
sec-Butylbenzene	82084.03				8/24/2009	ug/l			8260B
1,3-Dichlorobenzene	82084.03				8/24/2009	ug/l			8260B
p-Isopropyltoluene	82084.03				8/24/2009	ug/l			8260B
1,4-Dichlorobenzene	82084.03				8/24/2009	ug/l			8260B
1,2-Dichlorobenzene	82084.03				8/24/2009	ug/l			8260B
n-Butylbenzene	82084.03				8/24/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	82084.03				8/24/2009	ug/l			8260B
1,3,5-Trichlorobenzene	82084.03				8/24/2009	ug/l			8260B
1,2,4-Trichlorobenzene	82084.03				8/24/2009	ug/l			8260B
Hexachlorobutadiene	82084.03				8/24/2009	ug/l			8260B
Naphthalene	82084.03				8/24/2009	ug/l			8260B
1,2,3-Trichlorobenzene	82084.03				8/24/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	82084.03	96 %R	102 %R	102 %R	8/24/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	82084.03	100 %R	99 %R	98 %R	8/24/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	82084.03	101 %R	101 %R	101 %R	8/24/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 5			8/27/2009	ug/l			8260B
Chloromethane	< 2			8/27/2009	ug/l			8260B
Vinyl chloride	< 2			8/27/2009	ug/l			8260B
Bromomethane	< 2			8/27/2009	ug/l			8260B
Chloroethane	< 5			8/27/2009	ug/l			8260B
Trichlorofluoromethane	< 5			8/27/2009	ug/l			8260B
Diethyl Ether	< 5			8/27/2009	ug/l			8260B
Acetone	< 10			8/27/2009	ug/l			8260B
1,1-Dichloroethene	< 1	20 (99 %R)	19 (96 %R) (3 RPD)	8/27/2009	ug/l	61 - 145	20	8260B
tert-Butyl Alcohol (TBA)	< 30			8/27/2009	ug/l			8260B
Methylene chloride	< 5			8/27/2009	ug/l			8260B
Carbon disulfide	< 5			8/27/2009	ug/l			8260B
Methyl-t-butyl ether(MTBE)	< 5			8/27/2009	ug/l			8260B
Ethyl-t-butyl ether(ETBE)	< 5			8/27/2009	ug/l			8260B
Isopropyl ether(DIPE)	< 5			8/27/2009	ug/l			8260B
tert-amyl methyl ether(TAME)	< 5			8/27/2009	ug/l			8260B
trans-1,2-Dichloroethene	< 2			8/27/2009	ug/l			8260B
1,1-Dichloroethane	< 2			8/27/2009	ug/l			8260B
2,2-Dichloropropane	< 2			8/27/2009	ug/l			8260B
cis-1,2-Dichloroethene	< 2			8/27/2009	ug/l			8260B
2-Butanone(MEK)	< 10			8/27/2009	ug/l			8260B
Bromochloromethane	< 2			8/27/2009	ug/l			8260B
Tetrahydrofuran(THF)	< 10			8/27/2009	ug/l			8260B
Chloroform	< 2			8/27/2009	ug/l			8260B
1,1,1-Trichloroethane	< 2			8/27/2009	ug/l			8260B
Carbon tetrachloride	< 2			8/27/2009	ug/l			8260B
1,1-Dichloropropene	< 2			8/27/2009	ug/l			8260B
Benzene	< 1	20 (101 %R)	19 (97 %R) (4 RPD)	8/27/2009	ug/l	76 - 127	20	8260B
1,2-Dichloroethane	< 2			8/27/2009	ug/l			8260B
Trichloroethene	< 2	19 (97 %R)	19 (93 %R) (4 RPD)	8/27/2009	ug/l	71 - 120	20	8260B
1,2-Dichloropropane	< 2			8/27/2009	ug/l			8260B
Dibromomethane	< 2			8/27/2009	ug/l			8260B
Bromodichloromethane	< 0.5			8/27/2009	ug/l			8260B
4-Methyl-2-pentanone(MIBK)	< 10			8/27/2009	ug/l			8260B
cis-1,3-Dichloropropene	< 2			8/27/2009	ug/l			8260B
Toluene	< 1	20 (102 %R)	20 (98 %R) (4 RPD)	8/27/2009	ug/l	76 - 125	20	8260B
trans-1,3-Dichloropropene	< 2			8/27/2009	ug/l			8260B
1,1,2-Trichloroethane	< 2			8/27/2009	ug/l			8260B
2-Hexanone	< 10			8/27/2009	ug/l			8260B
Tetrachloroethene	< 2			8/27/2009	ug/l			8260B
1,3-Dichloropropane	< 2			8/27/2009	ug/l			8260B
Dibromochloromethane	< 2			8/27/2009	ug/l			8260B
1,2-Dibromoethane(EDB)	< 2			8/27/2009	ug/l			8260B
Chlorobenzene	< 2	20 (101 %R)	19 (97 %R) (4 RPD)	8/27/2009	ug/l	75 - 130	20	8260B

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 2			8/27/2009	ug/l			8260B
Ethylbenzene	< 1			8/27/2009	ug/l			8260B
mp-Xylene	< 1			8/27/2009	ug/l			8260B
o-Xylene	< 1			8/27/2009	ug/l			8260B
Styrene	< 1			8/27/2009	ug/l			8260B
Bromoform	< 2			8/27/2009	ug/l			8260B
IsoPropylbenzene	< 1			8/27/2009	ug/l			8260B
Bromobenzene	< 2			8/27/2009	ug/l			8260B
1,1,2,2-Tetrachloroethane	< 2			8/27/2009	ug/l			8260B
1,2,3-Trichloropropane	< 2			8/27/2009	ug/l			8260B
n-Propylbenzene	< 1			8/27/2009	ug/l			8260B
2-Chlorotoluene	< 2			8/27/2009	ug/l			8260B
4-Chlorotoluene	< 2			8/27/2009	ug/l			8260B
1,3,5-Trimethylbenzene	< 1			8/27/2009	ug/l			8260B
tert-Butylbenzene	< 1			8/27/2009	ug/l			8260B
1,2,4-Trimethylbenzene	< 1			8/27/2009	ug/l			8260B
sec-Butylbenzene	< 1			8/27/2009	ug/l			8260B
1,3-Dichlorobenzene	< 1			8/27/2009	ug/l			8260B
p-Isopropyltoluene	< 1			8/27/2009	ug/l			8260B
1,4-Dichlorobenzene	< 1			8/27/2009	ug/l			8260B
1,2-Dichlorobenzene	< 1			8/27/2009	ug/l			8260B
n-Butylbenzene	< 1			8/27/2009	ug/l			8260B
1,2-Dibromo-3-chloropropane	< 2			8/27/2009	ug/l			8260B
1,3,5-Trichlorobenzene	< 1			8/27/2009	ug/l			8260B
1,2,4-Trichlorobenzene	< 1			8/27/2009	ug/l			8260B
Hexachlorobutadiene	< 0.5			8/27/2009	ug/l			8260B
Naphthalene	< 5			8/27/2009	ug/l			8260B
1,2,3-Trichlorobenzene	< 1			8/27/2009	ug/l			8260B
4-Bromofluorobenzene (surr)	91 %R	100 %R	99 %R	8/27/2009	% Rec	86 - 115	50	8260B
1,2-Dichlorobenzene-d4 (surr)	101 %R	99 %R	98 %R	8/27/2009	% Rec	80 - 120	50	8260B
Toluene-d8 (surr)	100 %R	101 %R	100 %R	8/27/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	SW-SW-4-0809	SW-SW-5-0809	LC-L-1-0809	SW-SW-103-0809	DW-R-3-0809	DW-R-5-0809	Trip Blank
Lab Sample ID:	82084.2	82084.21	82084.22	82084.24	82084.3	82084.31	82084.32
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	7/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/28/09	8/28/09	8/28/09	8/28/09	8/25/09	8/28/09	8/28/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	524.2	524.2	524.2	524.2	524.2	524.2	524.2
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	< 0.5	< 0.5	**4.4**	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Diethyl Ether	< 5	< 5	**13**	< 5	< 5	< 5	< 5
Acetone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30	< 30	< 30	< 30
Methylene chloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl-t-butyl ether(ETBE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl ether(DIPE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-amyl methyl ether(TAME)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl acetate	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,2-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone(MEK)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrahydrofuran(THF)	< 5	< 5	**12**	< 5	< 5	< 5	< 5
Chloroform	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	< 0.5	< 0.5	**1.9**	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Toluene	< 0.5	**7.2**	< 0.5	**1.2**	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 0.5	< 0.5	**20**	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1,2-Tetrachloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	SW-SW-4-0809	SW-SW-5-0809	LC-L-1-0809	SW-SW-103-0809	DW-R-3-0809	DW-R-5-0809	Trip Blank
Lab Sample ID:	82084.2	82084.21	82084.22	82084.24	82084.3	82084.31	82084.32
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	7/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/28/09	8/28/09	8/28/09	8/28/09	8/25/09	8/28/09	8/28/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	524.2	524.2	524.2	524.2	524.2	524.2	524.2
Dilution Factor:	1	1	1	1	1	1	1
Ethylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
mp-Xylene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
IsoPropylbenzene	< 0.5	< 0.5	**1.5**	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Chlorotoluene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
p-Isopropyltoluene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	< 0.5	< 0.5	**2.5**	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	< 0.5	< 0.5	**1.1**	< 0.5	< 0.5	< 0.5	< 0.5
n-Butylbenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-chloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	< 0.5	< 0.5	**0.6**	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**92 %R**	**93 %R**	**96 %R**	**92 %R**	**95 %R**	**92 %R**	**92 %R**
1,2-Dichlorobenzene-d4 (surr)	**101 %R**	**101 %R**	**105 %R**	**100 %R**	**100 %R**	**100 %R**	**101 %R**

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.5	8.2 (82 %R)	8.6 (86 %R) (5 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Chloromethane	< 0.5	8.0 (80 %R)	8.3 (83 %R) (4 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Vinyl chloride	< 0.5	10 (105 %R)	11 (105 %R) (0 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Bromomethane	< 0.5	* 5.4 (54 %R)	* 6.1 (61 %R) (12 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Chloroethane	< 0.5	9.0 (90 %R)	9.4 (94 %R) (4 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Trichlorofluoromethane	< 0.5	9.9 (99 %R)	10 (102 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Diethyl Ether	< 5	10 (96 %R)	9 (95 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Acetone	< 10	10 (103 %R)	< 10 (96 %R) (7 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1-Dichloroethene	< 0.5	9.2 (92 %R)	9.5 (95 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
tert-Butyl Alcohol (TBA)	< 30	40 (88 %R)	40 (80 %R) (10 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Methylene chloride	< 0.5	9.3 (93 %R)	9.9 (99 %R) (6 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Carbon disulfide	< 2	* 20 (198 %R)	* 22 (221 %R) (11 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Methyl-t-butyl ether(MTBE)	< 0.5	8.3 (83 %R)	8.3 (83 %R) (0 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Ethyl-t-butyl ether(ETBE)	< 0.5	7.9 (79 %R)	8.1 (81 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Isopropyl ether(DIPE)	< 0.5	8.1 (81 %R)	8.4 (84 %R) (4 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
tert-amyl methyl ether(TAME)	< 0.5	8.2 (82 %R)	8.2 (82 %R) (0 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
trans-1,2-Dichloroethene	< 0.5	8.7 (87 %R)	8.9 (89 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Vinyl acetate	< 10	10 (128 %R)	10 (129 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1-Dichloroethane	< 0.5	9.3 (93 %R)	9.5 (95 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
2,2-Dichloropropane	< 0.5	* 6.4 (64 %R)	* 6.6 (66 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
cis-1,2-Dichloroethene	< 0.5	9.7 (97 %R)	10 (100 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
2-Butanone(MEK)	< 5	9 (89 %R)	8 (83 %R) (7 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Bromochloromethane	< 0.5	9.8 (98 %R)	10 (100 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Tetrahydrofuran(THF)	< 5	9 (86 %R)	8 (80 %R) (7 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Chloroform	< 0.5	9.4 (94 %R)	9.6 (96 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1,1-Trichloroethane	< 0.5	8.5 (85 %R)	8.8 (88 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Carbon tetrachloride	< 0.5	8.8 (88 %R)	9.3 (93 %R) (6 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1-Dichloropropene	< 0.5	8.2 (82 %R)	8.7 (87 %R) (6 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Benzene	< 0.5	9.5 (95 %R)	9.8 (98 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2-Dichloroethane	< 0.5	9.2 (92 %R)	9.2 (92 %R) (0 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Trichloroethene	< 0.5	9.0 (90 %R)	9.1 (91 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2-Dichloropropane	< 0.5	8.8 (88 %R)	8.9 (89 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Dibromomethane	< 0.5	9.5 (95 %R)	9.3 (93 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Bromodichloromethane	< 0.5	9.4 (94 %R)	9.6 (96 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
4-Methyl-2-pentanone(MIBK)	< 5	8 (82 %R)	8 (81 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
cis-1,3-Dichloropropene	< 0.3	7.9 (79 %R)	8.0 (80 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Toluene	< 0.5	9.5 (95 %R)	9.7 (97 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
trans-1,3-Dichloropropene	< 0.3	8.1 (81 %R)	8.2 (82 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1,2-Trichloroethane	< 0.5	9.6 (96 %R)	9.4 (94 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
2-Hexanone	< 5	8 (84 %R)	8 (77 %R) (9 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Tetrachloroethene	< 0.5	12 (120 %R)	12 (121 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,3-Dichloropropane	< 0.5	9.8 (98 %R)	9.7 (97 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Dibromochloromethane	< 0.5	9.2 (92 %R)	9.4 (94 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2-Dibromoethane(EDB)	< 0.5	9.3 (93 %R)	9.3 (93 %R) (0 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Chlorobenzene	< 0.5	9.5 (95 %R)	9.7 (97 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 0.5	9.4 (94 %R)	9.6 (96 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Ethylbenzene	< 0.5	9.4 (94 %R)	9.7 (97 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
mp-Xylene	< 0.5	19 (96 %R)	20 (99 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
o-Xylene	< 0.5	9.6 (96 %R)	9.8 (98 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Styrene	< 0.5	9.4 (94 %R)	9.5 (95 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Bromoform	< 0.5	9.8 (98 %R)	9.7 (97 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
IsoPropylbenzene	< 0.5	10 (100 %R)	10 (103 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Bromobenzene	< 0.5	9.8 (98 %R)	9.9 (99 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,1,2,2-Tetrachloroethane	< 0.5	9.3 (93 %R)	9.2 (92 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2,3-Trichloropropane	< 0.5	9.9 (99 %R)	9.5 (95 %R) (4 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
n-Propylbenzene	< 0.5	9.7 (97 %R)	9.9 (99 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
2-Chlorotoluene	< 0.5	9.4 (94 %R)	9.7 (97 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
4-Chlorotoluene	< 0.5	9.4 (94 %R)	9.6 (96 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,3,5-Trimethylbenzene	< 0.5	9.4 (94 %R)	9.7 (97 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
tert-Butylbenzene	< 0.5	9.1 (91 %R)	9.5 (95 %R) (4 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2,4-Trimethylbenzene	< 0.5	9.4 (94 %R)	9.7 (97 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
sec-Butylbenzene	< 0.5	9.4 (94 %R)	9.7 (97 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,3-Dichlorobenzene	< 0.5	9.6 (96 %R)	9.9 (99 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
p-Isopropyltoluene	< 0.5	9.5 (95 %R)	9.8 (98 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,4-Dichlorobenzene	< 0.5	10 (100 %R)	10 (101 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2-Dichlorobenzene	< 0.5	9.8 (98 %R)	9.7 (97 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
n-Butylbenzene	< 0.5	9.1 (91 %R)	9.4 (94 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2-Dibromo-3-chloropropane	< 0.5	9.2 (92 %R)	8.7 (87 %R) (6 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,3,5-Trichlorobenzene	< 0.5	9.7 (97 %R)	10 (100 %R) (3 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2,4-Trichlorobenzene	< 0.5	9.2 (92 %R)	9.4 (94 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Hexachlorobutadiene	< 0.5	8.6 (86 %R)	9.0 (90 %R) (5 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
Naphthalene	< 0.5	8.8 (88 %R)	8.7 (87 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
1,2,3-Trichlorobenzene	< 0.5	9.3 (93 %R)	9.4 (94 %R) (1 RPD)	8/28/2009	ug/l	70 - 130	30	524.2
4-Bromofluorobenzene (surr)	92 %R	101 %R	99 %R	8/28/2009	% Rec	70 - 130		524.2
1,2-Dichlorobenzene-d4 (surr)	101 %R	110 %R	107 %R	8/28/2009	% Rec	70 - 130		524.2

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

Analytes that exceed the acceptance limits high in the quality control samples but are not detected in the field samples do not impact the data. For analytes that show low recovery in the quality control samples and are not detected in the field samples, a low point calibration standard is analyzed to support the reporting limit.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.5	16 (81 %R)	15 (76 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Chloromethane	< 0.5	16 (80 %R)	15 (73 %R) (9 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Vinyl chloride	< 0.5	21 (107 %R)	19 (96 %R) (11 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Bromomethane	< 0.5	* 8.5 (42 %R)	* 10 (52 %R) (21 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Chloroethane	< 0.5	20 (102 %R)	19 (93 %R) (9 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Trichlorofluoromethane	< 0.5	22 (112 %R)	21 (103 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Diethyl Ether	< 5	21 (105 %R)	20 (102 %R) (3 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Acetone	< 10	20 (118 %R)	20 (109 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1-Dichloroethene	< 0.5	20 (100 %R)	19 (93 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
tert-Butyl Alcohol (TBA)	< 30	90 (92 %R)	90 (86 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Methylene chloride	< 0.5	20 (101 %R)	18 (91 %R) (10 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Carbon disulfide	< 2	* 49 (244 %R)	* 43 (213 %R) (14 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Methyl-t-butyl ether(MTBE)	< 0.5	18 (92 %R)	17 (87 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Ethyl-t-butyl ether(ETBE)	< 0.5	18 (91 %R)	17 (86 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Isopropyl ether(DIPE)	< 0.5	19 (94 %R)	18 (90 %R) (4 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
tert-amyl methyl ether(TAME)	< 0.5	18 (91 %R)	17 (86 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
trans-1,2-Dichloroethene	< 0.5	19 (93 %R)	17 (87 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Vinyl acetate	< 10	20 (118 %R)	20 (113 %R) (4 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1-Dichloroethane	< 0.5	20 (101 %R)	19 (95 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
2,2-Dichloropropane	< 0.5	* 9.6 (48 %R)	* 9.2 (46 %R) (4 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
cis-1,2-Dichloroethene	< 0.5	22 (108 %R)	20 (101 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
2-Butanone(MEK)	< 5	19 (93 %R)	17 (86 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Bromochloromethane	< 0.5	20 (99 %R)	19 (94 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Tetrahydrofuran(THF)	< 5	18 (92 %R)	17 (86 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Chloroform	< 0.5	21 (105 %R)	20 (98 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1,1-Trichloroethane	< 0.5	19 (93 %R)	18 (88 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Carbon tetrachloride	< 0.5	19 (96 %R)	18 (92 %R) (4 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1-Dichloropropene	< 0.5	19 (96 %R)	18 (90 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Benzene	< 0.5	21 (103 %R)	19 (95 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2-Dichloroethane	< 0.5	20 (100 %R)	19 (93 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Trichloroethene	< 0.5	20 (98 %R)	18 (91 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2-Dichloropropane	< 0.5	19 (97 %R)	18 (91 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Dibromomethane	< 0.5	20 (99 %R)	18 (92 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Bromodichloromethane	< 0.5	20 (102 %R)	19 (96 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
4-Methyl-2-pentanone(MIBK)	< 5	19 (94 %R)	17 (86 %R) (9 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
cis-1,3-Dichloropropene	< 0.3	17 (85 %R)	16 (81 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Toluene	< 0.5	21 (103 %R)	19 (95 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
trans-1,3-Dichloropropene	< 0.3	18 (88 %R)	16 (82 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1,2-Trichloroethane	< 0.5	20 (100 %R)	19 (93 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
2-Hexanone	< 5	19 (95 %R)	18 (88 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Tetrachloroethene	< 0.5	24 (121 %R)	22 (111 %R) (9 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,3-Dichloropropane	< 0.5	21 (103 %R)	19 (96 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Dibromochloromethane	< 0.5	18 (89 %R)	17 (85 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2-Dibromoethane(EDB)	< 0.5	20 (99 %R)	19 (93 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Chlorobenzene	< 0.5	20 (100 %R)	19 (93 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,1,1,2-Tetrachloroethane	< 0.5	20 (99 %R)	19 (94 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Ethylbenzene	< 0.5	21 (104 %R)	19 (96 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
mp-Xylene	< 0.5	42 (104 %R)	39 (96 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
o-Xylene	< 0.5	21 (104 %R)	19 (97 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Styrene	< 0.5	20 (101 %R)	19 (94 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Bromoform	< 0.5	18 (90 %R)	17 (85 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
IsoPropylbenzene	< 0.5	23 (113 %R)	21 (105 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Bromobenzene	< 0.5	20 (102 %R)	19 (96 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,1,2,2-Tetrachloroethane	< 0.5	20 (98 %R)	19 (93 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2,3-Trichloropropane	< 0.5	20 (99 %R)	19 (93 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
n-Propylbenzene	< 0.5	21 (106 %R)	20 (98 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
2-Chlorotoluene	< 0.5	20 (102 %R)	19 (96 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
4-Chlorotoluene	< 0.5	20 (101 %R)	19 (94 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,3,5-Trimethylbenzene	< 0.5	21 (104 %R)	19 (97 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
tert-Butylbenzene	< 0.5	21 (104 %R)	19 (95 %R) (9 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2,4-Trimethylbenzene	< 0.5	21 (103 %R)	19 (96 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
sec-Butylbenzene	< 0.5	21 (105 %R)	19 (97 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,3-Dichlorobenzene	< 0.5	20 (100 %R)	19 (94 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
p-Isopropyltoluene	< 0.5	21 (105 %R)	19 (97 %R) (8 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,4-Dichlorobenzene	< 0.5	20 (102 %R)	19 (97 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2-Dichlorobenzene	< 0.5	20 (99 %R)	19 (93 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
n-Butylbenzene	< 0.5	20 (99 %R)	19 (93 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2-Dibromo-3-chloropropane	< 0.5	17 (87 %R)	16 (81 %R) (7 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,3,5-Trichlorobenzene	< 0.5	20 (101 %R)	19 (95 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2,4-Trichlorobenzene	< 0.5	20 (98 %R)	19 (93 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Hexachlorobutadiene	< 0.5	18 (89 %R)	17 (84 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
Naphthalene	< 0.5	20 (98 %R)	18 (92 %R) (6 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
1,2,3-Trichlorobenzene	< 0.5	19 (97 %R)	18 (92 %R) (5 RPD)	8/25/2009	ug/l	70 - 130	30	524.2
4-Bromofluorobenzene (surr)	95 %R	104 %R	102 %R	8/25/2009	% Rec	70 - 130		524.2
1,2-Dichlorobenzene-d4 (surr)	97 %R	107 %R	104 %R	8/25/2009	% Rec	70 - 130		524.2

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

Analytes that exceed the acceptance limits high in the quality control samples but are not detected in the field samples do not impact the data. For analytes that show low recovery in the quality control samples and are not detected in the field samples, a low point calibration standard is analyzed to support the reporting limit.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-5S-0809	GW-MW-5S-Dup-0809	GW-MW-5D-0809	GW-MW-6-0809	GW-MW-8-0809	GW-MW-11-0809	LC-L-1-0809
Lab Sample ID:	82084.03	82084.04	82084.05	82084.06	82084.07	82084.08	82084.22
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/20/09	8/20/09	8/20/09	8/19/09	8/19/09	8/19/09	8/19/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/28/09	8/28/09	8/28/09	8/28/09	8/28/09	8/28/09	8/28/09
Analyst:	VG	VG	VG	VG	VG	VG	VG
Method:	8260B SIM	8260B SIM	8260B SIM	8260B SIM	8260B SIM	8260B SIM	8260B SIM
Dilution Factor:	10	10	10	1	20	10	1
1,4-Dioxane	**70**	**70**	**140**	< 1	**310**	**100**	**26**
4-Bromofluorobenzene (surr)	**103 %R**	**102 %R**	**102 %R**	**101 %R**	**102 %R**	**102 %R**	**101 %R**
Toluene-d8 (surr)	**101 %R**	**101 %R**	**103 %R**	**102 %R**	**102 %R**	**101 %R**	**101 %R**

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-4-FB-0809	Trip Blank
Lab Sample ID:	82084.29	82084.33
Matrix:	aqueous	aqueous
Date Sampled:	8/20/09	7/29/09
Date Received:	8/20/09	8/20/09
Units:	ug/l	ug/l
Date of Analysis:	8/27/09	9/1/09
Analyst:	VG	VG
Method:	8260B SIM	8260B SIM
Dilution Factor:	1	1
1,4-Dioxane	< 1	< 1
4-Bromofluorobenzene (surr)	**102 %R**	**107 %R**
Toluene-d8 (surr)	**102 %R**	**103 %R**

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,4-Dioxane	< 1	5 (98 %R)	5 (98 %R) (0 RPD)	8/27/2009	ug/l	70 - 130	20	8260B
4-Bromofluorobenzene (surr)	103 %R	105 %R	103 %R	8/27/2009	% Rec	70 - 130	50	8260B
Toluene-d8 (surr)	101 %R	102 %R	102 %R	8/27/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,4-Dioxane	< 1	6 (120 %R)	5 (104 %R) (14 RPD)	8/28/2009	ug/l	70 - 130	20	8260B
4-Bromofluorobenzene (surr)	100 %R	104 %R	103 %R	8/28/2009	% Rec	70 - 130	50	8260B
Toluene-d8 (surr)	101 %R	102 %R	103 %R	8/28/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: **82084** **Batch ID:**

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Analysis Date	Units	Limits	RPD	Method
1,4-Dioxane	82084.03	70	130 (106 %R)	130 (108 %R) (2 RPD)	8/28/2009	ug/l	70 - 130	20	8260B
4-Bromofluorobenzene (surr)	82084.03	96 %R	104 %R	104 %R	8/28/2009	% Rec	70 - 130	50	8260B
Toluene-d8 (surr)	82084.03	101 %R	103 %R	104 %R	8/28/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
1,4-Dioxane	< 1	5 (106 %R)	6 (117 %R) (10 RPD)	9/1/2009	ug/l	70 - 130	20	8260B
4-Bromofluorobenzene (surr)	105 %R	107 %R	107 %R	9/1/2009	% Rec	70 - 130	50	8260B
Toluene-d8 (surr)	101 %R	103 %R	104 %R	9/1/2009	% Rec	70 - 130	50	8260B

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
* Flagged analyte recoveries deviated from the QA/QC limits.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-5S-0809	GW-MW-5S-Dup-0809	GW-MW-5D-0809	GW-MW-6-0809	GW-MW-8-0809	GW-MW-11-0809	LC-L-1-0809	GW-MW-4-FB-0809
Lab Sample ID:	82084.03	82084.04	82084.05	82084.06	82084.07	82084.08	82084.22	82084.29
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/20/09	8/20/09	8/20/09	8/19/09	8/19/09	8/19/09	8/19/09	8/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Extraction/Prep:	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09
Date of Analysis:	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09	8/24/09
Analyst:	JMR	JMR	JMR	JMR	JMR	JMR	JMR	JMR
Method:	8011/504	8011/504	8011/504	8011/504	8011/504	8011/504	8011/504	8011/504
Dilution Factor:	1	1	1	1	1	1	1	1
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Dibromochloropropane (DBCP)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1,1,2-Tetrachloroethane	**103 %R**	**112 %R**	**106 %R**	**106 %R**	**106 %R**	**113 %R**	**100 %R**	**105 %R**

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
1,2-Dibromoethane(EDB)	< 0.02	0.10 (103 %R)	0.10 (103 %R) (0 RPD)	ug/l	8/24/09	70 - 130	20	8011/504
Dibromochloropropane	< 0.02	0.10 (103 %R)	0.10 (103 %R) (0 RPD)	ug/l	8/24/09	70 - 130	20	8011/504
1,1,1,2-Tetrachloroethane	109 %R	120 %R	122 %R	% Rec	8/24/09	65 - 135	20	8011/504

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
1,2-Dibromoethane(EDB)	82084.03	< 0.02	0.11 (110 %R)	0.12 (122 %R) (10 RPD)	ug/l	8/24/09	65-135	20	8011/504
Dibromochloropropane	82084.03	< 0.02	0.11 (113 %R)	0.12 (121 %R) (7 RPD)	ug/l	8/24/09	65-135	20	8011/504
1,1,1,2-Tetrachloroethan	82084.03	103 %R	105 %R	96 %R	%	8/24/09	65-135	20	8011/504

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	SW-SW-4-0809	SW-SW-5-0809	SW-SW-103-0809	GW-MW-4-FB-0809					
Lab Sample ID:	82084.2	82084.21	82084.24	82084.29					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/19/09	8/19/09	8/19/09	8/20/09		Analysis			
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	**Units**	**Date**	**Time**	**Method**	**Analyst**
Ammonia-N	**1.0**	**8.7**	**0.48**	< 0.05	mg/L	09/01/09	13:00	4500NH3D	SEL

Sample ID:	LC-L-1-0809	LC-L-1-Dup-0809						
Lab Sample ID:	82084.22	82084.23						
Matrix:	aqueous	aqueous						
Date Sampled:	8/19/09	8/19/09		Analysis				
Date Received:	8/20/09	8/20/09	**Units**	**Date**	**Time**	**Method**	**Analyst**	
Ammonia-N	**21**	**21**	mg/L	09/01/09	13:00	4500NH3D	SEL	
COD	**50**	**50**	mg/L	08/25/09	7:45	H8000	KJV	

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Ammonia-N	< 0.05	2.1 (104 %R)	2.0 (98 %R) (6 RPD)	mg/L	9/1/09	90 - 110	20	4500NH3
COD	< 10	100 (102 %R)	NA	mg/L	8/25/09	85 - 115	20	H8000

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Ammonia-N	82084.22	21	23 (104 %R)	23 (86 %R) (19 RPD)	mg/L	9/1/09	80-120	20	4500NH3
COD	82084.22	50	110 (105 %R)	100 (96 %R) (9 RPD)	mg/L	8/25/09	80-120	20	H8000

Aqueous Total

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-BP-4-0809	GW-MW-5D-0809	GW-MW-8-0809	GW-MW-11-0809					
Lab Sample ID:	82084.01	82084.05	82084.07	82084.08					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/19/09	8/20/09	8/19/09	8/19/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09					
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.022**	**0.006**	**0.008**	**0.011**	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.039**	**0.12**	**0.21**	**0.083**	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**50**	**32**	**42**	**24**	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	< 0.001	< 0.001	**0.003**	**0.002**	AqTot	mg/L	9/1/09	200.8	DS
Iron	**26**	**15**	**5.6**	**15**	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**0.94**	**0.77**	**2.0**	**0.39**	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.008**	**0.010**	**0.022**	**0.008**	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	**0.004**	**0.005**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	< 0.001	**0.001**	**0.002**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	**0.011**	< 0.005	< 0.005	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	< 0.5	< 0.5	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**26**	**32**	**50**	**21**	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**23**	**25**	**14**	**9.8**	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**89**	**140**	**210**	**110**	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	~~GW-FPC-5A-0809~~ GW-FPC-5B-0809	~~GW-FPC-5B-0809~~ GW-FPC-5A-0809	GW-FPC-8A-0809	SW-SW-4-0809					
Lab Sample ID:	82084.15	82084.16	82084.17	82084.2					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/20/09	8/20/09	8/19/09	8/19/09					
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.001**	**0.053**	**0.006**	**0.004**	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.054**	**0.13**	**0.015**	**0.049**	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**7.4**	**44**	**21**	**21**	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	< 0.001	**0.006**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	< 0.001	< 0.001	**0.004**	**0.001**	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	< 0.001	< 0.001	**0.002**	**0.001**	AqTot	mg/L	9/1/09	200.8	DS
Iron	**0.24**	**9.7**	**3.6**	**6.8**	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	< 0.001	**0.001**	**0.004**	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**0.087**	**0.11**	**0.19**	**1.6**	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.007**	**0.007**	**0.004**	**0.002**	AqTot	mg/L	9/1/09	200.8	DS
Selenium	**0.002**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	**0.001**	< 0.001	**0.007**	**0.002**	AqTot	mg/L	9/1/09	200.8	DS
Zinc	< 0.005	< 0.005	**0.010**	**0.026**	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	**2.6**	< 0.5	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**5.0**	**27**	**4.3**	**7.1**	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**7.8**	**27**	**2.5**	**5.0**	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**290**	**110**	**13**	**13**	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	SW-SW-5-0809	LC-L-1-0809	SW-SW-103-0809	Bowl Equip Blank					
Lab Sample ID:	82084.21	82084.22	82084.24	82084.28					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/19/09	8/19/09	8/19/09	8/19/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09					
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.045**	**0.004**	**0.011**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.063**	**0.10**	**0.078**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**66**	**64**	**55**	**0.07**	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	**0.001**	< 0.001	**0.003**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	**0.002**	< 0.001	**0.002**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Iron	**30**	**35**	**25**	< 0.05	AqTot	mg/L	9/1/09	200.8	DS
Lead	**0.001**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**1.6**	**3.2**	**3.3**	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.005**	**0.007**	**0.005**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	**0.001**	**0.002**	**0.002**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	**0.089**	**0.012**	**0.069**	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	< 0.5	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**15**	**25**	**14**	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**20**	**37**	**8.2**	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**46**	**100**	**39**	< 5	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-MW-4-0809	GW-MW-5S-0809	GW-MW-5S-Dup-0809	GW-MW-6-0809					
Lab Sample ID:	82084.02	82084.03	82084.04	82084.06					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/20/09	8/20/09	8/20/09	8/19/09					
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Iron	**23**	**14**	**15**	**0.34**	AqDis	mg/L	8/31/09	200.8	DS
Manganese	**1.2**	**3.2**	**3.3**	**0.51**	AqDis	mg/L	8/31/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.070**	**0.018**	**0.018**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.073**	**0.18**	**0.17**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**65**	**42**	**41**	**11**	AqTot	mg/L	9/2/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	**0.002**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	**0.002**	< 0.001	< 0.001	**0.002**	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	**0.005**	**0.007**	**0.006**	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Iron	**24**	**16**	**16**	**8.0**	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**1.2**	**3.4**	**3.3**	**0.49**	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.009**	**0.014**	**0.014**	**0.002**	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	**0.001**	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	**0.002**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	**0.006**	< 0.005	< 0.005	**0.008**	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	< 0.5	< 0.5	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**24**	**26**	**25**	**4.5**	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**38**	**25**	**24**	**1.6**	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**34**	**94**	**91**	**11**	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-OP-2-0809	GW-OP-5-0809	GW-AE-1A-0809	GW-AE-1B-0809					
Lab Sample ID:	82084.09	82084.1	82084.11	82084.12					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/18/09	8/19/09	8/20/09	8/20/09					
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Iron	**45**	**8.1**	**0.12**	**1.1**	AqDis	mg/L	8/31/09	200.8	DS
Manganese	**0.62**	**2.0**	**0.32**	**0.75**	AqDis	mg/L	8/31/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.20**	**0.013**	**0.029**	**0.004**	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.017**	**0.013**	**0.018**	**0.058**	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**42**	**7.6**	**25**	**25**	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	**0.014**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	**0.004**	**0.015**	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Iron	**48**	**8.1**	**0.10**	**1.1**	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**0.63**	**1.8**	**0.25**	**0.73**	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.007**	**0.025**	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	**0.001**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	**0.016**	**0.007**	< 0.005	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	< 0.5	< 0.5	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**11**	**2.3**	**8.6**	**13**	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**21**	**1.9**	**3.8**	**9.3**	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**18**	**9**	**24**	**33**	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	GW-AE-3A-0809	GW-AE-3B-0809	GW-FPC-8B-0809	GW-GZ-105-0809					
Lab Sample ID:	82084.13	82084.14	82084.18	82084.19					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	8/18/09	8/18/09	8/19/09	8/19/09					
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Iron	**24**	**15**	< 0.05	**4.7**	AqDis	mg/L	8/31/09	200.8	DS
Manganese	**1.3**	**1.4**	**0.025**	**0.50**	AqDis	mg/L	8/31/09	200.8	DS
Antimony	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	**0.12**	**0.091**	**0.007**	**0.013**	AqTot	mg/L	9/1/09	200.8	DS
Barium	**0.076**	**0.16**	**0.008**	**0.061**	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	**45**	**45**	**23**	**69**	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	**0.001**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	**0.004**	**0.001**	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Iron	**26**	**16**	**0.06**	**4.9**	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	**1.3**	**1.4**	**0.025**	**0.50**	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	**0.008**	**0.007**	< 0.001	**0.009**	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	< 0.001	< 0.001	**0.001**	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	**0.001**	< 0.001	< 0.001	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	< 0.005	< 0.005	< 0.005	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.5	< 0.5	< 0.5	< 0.5	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	**25**	**26**	**5.0**	**27**	AqTot	mg/L	9/2/09	200.8	DS
Potassium	**26**	**23**	**2.7**	**7.1**	AqTot	mg/L	9/2/09	200.8	DS
Sodium	**73**	**92**	**18**	**150**	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID: GW-MW-4-FB-0809

Lab Sample ID: 82084.29
Matrix: aqueous
Date Sampled: 8/20/09
Date Received: 8/20/09

		Analytical Matrix	Units	Date of Analysis	Method	Analyst
Iron	< 0.05	AqDis	mg/L	8/31/09	200.8	DS
Manganese	< 0.005	AqDis	mg/L	8/31/09	200.8	DS
Antimony	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Arsenic	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Barium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Beryllium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Calcium	< 0.05	AqTot	mg/L	9/1/09	200.8	DS
Cadmium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Chromium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Copper	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Cobalt	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Iron	< 0.05	AqTot	mg/L	9/1/09	200.8	DS
Lead	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Manganese	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Mercury	< 0.0001	AqTot	mg/L	9/1/09	200.8	DS
Nickel	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Selenium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Silver	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Thallium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Vanadium	< 0.001	AqTot	mg/L	9/1/09	200.8	DS
Zinc	< 0.005	AqTot	mg/L	9/1/09	200.8	DS
Aluminum	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Magnesium	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Potassium	< 0.05	AqTot	mg/L	9/2/09	200.8	DS
Sodium	< 5	AqTot	mg/L	9/2/09	200.8	DS

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	S-SED-4-0809	S-SED-5-0809	S-SED-5-Dup-0809					
Lab Sample ID:	82084.25	82084.26	82084.27					
Matrix:	soil	soil	soil					
Date Sampled:	8/19/09	8/19/09	8/19/09					
Date Received:	8/20/09	8/20/09	8/20/09	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Aluminum	**3100**	**17000**	**15000**	SolTotDry	mg/kg	9/9/09	6020	DS
Antimony	**0.7**	< 0.5	< 0.5	SolTotDry	mg/kg	9/9/09	6020	DS
Arsenic	**3.1**	**15**	**12**	SolTotDry	mg/kg	9/9/09	6020	DS
Barium	**52**	**110**	**120**	SolTotDry	mg/kg	9/9/09	6020	DS
Beryllium	< 0.5	**1.0**	**1.0**	SolTotDry	mg/kg	9/9/09	6020	DS
Calcium	**17000**	**1700**	**1800**	SolTotDry	mg/kg	9/9/09	6020	DS
Cadmium	**0.5**	< 0.5	< 0.5	SolTotDry	mg/kg	9/9/09	6020	DS
Chromium	**3.4**	**49**	**46**	SolTotDry	mg/kg	9/9/09	6020	DS
Copper	**16**	**28**	**28**	SolTotDry	mg/kg	9/9/09	6020	DS
Cobalt	**2.0**	**11**	**11**	SolTotDry	mg/kg	9/9/09	6020	DS
Iron	**2800**	**29000**	**25000**	SolTotDry	mg/kg	9/9/09	6020	DS
Lead	**32**	**18**	**18**	SolTotDry	mg/kg	9/9/09	6020	DS
Magnesium	**2000**	**7700**	**6500**	SolTotDry	mg/kg	9/9/09	6020	DS
Manganese	**980**	**300**	**290**	SolTotDry	mg/kg	9/9/09	6020	DS
Mercury	**0.3**	< 0.1	< 0.1	SolTotDry	mg/kg	9/9/09	6020	DS
Nickel	**6.9**	**38**	**36**	SolTotDry	mg/kg	9/9/09	6020	DS
Potassium	**200**	**5400**	**4800**	SolTotDry	mg/kg	9/9/09	6020	DS
Selenium	**2.2**	< 0.5	< 0.5	SolTotDry	mg/kg	9/9/09	6020	DS
Silver	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	9/9/09	6020	DS
Sodium	**400**	**300**	**300**	SolTotDry	mg/kg	9/9/09	6020	DS
Thallium	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	9/9/09	6020	DS
Vanadium	**10**	**41**	**39**	SolTotDry	mg/kg	9/9/09	6020	DS
Zinc	**93**	**80**	**75**	SolTotDry	mg/kg	9/9/09	6020	DS

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Iron	< 0.05	10 (93 %R)		mg/L	8/31/09	85 - 115	20	200.8
Manganese	< 0.005	0.97 (97 %R)		mg/L	8/31/09	85 - 115	20	200.8

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Iron	82084.03	14	25 (93 %R)	25 (97 %R) (4 RPD)	mg/L	8/31/09	70-130	20	200.8
Manganese	82084.03	3.2	4.1 (89 %R)	4.1 (91 %R) (2 RPD)	mg/L	8/31/09	70-130	20	200.8

Aqueous Dissolved

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	< 0.05	11 (96 %R)		mg/L	9/2/09	85 - 115	20	200.8
Antimony	< 0.001	1.1 (107 %R)		mg/L	9/1/09	85 - 115	20	200.8
Arsenic	< 0.001	1.0 (101 %R)		mg/L	9/1/09	85 - 115	20	200.8
Barium	< 0.001	1.0 (102 %R)		mg/L	9/1/09	85 - 115	20	200.8
Beryllium	< 0.001	1.1 (109 %R)		mg/L	9/1/09	85 - 115	20	200.8
Calcium	< 0.05	11 (98 %R)		mg/L	9/1/09	85 - 115	20	200.8
Cadmium	< 0.001	1.1 (107 %R)		mg/L	9/1/09	85 - 115	20	200.8
Chromium	< 0.001	0.96 (96 %R)		mg/L	9/1/09	85 - 115	20	200.8
Copper	< 0.001	0.97 (97 %R)		mg/L	9/1/09	85 - 115	20	200.8
Cobalt	< 0.001	1.0 (104 %R)		mg/L	9/1/09	85 - 115	20	200.8
Iron	< 0.05	11 (100 %R)		mg/L	9/1/09	85 - 115	20	200.8
Lead	< 0.001	1.1 (110 %R)		mg/L	9/1/09	85 - 115	20	200.8
Magnesium	< 0.05	11 (102 %R)		mg/L	9/2/09	85 - 115	20	200.8
Manganese	< 0.005	1.0 (101 %R)		mg/L	9/1/09	85 - 115	20	200.8
Mercury	< 0.0001	0.0011 (108 %R)		mg/L	9/1/09	85 - 115	20	200.8
Nickel	< 0.001	0.98 (98 %R)		mg/L	9/1/09	85 - 115	20	200.8
Potassium	< 0.05	11 (99 %R)		mg/L	9/2/09	85 - 115	20	200.8
Selenium	< 0.001	1.1 (109 %R)		mg/L	9/1/09	85 - 115	20	200.8
Silver	< 0.001	0.10 (100 %R)		mg/L	9/2/09	85 - 115	20	200.8
Sodium	< 5	11 (102 %R)		mg/L	9/2/09	85 - 115	20	200.8
Thallium	< 0.001	1.1 (110 %R)		mg/L	9/1/09	85 - 115	20	200.8
Vanadium	< 0.001	1.0 (103 %R)		mg/L	9/1/09	85 - 115	20	200.8
Zinc	< 0.005	0.99 (99 %R)		mg/L	9/1/09	85 - 115	20	200.8

Aqueous Total

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	82084.03	< 0.5	110 (96 %R)	110 (98 %R) (2 RPD)	mg/L	9/2/09	70-130	20	200.8
Antimony	82084.03	< 0.001	1.2 (121 %R)	1.2 (120 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Arsenic	82084.03	0.018	1.1 (109 %R)	1.1 (107 %R) (2 RPD)	mg/L	9/1/09	70-130	20	200.8
Barium	82084.03	0.18	1.3 (109 %R)	1.3 (108 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Beryllium	82084.03	< 0.001	0.96 (96 %R)	0.95 (95 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Calcium	82084.03	42	54 (105 %R)	55 (112 %R) (6 RPD)	mg/L	9/1/09	70-130	20	200.8
Cadmium	82084.03	< 0.001	1.1 (111 %R)	1.1 (109 %R) (2 RPD)	mg/L	9/1/09	70-130	20	200.8
Chromium	82084.03	< 0.001	0.92 (92 %R)	0.92 (92 %R) (0 RPD)	mg/L	9/1/09	70-130	20	200.8
Copper	82084.03	< 0.001	0.85 (85 %R)	0.86 (85 %R) (0 RPD)	mg/L	9/1/09	70-130	20	200.8
Cobalt	82084.03	0.007	0.92 (92 %R)	0.94 (93 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Iron	82084.03	16	27 (95 %R)	28 (101 %R) (6 RPD)	mg/L	9/1/09	70-130	20	200.8
Lead	82084.03	< 0.001	1.0 (102 %R)	1.0 (101 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Magnesium	82084.03	26	140 (101 %R)	140 (103 %R) (2 RPD)	mg/L	9/2/09	70-130	20	200.8
Manganese	82084.03	3.4	4.2 (83 %R)	4.3 (93 %R) (11 RPD)	mg/L	9/1/09	70-130	20	200.8
Mercury	82084.03	< 0.0001	0.0011 (102 %R)	0.0011 (101 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Nickel	82084.03	0.014	0.87 (85 %R)	0.87 (86 %R) (1 RPD)	mg/L	9/1/09	70-130	20	200.8
Potassium	82084.03	25	130 (95 %R)	130 (98 %R) (3 RPD)	mg/L	9/2/09	70-130	20	200.8
Selenium	82084.03	0.001	1.0 (103 %R)	1.0 (99 %R) (4 RPD)	mg/L	9/1/09	70-130	20	200.8
Silver	82084.03	< 0.001	0.83 (83 %R)	0.85 (85 %R) (2 RPD)	mg/L	9/2/09	70-130	20	200.8
Sodium	82084.03	94	200 (101 %R)	200 (101 %R) (0 RPD)	mg/L	9/2/09	70-130	20	200.8
Thallium	82084.03	< 0.001	1.0 (102 %R)	1.0 (102 %R) (0 RPD)	mg/L	9/1/09	70-130	20	200.8
Vanadium	82084.03	< 0.001	0.99 (99 %R)	1.0 (101 %R) (2 RPD)	mg/L	9/1/09	70-130	20	200.8
Zinc	82084.03	< 0.005	0.86 (85 %R)	0.87 (87 %R) (2 RPD)	mg/L	9/1/09	70-130	20	200.8

Aqueous Total

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	< 100	400 (84 %R)		mg/kg	9/9/09	80 - 120	20	6020
Antimony	< 0.5	36 (90 %R)		mg/kg	9/9/09	80 - 120	20	6020
Arsenic	< 0.5	37 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Barium	< 0.5	35 (88 %R)		mg/kg	9/9/09	80 - 120	20	6020
Beryllium	< 0.5	38 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Calcium	< 100	400 (96 %R)		mg/kg	9/9/09	80 - 120	20	6020
Cadmium	< 0.5	36 (90 %R)		mg/kg	9/9/09	80 - 120	20	6020
Chromium	< 0.5	37 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Copper	< 0.5	38 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Cobalt	< 0.5	38 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Iron	< 100	400 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Lead	< 0.5	38 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Magnesium	< 100	400 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Manganese	< 0.5	38 (94 %R)		mg/kg	9/9/09	80 - 120	20	6020
Mercury	< 0.1	0.4 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Nickel	< 0.5	38 (94 %R)		mg/kg	9/9/09	80 - 120	20	6020
Potassium	< 100	400 (92 %R)		mg/kg	9/9/09	80 - 120	20	6020
Selenium	< 0.5	37 (94 %R)		mg/kg	9/9/09	80 - 120	20	6020
Silver	< 0.5	9.5 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Sodium	< 100	500 (113 %R)		mg/kg	9/9/09	80 - 120	20	6020
Thallium	< 0.5	38 (94 %R)		mg/kg	9/9/09	80 - 120	20	6020
Vanadium	< 0.5	38 (95 %R)		mg/kg	9/9/09	80 - 120	20	6020
Zinc	< 5	44 (110 %R)		mg/kg	9/9/09	80 - 120	20	6020

Solids

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
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* Flagged analyte recoveries deviated from the QA/QC limits.

QC REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Aluminum	82084.26	17000	27000 (85 %R)	28000 (94 %R) (10 RPD)	mg/kg	9/9/09	75-125	20	6020
Antimony	82084.26	< 0.5	1100 (108 %R)	1100 (112 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Arsenic	82084.26	15	1000 (100 %R)	1000 (99 %R) (1 RPD)	mg/kg	9/9/09	75-125	20	6020
Barium	82084.26	110	1100 (103 %R)	1200 (108 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Beryllium	82084.26	1.0	840 (85 %R)	890 (89 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Calcium	82084.26	1700	10000 (78 %R)	11000 (82 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Cadmium	82084.26	< 0.5	1100 (108 %R)	1100 (112 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Chromium	82084.26	49	900 (85 %R)	940 (89 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Copper	82084.26	28	830 (80 %R)	850 (83 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Cobalt	82084.26	11	880 (88 %R)	920 (92 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Iron	82084.26	29000	39000 (95 %R)	39000 (91 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Lead	82084.26	18	1100 (106 %R)	1100 (111 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Magnesium	82084.26	7700	17000 (84 %R)	17000 (85 %R) (1 RPD)	mg/kg	9/9/09	75-125	20	6020
Manganese	82084.26	300	1200 (91 %R)	1200 (94 %R) (3 RPD)	mg/kg	9/9/09	75-125	20	6020
Mercury	82084.26	< 0.1	1.1 (103 %R)	1.1 (106 %R) (3 RPD)	mg/kg	9/9/09	75-125	20	6020
Nickel	82084.26	38	850 (82 %R)	860 (83 %R) (1 RPD)	mg/kg	9/9/09	75-125	20	6020
Potassium	82084.26	5400	15000 (84 %R)	15000 (86 %R) (2 RPD)	mg/kg	9/9/09	75-125	20	6020
Selenium	82084.26	< 0.5	1000 (100 %R)	1000 (102 %R) (2 RPD)	mg/kg	9/9/09	75-125	20	6020
Silver	82084.26	< 0.5	1100 (108 %R)	1100 (112 %R) (4 RPD)	mg/kg	9/9/09	75-125	20	6020
Sodium	82084.26	300	9600 (84 %R)	9700 (86 %R) (2 RPD)	mg/kg	9/9/09	75-125	20	6020
Thallium	82084.26	< 0.5	1100 (106 %R)	1100 (111 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020
Vanadium	82084.26	41	940 (91 %R)	970 (93 %R) (2 RPD)	mg/kg	9/9/09	75-125	20	6020
Zinc	82084.26	80	870 (80 %R)	920 (84 %R) (5 RPD)	mg/kg	9/9/09	75-125	20	6020

Solids

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Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
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* Flagged analyte recoveries deviated from the QA/QC limits.

Page 1 of 4

CHAIN-OF-CUSTODY RECORD

FOR LA 82084

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

	SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 BTEX	VOC: 524.2 MTBE ONLY	VOC: 624 VTICS (8260B)	VOC: 1,4 DIOXANE EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICS ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 ABN METALS VOC PEST HERB	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	INORGANICS: TS TSS TDS SPEC. CON.	INORGANICS: BR CL F SO4 NO2 NO3 NO2/NO3	INORGANICS: BOD CBOD T. ALK.	INORGANICS: TKN NH3 T. PHOS.	INORGANICS: PH T. RES. CHLORINE	INORGANICS: COD PHENOLS TOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: T. COLIFORM E. COLI	MICRO: E. COLIFORM ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER: 1,4-DIOXANE	OTHER: EDB, DBCP		# OF CONTAINERS	NOTES MEOH VIAL #
1	GW-BP-4-0809	8-19-09 / 11:45	GW	G														X																1
2	GW-MW-4-0809	8-20-09 / 12:25															X	X																2
3	GW-MW-5S-0809 *	12:20					X										X	X													X	X		8
4	GW-MW-5S-DUP-0809	12:20					X										X	X													X	X		8
5	GW-MW-5D-0809	13:45					X											X													X	X		7
6	GW-MW-6-0809	8-19-09 / 17:15					X										X	X													X	X		8
7	GW-MW-8-0809	13:15					X											X													X	X		7
8	GW-MW-11-0809	15:15					X											X													X	X		7
9	GW-OP-2-0809	8-18-09 / 18:20															X	X																2
10	GW-OP-5-0809	8-19-09 / 10:35															X	X																2
	MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER						H										M	N													-	-		
	PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH																																	

PROJECT MANAGER: Kevin McKibben

COMPANY: Provan & Lorber

ADDRESS: P.O. Box 349

CITY: Contoocook STATE: NH ZIP: 03229

PHONE: 603-746-3220 EXT.:

FAX: 746-5642

E-MAIL:

SITE NAME: Coakley Landfill

PROJECT #: M9081

STATE: (NH) MA ME VT OTHER:

REGULATORY PROGRAM: **NPDES:** RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: 1007109 PO #:

DATE NEEDED: Standard T.A.T.

QA/QC (special)

REPORTING LEVEL

A B C

OR

MA MCP

PRESUMPTIVE CERTAINTY

REPORTING OPTIONS

PRELIMS: YES OR NO

IF YES: FAX OR PDF

ELECTRONIC OPTIONS

NO FAX E-MAIL (PDF) EQUIS

TEMP. 2 °C

ICE? (YES) NO

SAMPLER(S): K. McKibben, J. Tonguay

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Kevin McKibben	8-20-09	1:30	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: 8 RCRA 13 PP (Dissolved) Fe, Mn Pb, Cu

OTHER METALS: Total 23 TAL metals

DISSOLVED METALS FIELD FILTERED? (YES) NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

* MS + MSD samples supplied for GW-MW-5S-0809

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:

eastern analytical, inc. professional laboratory services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | FAX: 603.228.4591 | E-MAIL: CUSTOMER_SERVICE@EAILABS.COM | WWW.EAILABS.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

82084

	Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 BTEX 524.2 MTBE only	VOC: 8260B 624 VTICs 1,4 Dioxane EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICs ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals VOC Pest Herb	Metals: Dissolved Metals (list below)	Metals: Total Metals (list below)	Inorganics: TS TSS TDS Spec. Con.	Inorganics: Br Cl F SO_4 NO_2 NO_3 NO_2/NO_3	Inorganics: BOD CBOD T. Alk.	Inorganics: TKN NH_3 T. Phos.	Inorganics: pH T. Res. Chlorine	Inorganics: COD Phenols TOC	Inorganics: Total Cyanide Total Sulfide	Inorganics: Reactive Cyanide Reactive Sulfide Flashpoint Ignitability	Micro: T. Coliform E. Coli F. Coliform	Micro: Enterococci Heterotrophic Plate Count	Other: 1,4-Dioxane	Other: EDB, DBCP	Other	# of Containers	Notes MeOH Vial #
11	GW-AE-1A-0809	8-20-09/9:05	GW	G											X	X														2	
12	GW-AE-1B-0809	↓ 10:10	↓	↓											X	X														2	
13	GW-AE-3A-0809	8-18-09/16:45	↓	↓		X									X	X														2	
14	GW-AE-3B-0809	↓ 16:40	↓	↓		X									X	X														2	
15	GW-FPC-5A-0809	8-20-09/8:40	↓	↓												X														1	
16	GW-FPC-5B-0809	9:35	↓	↓												X														1	
17	GW-FPC-8A-0809	8-19-09/17:20	↓	↓		X										X														3	
18	GW-FPC-8B-0809	16:15	↓	↓		X									X	X														4	
19	GW-GZ-105-0809	14:35	↓	↓		X									X	X														4	
20	SW-SW-4-0809	12:10	SW	↓	X											X				X										4	
	Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste water. Preservative: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH					H									N	N											–	–			

PROJECT MANAGER: Kevin McKibbon
COMPANY: Provan + Lorber
ADDRESS: P.O. Box 389
CITY: Contoocook STATE: NH ZIP: 03229
PHONE: 603-746-3220 EXT.:
FAX: 746-5642
E-MAIL:
SITE NAME: Coakley Landfill
PROJECT #: M9081
STATE: (NH) MA ME VT OTHER:
REGULATORY PROGRAM: **NPDES:** RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: 1007109 PO #:

DATE NEEDED: Standard T.A.T.

QA/QC (Special) **REPORTING ~~LEVEL~~**
A B C
OR
MA MCP
PRESUMPTIVE CERTAINTY

REPORTING OPTIONS
PRELIMS: YES OR NO
IF YES: FAX OR PDF

ELECTRONIC OPTIONS
NO FAX E-MAIL (PDF) EQUIS

TEMP. 2 °C
ICE? (YES) NO

SAMPLER(S): K. McKibbon, J. Tanguay

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Kevin McKibbon	8-20-09	15:30	[signature]

METALS: 8 RCRA 13 PP (Dissolved Fe, Mn) Pb, Cu
OTHER METALS: Total 23 TAL metals
DISSOLVED METALS FIELD FILTERED? (YES) NO
NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

SITE HISTORY:
SUSPECTED CONTAMINATION:
FIELD READINGS:

Page 3 of 4

CHAIN-OF-CUSTODY RECORD

FO 82084

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

	SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: (524.2) 524.2 BTEX	VOC: 524.2 MTBE ONLY	VOC: (8260B) 624 VOCs	VOC: 1,4 DIOXANE EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAYPH	SVOC: 8270C 625 SVOCs ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 VOC PEST ABN METALS HERB	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	INORGANICS: TSS	TDS	SPEC. CON.	INORGANICS: BR CL F SO4 NO2 NO2/NO3	INORGANICS: BOD	CBOD	T. ALK.	INORGANICS: TKN (NH3) T. PHOS.	INORGANICS: pH	T. RES. CHLORINE	INORGANICS: (COD) PHENOLS TOC	INORGANICS: TOTAL CYANIDE	TOTAL SULFIDE	REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: T. COLIFORM E. COLI	MICRO: E. COLIFORM	MICRO: ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER: 1,4-DIOXANE	OTHER: EDB, DBCP		# OF CONTAINERS	NOTES MEOH VIAL #
21	SW-SW-5-0909	8-19-09 / 8:00	SW	G	X													X								X												4	
22	LC-L-1-0809	9:50			X													X								X			X						X	X		8	
23	LC-L-1-DUP-0809	8:50			~~X~~		(1)											~~X~~	(2)							X			X						~~X~~	~~X~~ (3)		8	(2) Percent only Nitrate
24	SW-SW-103-0809	11:15			X													X								X											4	
25	S-SED-4-0809	12:20	S															X																			1	
26	S-SED-5-0809	8:15																X																			1	
27	S-SED-5-DUP-0809	8:15																X																			1	
28	Bowl Equip Blank	13:05	-															X																			1	
29	GW-MW-4-FB-0909	8-20-09 / 13:10					X										X	X								X								X	X		9	
30	DW-R-3-0809	8-19-09 / 10:10	DW		X																																2	
	MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH				H		H										N	N																					

PROJECT MANAGER: Kevin McKibben
COMPANY: Provan & Lowber
ADDRESS: P.O. Box 349
CITY: Contoocook STATE: NH ZIP: 03229
PHONE: 603-746-3220 EXT.:
FAX: 746-5642
E-MAIL:
SITE NAME: Coakley Landfill
PROJECT #: M9081
STATE: (NH) MA ME VT OTHER:
REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: 1007109 PO #:

DATE NEEDED: Standard T.A.T.

QA/QC (Specia) REPORTING ~~LEVEL~~
A B C
OR
MA MCP
PRESUMPTIVE CERTAINTY

REPORTING OPTIONS
PRELIMS: YES OR NO
IF YES: FAX OR PDF

ELECTRONIC OPTIONS
NO FAX E-MAIL (PDF) EQUIS

TEMP. 2 °C
ICE? (YES) NO

SAMPLER(S): K. McKibben, D. Tanguay

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Kevin McKibben	8-20-09	15:30	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: 8 RCRA 13 PP (Dissolved) Fe, Mn Pb, Cu
OTHER METALS: Total 23 TAL metals
DISSOLVED METALS FIELD FILTERED? (YES) NO
NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)
MS + MSD samples supplied for LC-L-1-0809 NH_3
MS + MSD sample supplied for S-SED-5-0909
SITE HISTORY:
SUSPECTED CONTAMINATION:
FIELD READINGS:

eastern analytical, inc. professional laboratory services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | FAX: 603.228.4591 | E-MAIL: CUSTOMER_SERVICE@EAILABS.COM | WWW.EAILABS.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)

Page 4 of 4

CHAIN-OF-CUSTODY RECORD

FOR LAB USE ONLY 82084

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

	SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 MTBE ONLY (524)	VOC: 524.2 BTEX	VOC: 8260B 624 VTICs 1,4 DIOXANE EDB DBCP	VOC: 8021B BTEX HALOS	VOC: 8015B GRO MEGRO MAVPH	SVOC: 8270C 625 SVTICs ABN A BN PAH	SVOC: TPH8100 LI L2	SVOC: 8015B DRO MEDRO MAEPH	SVOC: 608 PEST/PCB PEST 8081A PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 ABN METALS VOC PEST HERB	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	INORGANICS: TS TSS TDS SPEC. CON.	INORGANICS: BR CL F SO4 NO2 NO3 NO2/NO3	INORGANICS: BOD CBOD T. ALK.	INORGANICS: TKN NH3 T. PHOS.	INORGANICS: pH T. RES. CHLORINE	INORGANICS: COD PHENOLS TOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: T. COLIFORM E. COLI F. COLIFORM	MICRO: ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER: 1,4-Dioxane	OTHER: EDB, DBCP	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
31	DW-R-5-0909	8-19-09 / 16:25	DW	G	X																									EDB, DBCP		2	
32	Trip Blank				X																												
33	Trip Blank																													X			

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

H | N | N | 1 | 1

PROJECT MANAGER: Kevin McKibben
COMPANY: Provan + Lorben
ADDRESS: P.O. Box 389
CITY: Contoocook **STATE:** NH **ZIP:** 03229
PHONE: 603-746-3220 **EXT.:**
FAX: 746-5642
E-MAIL:
SITE NAME: Coakley Landfill
PROJECT #: M90#1
STATE: (NH) MA ME VT **OTHER:**
REGULATORY PROGRAM: **NPDES:** RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: 1007109 **PO #:**

DATE NEEDED: Standard T.A.T.

QA/QC (Special)
REPORTING LEVEL
A B C
OR
MA MCP
PRESUMPTIVE CERTAINTY

REPORTING OPTIONS
PRELIMS: YES OR NO
IF YES: FAX OR PDF

ELECTRONIC OPTIONS
NO FAX E-MAIL (PDF) EQUIS

TEMP. 2 °C
ICE? (YES) NO

SAMPLER(S): K. McKibben, J. Tanguay

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Kevin McKibben	8-20-09	15:30	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: 8 RCRA 13 PP (Dissolved) FE, MN PB, CU
OTHER METALS: Total 13 TAL metals
DISSOLVED METALS FIELD FILTERED? (YES) NO
NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

SITE HISTORY:
SUSPECTED CONTAMINATION:
FIELD READINGS:

eastern analytical, inc.
professional laboratory services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | FAX: 603.228.4591 | E-MAIL: CUSTOMER_SERVICE@EAILABS.COM | WWW.EAILABS.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)

eastern analytical, inc.
professional laboratory services

82084

Volatile Organic Analysis
8260B
Initial Calibration and Support Data

Response Factor Report VOAMS5

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Initial Calibration

Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081110.D 20 =SA081111.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
1)	I	Fluorobenzene IS	ISTD							
2)		dichlorodifluor							0.235	11.79
3)	P	chloromethane							0.259	12.69
4)	C	vinyl chloride							0.218	18.67
5)		bromomethane							0.133	15.24
6)		chloroethane							0.153	12.77
7)		trichlorofluoro							0.313	10.42
8)		diethyl ether	0.176	0.162	0.165	0.161	0.159	0.166	0.165	3.31
9)		1,1,2-Trichloro	0.186	0.170	0.178	0.161	0.162	0.170	0.171	5.23
10)		acrolein							0.000#	-1.00
11)		acetone			0.075	0.063	0.058	0.055	0.061#	13.62
12)	CM	1,1-dichloroeth	0.216	0.202	0.196	0.179	0.178	0.186	0.192	7.17
13)		tert-Butyl Alco		0.020	0.020	0.019	0.018	0.018	0.019#	4.26
14)		methylene chlor		0.274	0.239	0.214	0.203	0.215	0.226	11.58
15)		carbon disulfid		0.289	0.283	0.265	0.258	0.284	0.277	4.37
16)		acrylonitrile	0.065	0.062	0.063	0.060	0.059	0.061	0.062#	3.10
17)		Methyl-t-butyl	0.576	0.533	0.539	0.526	0.519	0.546	0.545	3.66
18)		trans-1,2-dichl	0.217	0.204	0.200	0.191	0.189	0.198	0.200	4.71
19)		hexane	0.172	0.162	0.159	0.148	0.149	0.162	0.159	5.31
20)		Isopropyl ether		0.641	0.654	0.639	0.632	0.668	0.651	2.54
21)		vinyl acetate							0.221	11.51
22)	P	1,1-dichloroeth	0.395	0.362	0.368	0.350	0.349	0.365	0.365	4.18
23)		Ethyl-t-butyl e			0.597	0.578	0.571	0.608	0.593	2.99
24)		2,2-dichloropro	0.310	0.303	0.300	0.288	0.284	0.316	0.302	3.94
25)		cis-1,2-dichlor	0.305	0.288	0.287	0.279	0.273	0.287	0.287	3.41
26)		2-butanone (MEK		0.093	0.088	0.086	0.081	0.084	0.086#	4.79
27)		bromochlorometh	0.106	0.102	0.103	0.101	0.099	0.104	0.103	2.47
28)		Tetrahydrofuran			0.057	0.055	0.053	0.053	0.054#	2.84
29)	C	chloroform	0.384	0.359	0.362	0.349	0.342	0.360	0.359	3.65
30)	S	SS Dibromofluor	0.245	0.242	0.243	0.245	0.242	0.242	0.243	0.80
31)		1,1,1-trichloro	0.319	0.299	0.310	0.287	0.293	0.316	0.307	4.33
32)		carbon tetrachl	0.219	0.217	0.225	0.216	0.230	0.259	0.234	9.47
33)		1,1-dichloropro	0.307	0.282	0.295	0.271	0.274	0.294	0.289	4.76
34)	S	SS 1,2-DCA-d4_M	0.307	0.307	0.305	0.308	0.303	0.297	0.305	1.28
35)		tert-amyl methy		0.542	0.557	0.539	0.536	0.569	0.554	3.31
36)	M	benzene	0.878	0.835	0.847	0.809	0.804	0.859	0.845	3.62
37)		1,2-dichloroeth	0.328	0.314	0.315	0.303	0.295	0.307	0.309	3.41
38)	M	trichloroethene	0.241	0.218	0.219	0.205	0.210	0.217	0.219	5.22
39)	C	1,2-dichloropro	0.223	0.210	0.216	0.205	0.201	0.214	0.212	3.45
40)		dibromomethane	0.135	0.130	0.128	0.126	0.123	0.130	0.129	2.82
41)		bromodichlorome	0.262	0.243	0.250	0.252	0.257	0.280	0.262	5.83
42)		2-Chloroethoxye							0.104	11.37
43)		4-methyl-2-pent		0.061	0.063	0.063	0.064	0.068	0.065#	5.87
44)		cis-1,3-dichlor	0.320	0.306	0.320	0.320	0.324	0.360	0.330	6.58
45)	I	Chlorobenzene-D5 IS	ISTD							
46)	S	SS Toluene-d8_M	1.298	1.298	1.311	1.310	1.291	1.293	1.300	0.66
47)	CM	toluene	1.222	1.140	1.176	1.120	1.123	1.204	1.172	3.85
48)		trans-1,3-dichl	0.384	0.364	0.395	0.395	0.403	0.449	0.406	8.07
49)		1,1,2-trichloro	0.213	0.196	0.202	0.198	0.195	0.207	0.203	3.66
50)		2-hexanone		0.167	0.174	0.168	0.167	0.175	0.172	3.39
51)		tetrachloroethe	0.311	0.280	0.288	0.267	0.271	0.291	0.286	5.24
52)		1,3-dichloropro	0.436	0.416	0.423	0.408	0.403	0.429	0.422	3.07
53)		dibromochlorome	0.195	0.185	0.204	0.213	0.224	0.263	0.214	12.81
54)		1,2-dibromoetha	0.248	0.232	0.243	0.237	0.235	0.249	0.243	3.40

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Initial Calibration

Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081110.D 20 =SA081111.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
55)	PM	chlorobenzene	0.824	0.765	0.787	0.756	0.751	0.805	0.787	3.83
56)		1,1,1,2-tetrach	0.234	0.220	0.236	0.236	0.246	0.280	0.249	10.49
57)	C	ethylbenzene	1.352	1.259	1.329	1.263	1.291	1.410	1.336	5.37
58)		mp-xylene	0.529	0.491	0.523	0.506	0.508	0.562	0.528	5.16
59)		o-xylene	0.492	0.468	0.500	0.482	0.489	0.537	0.503	5.90
60)		styrene	0.821	0.809	0.856	0.849	0.855	0.941	0.870	6.70
61)	P	bromoform	0.103	0.094	0.109	0.113	0.128	0.161	0.127	25.26
62)		iso-propylbenze	1.139	1.079	1.144	1.085	1.117	1.225	1.149	5.92
63)	S	SS 4-BFB_MS	0.493	0.497	0.499	0.505	0.504	0.508	0.497	1.50
64)	I	1,4-Dichlorobenzene-D	----------	----------	----------	ISTD	----------	----------	----------	
65)		bromobenzene	0.684	0.617	0.635	0.599	0.590	0.630	0.628	4.97
66)	P	1,1,2,2-tetrach	0.574	0.512	0.533	0.508	0.482	0.531	0.527	5.66
67)		1,2,3-trichloro	0.197	0.174	0.175	0.167	0.162	0.169	0.174	6.43
68)		trans-1,4-dichl							0.000#	-1.00
69)		n-propylbenzene	2.763	2.646	2.689	2.544	2.558	2.749	2.677	3.72
70)		2-chlorotoluene	1.884	1.751	1.801	1.700	1.683	1.790	1.772	3.86
71)		4-chlorotoluene	1.913	1.749	1.823	1.718	1.712	1.849	1.803	4.29
72)		1,3,5-trimethyl	1.922	1.827	1.920	1.813	1.829	1.972	1.900	4.17
73)		tert-butylbenze	1.601	1.484	1.561	1.473	1.483	1.608	1.550	4.48
74)		1,2,4-trimethyl	2.020	1.916	2.020	1.930	1.934	1.973	1.973	2.35
75)		sec-butylbenzen	2.249	2.103	2.180	2.057	2.090	2.278	2.181	4.62
76)		1,3-dichloroben	1.227	1.103	1.170	1.107	1.093	1.180	1.152	4.47
77)		p-isopropyltolu	1.878	1.764	1.870	1.775	1.792	1.976	1.862	4.87
78)		1,4-dichloroben	1.263	1.158	1.185	1.136	1.121	1.198	1.181	4.08
79)		1,2-dichloroben	1.246	1.081	1.129	1.069	1.052	1.127	1.122	5.81
80)		n-butylbenzene	1.675	1.562	1.625	1.544	1.547	1.699	1.623	4.47
81)	S	SS 1,2-DCB-D4_M	0.923	0.913	0.920	1.000	0.904	0.905	0.921	2.56
82)		1,2-dibromo-3-c	0.101	0.081	0.095	0.093	0.097	0.112	0.100#	12.36
83)		1,3,5-trichloro	0.793	0.704	0.735	0.697	0.682	0.739	0.728	5.20
84)		1,2,4-trichloro	0.747	0.646	0.685	0.643	0.642	0.688	0.679	5.68
85)		hexachlorobutad	0.295	0.270	0.261	0.244	0.243	0.264	0.270	9.80
86)		naphthaleneV	1.708	1.429	1.593	1.527	1.527	1.643	1.592	6.59
87)		1,2,3-trichloro	0.694	0.592	0.630	0.593	0.586	0.631	0.624	6.14
88)	S	SS 2,5-DBT_MS	0.233	0.194	0.216	0.203	0.208	0.230	0.217	7.48

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report VOAMS5

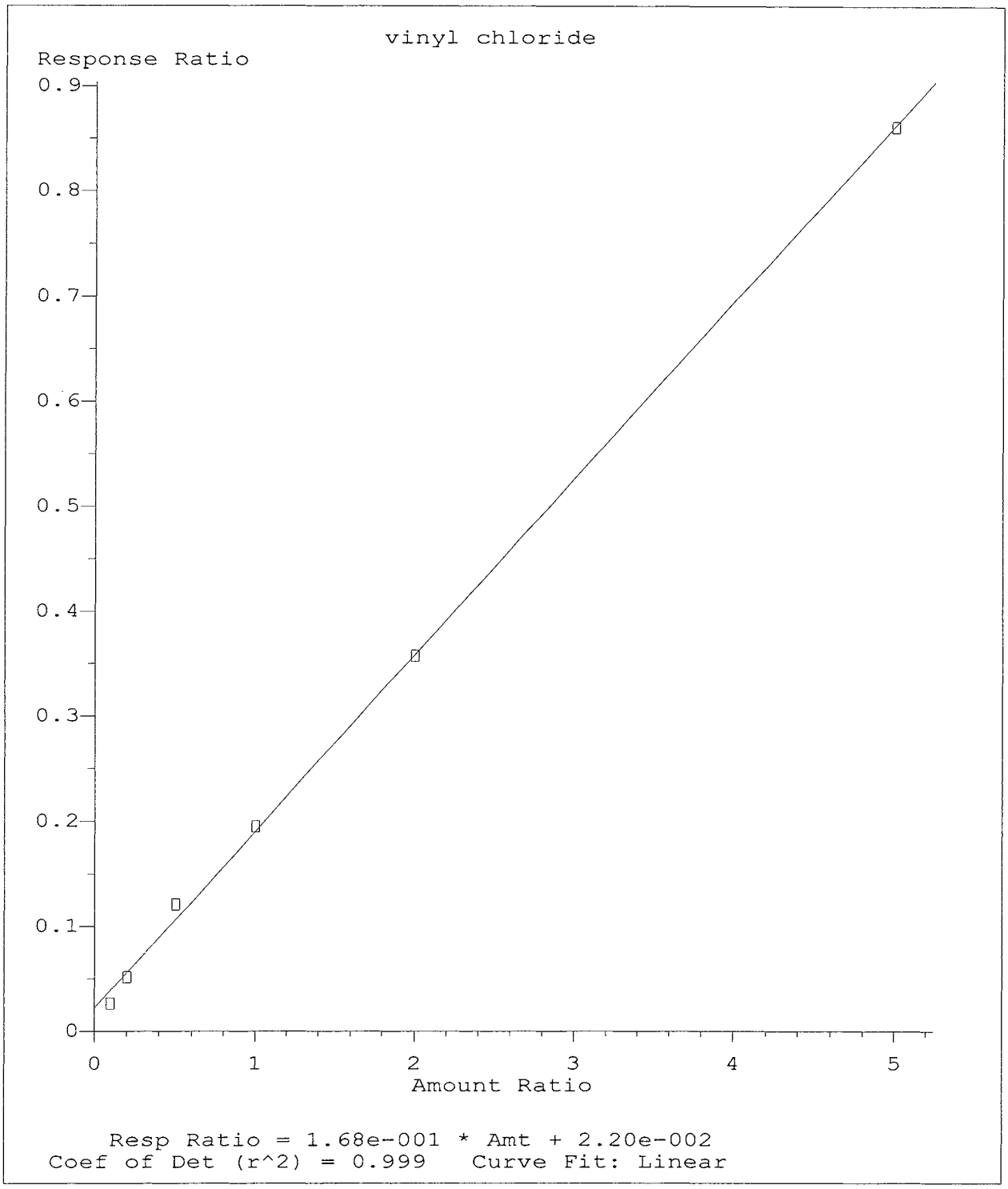
Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Initial Calibration
Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene IS	96	12.24	1.000	A	2	A	B
2		dichlorodifluoromethane	85	2.97	0.243	A	2	A	B
3	P	chloromethane	50	3.32	0.272	A	1	A	B
4	C	vinyl chloride	62	3.48	0.284	L	1	A	B
5		bromomethane	94	4.17	0.341	A	2	A	B
6		chloroethane	64	4.29	0.350	A	2	A	B
7		trichlorofluoromethane	101	4.71	0.384	A	2	A	B
8		diethyl ether	59	5.22	0.427	A	2	A	B
9		1,1,2-Trichlorotrifluoroethane	101	5.48	0.448	A	2	A	B
10		acrolein	56	5.46	0.446	A	1	A	B
11		acetone	43	5.60	0.458	A	1	A	B
12	CM	1,1-dichloroethene	96	5.83	0.477	A	3	A	B
13		tert-Butyl Alcohol (TBA)	59	6.00	0.490	A	1	A	B
14		methylene chloride	84	6.80	0.556	A	2	A	B
15		carbon disulfide	76	6.82	0.557	A	1	A	B
16		acrylonitrile	53	7.07	0.577	A	2	A	B
17		Methyl-t-butyl ether (MTBE)	73	7.10	0.580	A	3	A	B
18		trans-1,2-dichloroethene	96	7.40	0.605	A	3	A	B
19		hexane	57	7.53	0.615	A	3	A	B
20		Isopropyl ether (DIPE)	45	8.07	0.659	A	3	A	B
21		vinyl acetate	43	8.32	0.680	A	1	A	B
22	P	1,1-dichloroethane	63	8.31	0.679	A	2	A	B
23		Ethyl-t-butyl ether (ETBE)	59	8.96	0.732	A	3	A	B
24		2,2-dichloropropane	77	9.53	0.779	A	3	A	B
25		cis-1,2-dichloroethene	61	9.64	0.788	A	3	A	B
26		2-butanone (MEK)	43	9.24	0.755	A	2	A	B
27		bromochloromethane	128	10.36	0.847	A	3	A	B
28		Tetrahydrofuran (THF)	42	10.44	0.853	A	2	A	B
29	C	chloroform	83	9.99	0.817	A	2	A	B
30	S	SS Dibromofluoromethane_MS	111	10.49	0.857	A	2	A	B
31		1,1,1-trichloroethane	97	10.89	0.890	A	3	A	B
32		carbon tetrachloride	117	11.45	0.936	A	3	A	B
33		1,1-dichloropropene	75	11.25	0.919	A	3	A	B
34	S	SS 1,2-DCA-d4_MS	65	11.60	0.948	A	2	A	B
35		tert-amyl methyl ether (TAME)	73	11.51	0.940	A	3	A	B
36	M	benzene	78	11.82	0.966	A	3	A	B
37		1,2-dichloroethane	62	11.80	0.964	A	2	A	B
38	M	trichloroethene	95	12.96	1.059	A	3	A	B
39	C	1,2-dichloropropane	63	13.27	1.085	A	3	A	B
40		dibromomethane	93	13.75	1.123	A	3	A	B
41		bromodichloromethane	83	13.65	1.116	A	3	A	B
42		2-Chloroethoxyethene	63	14.15	1.156	A	3	A	B
43		4-methyl-2-pentanone (MIBK)	58	14.18	1.159	A	3	A	B
44		cis-1,3-dichloropropene	75	14.50	1.185	A	3	A	B
45	I	Chlorobenzene-D5 IS	117	16.88	1.000	A	2	A	B
46	S	SS Toluene-d8_MS	98	14.85	0.880	A	2	A	B
47	CM	toluene	91	14.97	0.887	A	3	A	B
48		trans-1,3-dichloropropene	75	15.22	0.902	A	3	A	B
49		1,1,2-trichloroethane	83	15.44	0.915	A	3	A	B
50		2-hexanone	43	15.44	0.915	A	2	A	B
51		tetrachloroethene	166	15.87	0.940	A	3	A	B
52		1,3-dichloropropane	76	15.78	0.935	A	2	A	B
53		dibromochloromethane	129	16.14	0.956	A	3	A	B
54		1,2-dibromoethane	107	16.40	0.972	A	3	A	B
55	PM	chlorobenzene	112	16.93	1.003	A	2	A	B
56		1,1,1,2-tetrachloroethane	131	16.97	1.005	A	3	A	B
57	C	ethylbenzene	91	16.98	1.006	A	3	A	B
58		mp-xylene	106	17.07	1.011	A	3	A	B
59		o-xylene	106	17.60	1.043	A	3	A	B
60		styrene	104	17.64	1.045	A	3	A	B
61	P	bromoform	173	18.07	1.071	L	3	A	B
62		iso-propylbenzene	105	18.00	1.067	A	3	A	B
63	S	SS 4-BFB_MS	95	18.31	1.085	A	3	A	B

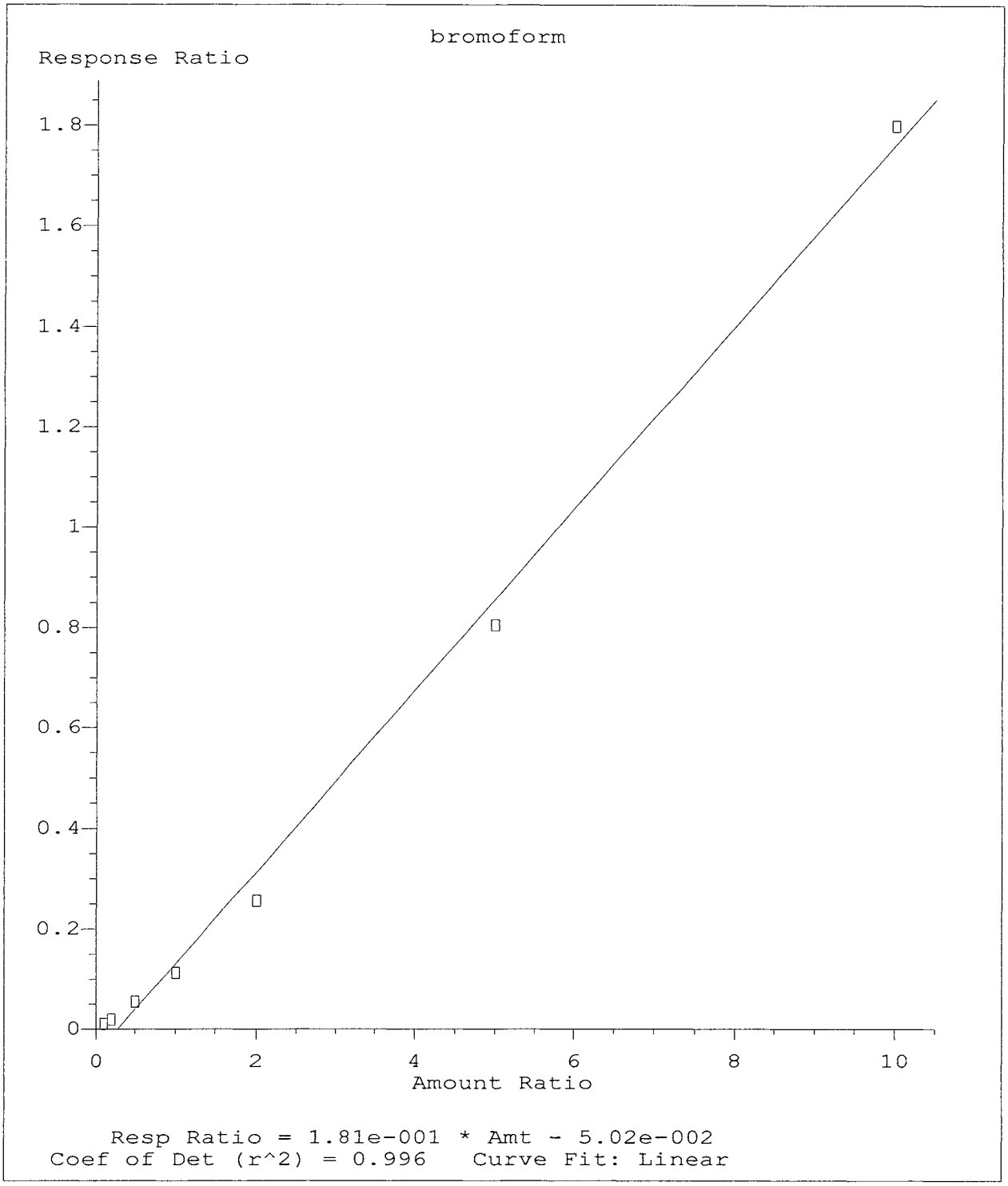
64	I	1,4-Dichlorobenzene-D4 IS	152	19.55	1.000	A	3	A	B
65		bromobenzene	156	18.56	0.949	A	3	A	B
66	P	1,1,2,2-tetrachloroethane	83	18.21	0.932	A	3	A	B
67		1,2,3-trichloropropane	110	18.38	0.940	A	3	A	B
68		trans-1,4-dichloro-2-butene	75	18.31	0.937	A	3	A	B
69		n-propylbenzene	91	18.47	0.945	A	1	A	B
70		2-chlorotoluene	91	18.69	0.956	A	2	A	B
71		4-chlorotoluene	91	18.73	0.958	A	2	A	B
72		1,3,5-trimethylbenzene	105	18.63	0.953	A	3	A	B
73		tert-butylbenzene	119	19.01	0.973	A	3	A	B
74		1,2,4-trimethylbenzene	105	19.05	0.974	A	3	A	B
75		sec-butylbenzene	105	19.23	0.984	A	3	A	B
76		1,3-dichlorobenzeneV	146	19.48	0.997	A	3	A	B
77		p-isopropyltoluene	119	19.35	0.990	A	3	A	B
78		1,4-dichlorobenzeneV	146	19.58	1.002	A	3	A	B
79		1,2-dichlorobenzeneV	146	19.94	1.020	A	3	A	B
80		n-butylbenzene	91	19.73	1.009	A	3	A	B
81	S	SS 1,2-DCB-D4_MS	152	19.91	1.019	A	3	A	B
82		1,2-dibromo-3-chloropropane	157	20.70	1.059	A	3	A	B
83		1,3,5-trichlorobenzV	180	20.93	1.071	A	3	A	B
84		1,2,4-trichlorobenzV	180	21.64	1.107	A	3	A	B
85		hexachlorobutadieneV	225	21.77	1.114	A	3	A	B
86		naphthaleneV	128	21.98	1.124	A	3	A	B
87		1,2,3-trichlorobenzV	180	22.28	1.139	A	3	A	B
88	S	SS 2,5-DBT_MS	250	23.63	1.208	A	3	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

5VID0811.M Thu Sep 03 13:41:48 2009



Method Name: W:\1\METHODS\2009\5VID0811.M
Calibration Table Last Updated: Mon Aug 31 11:47:04 2009



Method Name: W:\1\METHODS\2009\5VID0811.M
Calibration Table Last Updated: Mon Aug 31 11:47:04 2009

IS/SS ID= V- 3522 Added IS/SS

Standard ID= V- 5518B

Analyst: Dave

Gas Standard ID= V- 3520

LCS/LCSD and/or MS/MSD Standard ID= V- 3521, 3514

Date: 8/24/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	SA082401	BFB					VOCMS		Auto Find		✓
2		STD 20					VOCMS	SVID0811	BM↓		✓
3		STD 2					VOCMS				✓
4		MB					VOCMS				✓
5		82039.01		✓		x1	VOCMS				
6		.02		✓			VOCMS				
7		.03		✓			VOCMS				
8		81979.03	✓	✓		x100	VOCMS		toluene + xylenes		
9		82073.01		✓		x1	VOCMS				
10		82084.03		✓			VOCMS				
11		.03MS		✓			VOCMS				
12		.03MSD		✓			VOCMS				
13		82073.02		✓			VOCMS				
14		81992.08	✓	✓		x5	VOCMS				
15		.05	✓	✓		x20	VOCMS				
16		.01		✓		x20	VOCMS				
17		.07		✓		x20	VOCMS				
18		81859.01	✓	✓		x50	VOCMS		VC		
19		81992.09		✓		x50	VOCMS				
20		LCS 20					VOCMS			✓	✓
21		LCSD 20					VOCMS			✓	✓
22		BFB					VOCMS		Auto Find		✓
23		STD 20					VOCMS		BM, 22DCP↓	✓	✓
24		STD 2					VOCMS			✓	✓
25		MB					VOCMS				✓
26		82073.03		✓		x1	VOCMS				
27		.04		✓			VOCMS				
28		.05		✓			VOCMS				
29		.06		✓			VOCMS				
30		82084.04		✓			VOCMS				
31		.05		✓			VOCMS				
32		.06		✓			VOCMS				
33		.07		✓			VOCMS				
34		.08		✓			VOCMS				
35		.13		✓			VOCMS				
36		.14		✓			VOCMS				
37		.17		✓			VOCMS				
38		.18		✓			VOCMS				
39		.19		✓			VOCMS				
40		.20		✓			VOCMS				
41		LCS 20					VOCMS			✓	✓
42		LCSD 20					VOCMS			✓	✓

✓ ✓ ✓

Samples removed from autosampler, order and pH verified by Dave 8/25/09 1-42

BFB

Data File : C:\MSDCHEM\1\DATA\AUG2409\SA082401.D Vial: 1
Acq On : 24 Aug 2009 7:41 am Operator: BAM
Sample : BFB Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.2	15991	PASS
75	95	30	60	51.4	42824	PASS
95	95	100	100	100.0	83253	PASS
96	95	5	9	6.9	5774	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	80.9	67336	PASS
175	174	5	9	7.1	4804	PASS
176	174	95	101	98.5	66357	PASS
177	176	5	9	6.8	4500	PASS

SA082401.D 5VID0811.M Tue Aug 25 09:32:38 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082402.D Vial: 2
Acq On : 24 Aug 2009 8:21 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	116	0.00
2		dichlorodifluoromethane	-1.000	19.063	0.0	0	0.00
3	P	chloromethane	-1.000	16.728	0.0	0	0.00
4	C	vinyl chloride	-1.000	21.157	0.0	0	0.00
5		bromomethane	-1.000	12.786	0.0	0	0.00
6		chloroethane	-1.000	19.683	0.0	0	0.00
7		trichlorofluoromethane	-1.000	20.899	0.0	0	0.00
8		diethyl ether	20.000	20.629	-3.1	124	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	21.082	-5.4	130	0.00
10		acrolein	-1.000	0.000	0.0	0	0.02
11		acetone	20.000	18.897	5.5	117	0.00
12	CM	1,1-dichloroethene	20.000	20.563	-2.8	129	0.00
13		tert-Butyl Alcohol (TBA)	100.000	91.178	8.8	111	0.00
14		methylene chloride	20.000	19.712	1.4	128	0.00
15		carbon disulfide	20.000	21.179	-5.9	132	0.00
16		acrylonitrile	20.000	20.096	-0.5	123	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	37.826	5.4	116	0.00
18		trans-1,2-dichloroethene	20.000	19.453	2.7	120	0.00
19		hexane	20.000	19.585	2.1	122	0.00
20		Isopropyl ether (DIPE)	20.000	19.430	2.9	117	0.00
21		vinyl acetate	-1.000	24.873	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	19.556	2.2	119	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.651	6.7	113	0.00
24		2,2-dichloropropane	20.000	18.005	10.0	111	0.00
25		cis-1,2-dichloroethene	20.000	19.246	3.8	118	0.00
26		2-butanone (MEK)	20.000	18.684	6.6	116	0.00
27		bromochloromethane	20.000	19.480	2.6	118	0.00
28		Tetrahydrofuran (THF)	20.000	19.195	4.0	114	0.00
29	C	chloroform	20.000	19.157	4.2	117	0.00
30	S	SS Dibromofluoromethane_MS	10.000	9.726	2.7	114	0.00
31		1,1,1-trichloroethane	20.000	18.611	6.9	113	0.00
32		carbon tetrachloride	20.000	18.883	5.6	112	0.00
33		1,1-dichloropropene	20.000	19.752	1.2	121	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.767	2.3	114	0.00
35		tert-amyl methyl ether (TAM	20.000	18.681	6.6	112	0.00
36	M	benzene	20.000	19.502	2.5	119	0.00
37		1,2-dichloroethane	20.000	19.415	2.9	118	0.00
38	M	trichloroethene	20.000	19.506	2.5	119	0.00
39	C	1,2-dichloropropane	20.000	19.160	4.2	118	0.00
40		dibromomethane	20.000	19.613	1.9	119	0.00
41		bromodichloromethane	20.000	19.749	1.3	117	0.00
42		2-Chloroethoxyethene	20.000	20.436	-2.2	0	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.230	-1.2	120	0.00
44		cis-1,3-dichloropropene	20.000	19.299	3.5	115	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	116	0.00
46	S	SS Toluene-d8_MS	10.000	9.988	0.1	116	0.00
47	CM	toluene	20.000	20.034	-0.2	121	0.00
48		trans-1,3-dichloropropene	20.000	19.066	4.7	111	0.00
49		1,1,2-trichloroethane	20.000	19.535	2.3	118	0.00
50		2-hexanone	20.000	19.317	3.4	115	0.00
51		tetrachloroethene	20.000	19.608	2.0	120	0.00
52		1,3-dichloropropane	20.000	19.851	0.7	120	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082402.D Vial: 2
Acq On : 24 Aug 2009 8:21 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	21.821	-9.1	121	0.00
54		1,2-dibromoethane	20.000	19.792	1.0	118	0.00
55	PM	chlorobenzene	20.000	19.813	0.9	120	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.539	2.3	114	0.00
57	C	ethylbenzene	20.000	20.093	-0.5	120	0.00
58		mp-xylene	40.000	40.380	-1.0	121	0.00
59		o-xylene	20.000	20.261	-1.3	120	0.00
60		styrene	20.000	20.136	-0.7	119	0.00
61	P	bromoform	20.000	18.039	9.8	125	0.00
62		iso-propylbenzene	20.000	20.233	-1.2	120	0.00
63	S	SS 4-BFB_MS	10.000	10.221	-2.2	117	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	117	0.00
65		bromobenzene	20.000	19.338	3.3	121	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.705	6.5	120	0.00
67		1,2,3-trichloropropane	20.000	18.811	5.9	119	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	19.633	1.8	121	0.00
70		2-chlorotoluene	20.000	19.260	3.7	119	0.00
71		4-chlorotoluene	20.000	18.944	5.3	117	0.00
72		1,3,5-trimethylbenzene	20.000	19.520	2.4	119	0.00
73		tert-butylbenzene	20.000	19.712	1.4	121	0.00
74		1,2,4-trimethylbenzene	20.000	19.982	0.1	120	0.00
75		sec-butylbenzene	20.000	19.763	1.2	121	0.00
76		1,3-dichlorobenzeneV	20.000	19.044	4.8	118	0.00
77		p-isopropyltoluene	20.000	19.780	1.1	121	0.00
78		1,4-dichlorobenzeneV	20.000	19.077	4.6	118	0.00
79		1,2-dichlorobenzeneV	20.000	19.090	4.6	119	0.00
80		n-butylbenzene	20.000	19.545	2.3	120	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.815	1.9	117	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.682	1.6	119	0.00
83		1,3,5-trichlorobenzV	20.000	18.967	5.2	119	0.00
84		1,2,4-trichlorobenzV	20.000	18.729	6.4	116	0.00
85		hexachlorobutadieneV	20.000	17.965	10.2	117	0.00
86		naphthaleneV	20.000	19.299	3.5	118	0.00
87		1,2,3-trichlorobenzV	20.000	18.856	5.7	118	0.00
88	S	SS 2,5-DBT_MS	20.000	17.632	11.8	108	0.00

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082402.D Vial: 2
Acq On : 24 Aug 2009 8:21 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	122	0.00
2		dichlorodifluoromethane	20.000	19.063	4.7	137	0.00
3	P	chloromethane	20.000	16.728	16.4	118	0.00
4	C	vinyl chloride	20.000	21.157	-5.8	129	0.00
5		bromomethane	20.000	12.786	36.1#	88	0.00
6		chloroethane	20.000	19.683	1.6	139	0.00
7		trichlorofluoromethane	20.000	20.899	-4.5	148	0.00
8		diethyl ether	20.000	20.629	-3.1	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	21.082	-5.4	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.02
11		acetone	20.000	18.897	5.5	0	0.00
12	CM	1,1-dichloroethene	20.000	20.563	-2.8	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	91.178	-355.9#	0	0.00
14		methylene chloride	20.000	19.712	1.4	0	0.00
15		carbon disulfide	20.000	21.179	-5.9	0	0.00
16		acrylonitrile	20.000	20.096	-0.5	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	37.826	-89.1#	0	0.00
18		trans-1,2-dichloroethene	20.000	19.453	2.7	0	0.00
19		hexane	20.000	19.585	2.1	0	0.00
20		Isopropyl ether (DIPE)	20.000	19.430	2.9	0	0.00
21		vinyl acetate	20.000	24.873	-24.4#	156	0.00
22	P	1,1-dichloroethane	20.000	19.556	2.2	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.651	6.7	0	0.00
24		2,2-dichloropropane	20.000	18.005	10.0	0	0.00
25		cis-1,2-dichloroethene	20.000	19.246	3.8	0	0.00
26		2-butanone (MEK)	20.000	18.684	6.6	0	0.00
27		bromochloromethane	20.000	19.480	2.6	0	0.00
28		Tetrahydrofuran (THF)	20.000	19.195	4.0	0	0.00
29	C	chloroform	20.000	19.157	4.2	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	9.726	2.7	118	0.00
31		1,1,1-trichloroethane	20.000	18.611	6.9	0	0.00
32		carbon tetrachloride	20.000	18.883	5.6	0	0.00
33		1,1-dichloropropene	20.000	19.752	1.2	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.767	2.3	117	0.00
35		tert-amyl methyl ether (TAM	20.000	18.681	6.6	0	0.00
36	M	benzene	20.000	19.502	2.5	0	0.00
37		1,2-dichloroethane	20.000	19.415	2.9	0	0.00
38	M	trichloroethene	20.000	19.506	2.5	0	0.00
39	C	1,2-dichloropropane	20.000	19.160	4.2	0	0.00
40		dibromomethane	20.000	19.613	1.9	0	0.00
41		bromodichloromethane	20.000	19.749	1.3	0	0.00
42		2-Chloroethoxyethene	20.000	20.436	-2.2	123	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.230	-1.2	0	0.00
44		cis-1,3-dichloropropene	20.000	19.299	3.5	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	120	0.00
46	S	SS Toluene-d8_MS	10.000	9.988	0.1	120	0.00
47	CM	toluene	20.000	20.034	-0.2	0	0.00
48		trans-1,3-dichloropropene	20.000	19.066	4.7	0	0.00
49		1,1,2-trichloroethane	20.000	19.535	2.3	0	0.00
50		2-hexanone	20.000	19.317	3.4	0	0.00
51		tetrachloroethene	20.000	19.608	2.0	0	0.00
52		1,3-dichloropropane	20.000	19.851	0.7	0	0.00

use for gases

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082402.D Vial: 2
Acq On : 24 Aug 2009 8:21 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	21.821	-9.1	0	0.00
54		1,2-dibromoethane	20.000	19.792	1.0	0	0.00
55	PM	chlorobenzene	20.000	19.813	0.9	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.539	2.3	0	0.00
57	C	ethylbenzene	20.000	20.093	-0.5	0	0.00
58		mp-xylene	20.000	40.380	-101.9#	0	0.00
59		o-xylene	20.000	20.261	-1.3	0	0.00
60		styrene	20.000	20.136	-0.7	0	0.00
61	P	bromoform	-1.000	18.039	0.0	0	0.00
62		iso-propylbenzene	20.000	20.233	-1.2	0	0.00
63	S	SS 4-BFB_MS	10.000	10.221	-2.2	124	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	128	0.00
65		bromobenzene	20.000	19.338	3.3	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.705	6.5	0	0.00
67		1,2,3-trichloropropane	20.000	18.811	5.9	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	19.633	1.8	0	0.00
70		2-chlorotoluene	20.000	19.260	3.7	0	0.00
71		4-chlorotoluene	20.000	18.944	5.3	0	0.00
72		1,3,5-trimethylbenzene	20.000	19.520	2.4	0	0.00
73		tert-butylbenzene	20.000	19.712	1.4	0	0.00
74		1,2,4-trimethylbenzene	20.000	19.982	0.1	0	0.00
75		sec-butylbenzene	20.000	19.763	1.2	0	0.00
76		1,3-dichlorobenzeneV	20.000	19.044	4.8	0	0.00
77		p-isopropyltoluene	20.000	19.780	1.1	0	0.00
78		1,4-dichlorobenzeneV	20.000	19.077	4.6	0	0.00
79		1,2-dichlorobenzeneV	20.000	19.090	4.6	0	0.00
80		n-butylbenzene	20.000	19.545	2.3	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.815	1.9	126	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.682	1.6	0	0.00
83		1,3,5-trichlorobenzV	20.000	18.967	5.2	0	0.00
84		1,2,4-trichlorobenzV	20.000	18.729	6.4	0	0.00
85		hexachlorobutadieneV	20.000	17.965	10.2	0	0.00
86		naphthaleneV	20.000	19.299	3.5	0	0.00
87		1,2,3-trichlorobenzV	20.000	18.856	5.7	0	0.00
88	S	SS 2,5-DBT_MS	20.000	17.632	11.8	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2409\SA082402.D
Tune Time : 24 Aug 2009 8:21 am

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2409\SA082402.D

							356455	264871	146163

File	Sample	Surrogate Recovery %				Internal Standard Responses		
SA082402.D	STD 20	97	98	100	102	356455	264871	146163
		98	44*					
SA082403.D	STD 2	97	99	100	98	348912	258431	133837
		99	5*					
SA082404.D	MB	97	100	101	96	337047	248239	126900
		99	0*					
SA082405.D	82039.01	98	100	100	98	334323	249177	132665
		101	0*					
SA082406.D	82039.02	98	101	100	97	343360	256258	129688
		100	0*					
SA082407.D	82039.03	98	102	100	98	333182	248872	127260
		100	0*					
SA082408.D	81979.03	97	100	100	98	333418	247460	132726
		98	0*					
SA082409.D	82073.01	98	101	100	96	327682	242979	122778
		100	0*					
SA082410.D	82084.03	100	102	101	96	325869	242072	123012
		100	0*					
SA082411.D	82084.03 MS	99	98	101	102	338830	250982	137517
		99	0*					
SA082412.D	82084.03 MSD	100	99	101	102	339473	252525	137964
		98	0*					
SA082413.D	82073.02	98	101	102	97	334101	245698	126758
		99	0*					
SA082414.D	81992.08	99	101	102	99	334946	248168	132678
		100	0*					
SA082415.D	81992.05	96	99	101	98	341237	249390	133745
		101	0*					
SA082416.D	81992.01	96	100	101	99	334785	246378	134834
		99	0*					
SA082417.D	81992.07	96	99	101	99	341993	251443	139062
		97	0*					
SA082418.D	81859.01	98	101	100	96	337894	251174	127123
		99	0*					
SA082419.D	81992.09	96	101	101	100	338131	248316	137314
		98	0*					
SA082420.D	LCS 20	98	99	101	102	346157	257588	139886
		98	0*					
SA082421.D	LCSD 20	98	99	101	102	346213	255964	139491
		100	0*					

t - fails 12hr time check * - fails criteria

Created: Tue Aug 25 09:33:25 2009 VOAMS5

tuneeval

BFB

Data File : C:\MSDCHEM\1\DATA\AUG 09\AUG2409\SA082422.D Vial: 22
Acq On : 24 Aug 2009 8:31 pm Operator: BAM
Sample : BFB Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	13251	PASS
75	95	30	60	50.8	35325	PASS
95	95	100	100	100.0	69474	PASS
96	95	5	9	7.0	4830	PASS
173	174	0.00	2	0.2	132	PASS
174	95	50	100	82.1	57053	PASS
175	174	5	9	7.1	4075	PASS
176	174	95	101	98.9	56410	PASS
177	176	5	9	6.5	3680	PASS

SA082422.D 5VID0811.M Tue Sep 01 10:09:24 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082423.D Vial: 23
Acq On : 24 Aug 2009 9:07 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	112	0.00
2		dichlorodifluoromethane	-1.000	19.756	0.0	0	0.00
3	P	chloromethane	-1.000	17.507	0.0	0	0.00
4	C	vinyl chloride	-1.000	21.504	0.0	0	0.00
5		bromomethane	-1.000	11.780	0.0	0	0.00
6		chloroethane	-1.000	20.479	0.0	0	0.00
7		trichlorofluoromethane	-1.000	21.812	0.0	0	0.00
8		diethyl ether	20.000	20.709	-3.5	120	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	21.691	-8.5	128	0.00
10		acrolein	-1.000	0.000	0.0	0	0.03
11		acetone	20.000	20.318	-1.6	121	0.00
12	CM	1,1-dichloroethene	20.000	21.094	-5.5	127	0.00
13		tert-Butyl Alcohol (TBA)	100.000	88.367	11.6	104	0.00
14		methylene chloride	20.000	19.948	0.3	124	0.00
15		carbon disulfide	20.000	21.246	-6.2	127	0.00
16		acrylonitrile	20.000	19.516	2.4	115	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	35.795	10.5	105	0.00
18		trans-1,2-dichloroethene	20.000	19.503	2.5	116	0.00
19		hexane	20.000	16.992	15.0	102	0.00
20		Isopropyl ether (DIPE)	20.000	19.097	4.5	110	0.00
21		vinyl acetate	-1.000	20.684	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	19.818	0.9	116	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.093	9.5	105	0.00
24		2,2-dichloropropane	20.000	11.752	41.2#	70	0.00
25		cis-1,2-dichloroethene	20.000	19.813	0.9	116	0.00
26		2-butanone (MEK)	20.000	17.928	10.4	107	0.00
27		bromochloromethane	20.000	19.849	0.8	115	0.00
28		Tetrahydrofuran (THF)	20.000	18.094	9.5	104	0.00
29	C	chloroform	20.000	19.480	2.6	114	0.00
30	S	SS Dibromofluoromethane_MS	10.000	9.729	2.7	109	0.00
31		1,1,1-trichloroethane	20.000	18.613	6.9	109	0.00
32		carbon tetrachloride	20.000	18.897	5.5	107	0.00
33		1,1-dichloropropene	20.000	20.174	-0.9	119	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.865	1.3	111	0.00
35		tert-amyl methyl ether (TAM	20.000	17.971	10.1	104	0.00
36	M	benzene	20.000	20.084	-0.4	118	0.00
37		1,2-dichloroethane	20.000	19.895	0.5	117	0.00
38	M	trichloroethene	20.000	19.575	2.1	114	0.00
39	C	1,2-dichloropropane	20.000	19.530	2.3	115	0.00
40		dibromomethane	20.000	19.802	1.0	116	0.00
41		bromodichloromethane	20.000	19.640	1.8	112	0.00
42		2-Chloroethoxyethene	20.000	0.012	99.9#	0	0.02
43		4-methyl-2-pentanone (MIBK)	20.000	18.069	9.7	103	0.00
44		cis-1,3-dichloropropene	20.000	17.674	11.6	101	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	111	0.00
46	S	SS Toluene-d8_MS	10.000	10.006	-0.1	112	0.00
47	CM	toluene	20.000	20.329	-1.6	118	0.00
48		trans-1,3-dichloropropene	20.000	17.342	13.3	97	0.00
49		1,1,2-trichloroethane	20.000	19.840	0.8	115	0.00
50		2-hexanone	20.000	18.391	8.0	105	0.00
51		tetrachloroethene	20.000	19.768	1.2	116	0.00
52		1,3-dichloropropane	20.000	19.872	0.6	115	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082423.D Vial: 23
Acq On : 24 Aug 2009 9:07 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	20.913	-4.6	111	0.00
54		1,2-dibromoethane	20.000	19.591	2.0	112	0.00
55	PM	chlorobenzene	20.000	20.230	-1.2	118	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.369	3.2	109	0.00
57	C	ethylbenzene	20.000	20.692	-3.5	119	0.00
58		mp-xylene	40.000	41.389	-3.5	119	0.00
59		o-xylene	20.000	20.588	-2.9	117	0.00
60		styrene	20.000	20.410	-2.1	115	0.00
61	P	bromoform	20.000	17.007	15.0	112	0.00
62		iso-propylbenzene	20.000	20.776	-3.9	119	0.00
63	S	SS 4-BFB_MS	10.000	10.111	-1.1	111	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	113	0.00
65		bromobenzene	20.000	19.643	1.8	118	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.603	7.0	114	0.00
67		1,2,3-trichloropropane	20.000	18.368	8.2	111	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.019	-0.1	118	0.00
70		2-chlorotoluene	20.000	19.903	0.5	118	0.00
71		4-chlorotoluene	20.000	19.308	3.5	114	0.00
72		1,3,5-trimethylbenzene	20.000	19.996	0.0	117	0.00
73		tert-butylbenzene	20.000	20.443	-2.2	120	0.00
74		1,2,4-trimethylbenzene	20.000	20.483	-2.4	118	0.00
75		sec-butylbenzene	20.000	20.355	-1.8	120	0.00
76		1,3-dichlorobenzeneV	20.000	19.653	1.7	117	0.00
77		p-isopropyltoluene	20.000	20.025	-0.1	117	0.00
78		1,4-dichlorobenzeneV	20.000	19.502	2.5	116	0.00
79		1,2-dichlorobenzeneV	20.000	19.326	3.4	116	0.00
80		n-butylbenzene	20.000	19.592	2.0	116	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.751	2.5	112	0.00
82		1,2-dibromo-3-chloropropane	20.000	17.978	10.1	105	0.00
83		1,3,5-trichlorobenzV	20.000	18.898	5.5	114	0.00
84		1,2,4-trichlorobenzV	20.000	18.697	6.5	111	0.00
85		hexachlorobutadieneV	20.000	18.269	8.7	114	0.00
86		naphthaleneV	20.000	18.946	5.3	111	0.00
87		1,2,3-trichlorobenzV	20.000	18.902	5.5	113	0.00
88	S	SS 2,5-DBT_MS	20.000	17.374	13.1	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082423.D Vial: 23
Acq On : 24 Aug 2009 9:07 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	117	0.00
2		dichlorodifluoromethane	20.000	19.756	1.2	136	0.00
3	P	chloromethane	20.000	17.507	12.5	118	0.00
4	C	vinyl chloride	20.000	21.504	-7.5	126	0.00
5		bromomethane	20.000	11.780	41.1#	78	0.00
6		chloroethane	20.000	20.479	-2.4	139	0.00
7		trichlorofluoromethane	20.000	21.812	-9.1	148	0.00
8		diethyl ether	20.000	20.709	-3.5	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	21.691	-8.5	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.03
11		acetone	20.000	20.318	-1.6	0	0.00
12	CM	1,1-dichloroethene	20.000	21.094	-5.5	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	88.367	-341.8#	0	0.00
14		methylene chloride	20.000	19.948	0.3	0	0.00
15		carbon disulfide	20.000	21.246	-6.2	0	0.00
16		acrylonitrile	20.000	19.516	2.4	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	35.795	-79.0#	0	0.00
18		trans-1,2-dichloroethene	20.000	19.503	2.5	0	0.00
19		hexane	20.000	16.992	15.0	0	0.00
20		Isopropyl ether (DIPE)	20.000	19.097	4.5	0	0.00
21		vinyl acetate	20.000	20.684	-3.4	125	0.00
22	P	1,1-dichloroethane	20.000	19.818	0.9	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	18.093	9.5	0	0.00
24		2,2-dichloropropane	20.000	11.752	41.2#	0	0.00
25		cis-1,2-dichloroethene	20.000	19.813	0.9	0	0.00
26		2-butanone (MEK)	20.000	17.928	10.4	0	0.00
27		bromochloromethane	20.000	19.849	0.8	0	0.00
28		Tetrahydrofuran (THF)	20.000	18.094	9.5	0	0.00
29	C	chloroform	20.000	19.480	2.6	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	9.729	2.7	113	0.00
31		1,1,1-trichloroethane	20.000	18.613	6.9	0	0.00
32		carbon tetrachloride	20.000	18.897	5.5	0	0.00
33		1,1-dichloropropene	20.000	20.174	-0.9	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.865	1.3	113	0.00
35		tert-amyl methyl ether (TAM	20.000	17.971	10.1	0	0.00
36	M	benzene	20.000	20.084	-0.4	0	0.00
37		1,2-dichloroethane	20.000	19.895	0.5	0	0.00
38	M	trichloroethene	20.000	19.575	2.1	0	0.00
39	C	1,2-dichloropropane	20.000	19.530	2.3	0	0.00
40		dibromomethane	20.000	19.802	1.0	0	0.00
41		bromodichloromethane	20.000	19.640	1.8	0	0.00
42		2-Chloroethoxyethene	20.000	0.012	99.9#	0	0.02
43		4-methyl-2-pentanone (MIBK)	20.000	18.069	9.7	0	0.00
44		cis-1,3-dichloropropene	20.000	17.674	11.6	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	115	0.00
46	S	SS Toluene-d8_MS	10.000	10.006	-0.1	116	0.00
47	CM	toluene	20.000	20.329	-1.6	0	0.00
48		trans-1,3-dichloropropene	20.000	17.342	13.3	0	0.00
49		1,1,2-trichloroethane	20.000	19.840	0.8	0	0.00
50		2-hexanone	20.000	18.391	8.0	0	0.00
51		tetrachloroethene	20.000	19.768	1.2	0	0.00
52		1,3-dichloropropane	20.000	19.872	0.6	0	0.00

use for 502 gases

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2409\SA082423.D Vial: 23
Acq On : 24 Aug 2009 9:07 pm Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL; Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	20.913	-4.6	0	0.00
54		1,2-dibromoethane	20.000	19.591	2.0	0	0.00
55	PM	chlorobenzene	20.000	20.230	-1.2	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	19.369	3.2	0	0.00
57	C	ethylbenzene	20.000	20.692	-3.5	0	0.00
58		mp-xylene	20.000	41.389	-106.9#	0	0.00
59		o-xylene	20.000	20.588	-2.9	0	0.00
60		styrene	20.000	20.410	-2.1	0	0.00
61	P	bromoform	-1.000	17.007	0.0	0	0.00
62		iso-propylbenzene	20.000	20.776	-3.9	0	0.00
63	S	SS 4-BFB_MS	10.000	10.111	-1.1	118	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	123	0.00
65		bromobenzene	20.000	19.643	1.8	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.603	7.0	0	0.00
67		1,2,3-trichloropropane	20.000	18.368	8.2	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.019	-0.1	0	0.00
70		2-chlorotoluene	20.000	19.903	0.5	0	0.00
71		4-chlorotoluene	20.000	19.308	3.5	0	0.00
72		1,3,5-trimethylbenzene	20.000	19.996	0.0	0	0.00
73		tert-butylbenzene	20.000	20.443	-2.2	0	0.00
74		1,2,4-trimethylbenzene	20.000	20.483	-2.4	0	0.00
75		sec-butylbenzene	20.000	20.355	-1.8	0	0.00
76		1,3-dichlorobenzeneV	20.000	19.653	1.7	0	0.00
77		p-isopropyltoluene	20.000	20.025	-0.1	0	0.00
78		1,4-dichlorobenzeneV	20.000	19.502	2.5	0	0.00
79		1,2-dichlorobenzeneV	20.000	19.326	3.4	0	0.00
80		n-butylbenzene	20.000	19.592	2.0	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.751	2.5	120	0.00
82		1,2-dibromo-3-chloropropane	20.000	17.978	10.1	0	0.00
83		1,3,5-trichlorobenzV	20.000	18.898	5.5	0	0.00
84		1,2,4-trichlorobenzV	20.000	18.697	6.5	0	0.00
85		hexachlorobutadieneV	20.000	18.269	8.7	0	0.00
86		naphthaleneV	20.000	18.946	5.3	0	0.00
87		1,2,3-trichlorobenzV	20.000	18.902	5.5	0	0.00
88	S	SS 2,5-DBT_MS	20.000	17.374	13.1	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
SA082423.D 5VID0811.M Thu Sep 03 13:44:21 2009 Page 67

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2409\SA082422.D
Tune Time : 24 Aug 2009 8:31 pm

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2409\SA082423.D

342186 254293 140218

File	Sample	Surrogate Recovery %				Internal Standard Responses		
SA082423.D	STD 20	97	99	100	101	342186	254293	140218
		98	43*					
SA082424.D	STD 2	98	102	101	99	337259	249427	130777
		99	4*					
SA082425.D	MB	97	100	101	95	332065	244408	122192
		100	0*					
SA082426.D	82073.03	100	103	101	97	321324	237968	120804
		101	0*					
SA082427.D	82073.04	100	104	100	95	316359	238252	120455
		100	0*					
SA082428.D	82073.05	99	103	101	96	317193	235167	119440
		100	0*					
SA082429.D	82073.06	100	103	100	95	310846	232071	116115
		101	0*					
SA082430.D	82084.04	101	103	101	96	308826	229751	117149
		101	0*					
SA082431.D	82084.05	102	101	100	95	308244	229784	116043
		101	0*					
SA082432.D	82084.06	101	105	100	95	306107	228906	114859
		101	0*					
SA082433.D	82084.07	102	103	101	97	313321	232968	121608
		98	0*					
SA082434.D	82084.08	102	102	101	97	308369	230274	119419
		100	0*					
SA082435.D	82084.13	101	104	101	95	303704	226771	114201
		101	0*					
SA082436.D	82084.14	101	103	101	95	303848	224804	113708
		102	0*					
SA082437.D	82084.17	101	104	101	94	298730	222911	112918
		101	0*					
SA082438.D	82084.18	101	104	101	94	296511	223269	111009
		101	0*					
SA082439.D	82084.19	103	103	101	97	298013	221446	115438
		100	0*					
SA082440.D	82084.20	101	105	100	94	299146	224022	112118
		102	0*					
SA082441.D	LCS 20	102	103	101	102	308193	233453	130519
		99	0*					
SA082442.D	LCSD 20	100	101	100	103	320365	239121	132504
		98	0*					

t - fails 12hr time check * - fails criteria

Created: Thu Aug 27 12:43:25 2009 VOAMS5

IS/SS ID= V- 3522 Added IS/SS

Standard ID= V- 3518B

Analyst: [illegible] Gas Standard ID= V- 3520

LCS/LCSD and/or MS/MSD Standard ID= V- 5521, 3525 (New 20 GAS)

Date: 8/27/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	SA082701	BFB					VOCMS		Auto Find		✓
2		STD20					VOCMS	5V1D0811	BMV		✓
3		STD2					VOCMS				✓
4		MB					VOCMS				✓
5		LCS 20					VOCMS			✓	✓
6		LCSD 20					VOCMS			✓	✓
7		82095.16		✓		x1	VOCMS		TB		
8		82117.03		✓			VOCMS				
9		.01 .02 [illegible]		✓			VOCMS				
10		.02		✓		"	VOCMS				
11		Blank [illegible]	✓	✓		x1	VOCMS				
12		82117.02	✓	✓		x10	VOCMS				
13		"	✓	✓		x50	VOCMS				
14		Blank					VOCMS				
15		82084.33	✓	✓		x1	VOCMS		82084.29 RRx1		
16		.32	✓	✓			VOCMS		82187.01 x1		
17		.31	✓	✓			VOCMS		.02		
18		.29	✓	✓			VOCMS		.03		
19		.24	✓	✓			VOCMS		.04		
20		.22 [illegible]		✓			VOCMS		Blank		
21		.21		✓			VOCMS		"		
22		BFB					VOCMS		Auto Find		✓
23		STD20					VOCMS			✓	✓
24		STD2					VOCMS			✓	✓
25		MB					VOCMS				✓
26		LCS 20					VOCMS			✓	✓
27		LCSD 20					VOCMS			✓	✓
28		82095.01		✓		X20	VOCMS		RRx1		
29		.02		✓			VOCMS				
30		.03		✓			VOCMS				
31		.04		✓			VOCMS				
32		.05		✓			VOCMS				
33		.06		✓			VOCMS				
34		.07		✓			VOCMS		RRx2		
35		.08		✓			VOCMS				
36		.09		✓			VOCMS		RRx2		
37		.10		✓			VOCMS		RRx100		
38		.11		✓			VOCMS		RRx20 ?d/o		
39		.12		✓			VOCMS		RRx2		
40		.13		✓			VOCMS		RRx2		
41		.14		✓			VOCMS		RRx5		
42		.15		✓		—	VOCMS		RRx1		

✓ ✓ ✓

Samples removed from autosampler, order and pH verified by [illegible] 8/28/09 1-42

tuneeval

BFB

Data File : C:\MSDCHEM\1\DATA\AUG 09\AUG2709\SA082701.D Vial: 1
Acq On : 27 Aug 2009 7:41 am Operator: BAM
Sample : BFB Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	13202	PASS
75	95	30	60	50.3	35466	PASS
95	95	100	100	100.0	70501	PASS
96	95	5	9	7.2	5061	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.3	58730	PASS
175	174	5	9	7.3	4276	PASS
176	174	95	101	97.2	57104	PASS
177	176	5	9	6.6	3786	PASS

SA082701.D 5VID0811.M Mon Aug 31 15:34:57 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2709\SA082702.D Vial: 2
Acq On : 27 Aug 2009 8:17 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	117	0.00
2		dichlorodifluoromethane	-1.000	19.648	0.0	0	0.00
3	P	chloromethane	-1.000	17.039	0.0	0	0.00
4	C	vinyl chloride	-1.000	19.871	0.0	0	0.00
5		bromomethane	-1.000	8.786	0.0	0	-0.01
6		chloroethane	-1.000	20.356	0.0	0	0.00
7		trichlorofluoromethane	-1.000	21.759	0.0	0	0.00
8		diethyl ether	20.000	20.379	-1.9	123	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.956	-14.8	142	0.00
10		acrolein	-1.000	0.000	0.0	0	0.03
11		acetone	20.000	19.761	1.2	123	0.00
12	CM	1,1-dichloroethene	20.000	21.249	-6.2	134	0.00
13		tert-Butyl Alcohol (TBA)	100.000	92.549	7.5	114	0.00
14		methylene chloride	20.000	21.219	-6.1	138	0.00
15		carbon disulfide	20.000	22.218	-11.1	139	0.00
16		acrylonitrile	20.000	20.688	-3.4	127	0.00
17		Methyl-t-butyl ether (MTBE)	40.000	35.953	10.1	110	0.00
18		trans-1,2-dichloroethene	20.000	19.840	0.8	123	0.00
19		hexane	20.000	19.410	2.9	122	0.00
20		Isopropyl ether (DIPE)	20.000	18.703	6.5	113	0.00
21		vinyl acetate	-1.000	23.614	0.0	0	0.00
22	P	1,1-dichloroethane	20.000	20.392	-2.0	125	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	17.590	12.1	107	0.00
24		2,2-dichloropropane	20.000	17.398	13.0	108	0.00
25		cis-1,2-dichloroethene	20.000	19.786	1.1	122	0.00
26		2-butanone (MEK)	20.000	18.328	8.4	115	0.00
27		bromochloromethane	20.000	21.029	-5.1	128	0.00
28		Tetrahydrofuran (THF)	20.000	17.937	10.3	107	0.00
29	C	chloroform	20.000	20.226	-1.1	124	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.025	-0.3	118	0.00
31		1,1,1-trichloroethane	20.000	19.398	3.0	119	0.00
32		carbon tetrachloride	20.000	20.397	-2.0	121	0.00
33		1,1-dichloropropene	20.000	19.848	0.8	123	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.794	2.1	115	0.00
35		tert-amyl methyl ether (TAM	20.000	17.831	10.8	108	0.00
36	M	benzene	20.000	21.074	-5.4	129	0.00
37		1,2-dichloroethane	20.000	20.338	-1.7	125	0.00
38	M	trichloroethene	20.000	20.018	-0.1	122	0.00
39	C	1,2-dichloropropane	20.000	19.829	0.9	122	0.00
40		dibromomethane	20.000	20.501	-2.5	125	0.00
41		bromodichloromethane	20.000	20.663	-3.3	123	0.00
42		2-Chloroethoxyethene	20.000	18.828	5.9	0	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.468	-2.3	122	0.00
44		cis-1,3-dichloropropene	20.000	19.544	2.3	117	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	117	0.00
46	S	SS Toluene-d8_MS	10.000	10.134	-1.3	119	0.00
47	CM	toluene	20.000	21.026	-5.1	128	0.00
48		trans-1,3-dichloropropene	20.000	19.200	4.0	113	0.00
49		1,1,2-trichloroethane	20.000	21.174	-5.9	129	0.00
50		2-hexanone	20.000	19.173	4.1	116	0.00
51		tetrachloroethene	20.000	21.644	-8.2	134	0.00
52		1,3-dichloropropane	20.000	20.666	-3.3	126	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2709\SA082702.D Vial: 2
Acq On : 27 Aug 2009 8:17 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	23.429	-17.1	131	0.00
54		1,2-dibromoethane	20.000	20.508	-2.5	124	0.00
55	PM	chlorobenzene	20.000	21.196	-6.0	130	0.00
56		1,1,1,2-tetrachloroethane	20.000	21.651	-8.3	128	0.00
57	C	ethylbenzene	20.000	21.446	-7.2	130	0.00
58		mp-xylene	40.000	43.407	-8.5	132	0.00
59		o-xylene	20.000	21.447	-7.2	129	0.00
60		styrene	20.000	21.828	-9.1	130	0.00
61	P	bromoform	20.000	19.606	2.0	139	0.00
62		iso-propylbenzene	20.000	21.702	-8.5	131	0.00
63	S	SS 4-BFB_MS	10.000	10.181	-1.8	118	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	125	0.00
65		bromobenzene	20.000	20.155	-0.8	135	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.906	5.5	130	0.00
67		1,2,3-trichloropropane	20.000	19.272	3.6	130	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.055	-0.3	132	0.00
70		2-chlorotoluene	20.000	19.879	0.6	131	0.00
71		4-chlorotoluene	20.000	19.540	2.3	129	0.00
72		1,3,5-trimethylbenzene	20.000	20.200	-1.0	132	0.00
73		tert-butylbenzene	20.000	20.186	-0.9	132	0.00
74		1,2,4-trimethylbenzene	20.000	20.621	-3.1	132	0.00
75		sec-butylbenzene	20.000	20.544	-2.7	134	0.00
76		1,3-dichlorobenzeneV	20.000	20.467	-2.3	135	0.00
77		p-isopropyltoluene	20.000	20.669	-3.3	135	0.00
78		1,4-dichlorobenzeneV	20.000	20.321	-1.6	134	0.00
79		1,2-dichlorobenzeneV	20.000	20.321	-1.6	136	0.00
80		n-butylbenzene	20.000	20.322	-1.6	134	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.895	1.1	127	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.886	0.6	129	0.00
83		1,3,5-trichlorobenzV	20.000	19.821	0.9	133	0.00
84		1,2,4-trichlorobenzV	20.000	19.657	1.7	130	0.00
85		hexachlorobutadieneV	20.000	19.442	2.8	136	0.00
86		naphthaleneV	20.000	19.317	3.4	126	0.00
87		1,2,3-trichlorobenzV	20.000	19.819	0.9	132	0.00
88	S	SS 2,5-DBT_MS	20.000	18.773	6.1	123	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2709\SA082702.D Vial: 2
Acq On : 27 Aug 2009 8:17 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	123	0.00
2		dichlorodifluoromethane	20.000	19.648	1.8	142	0.00
3	P	chloromethane	20.000	17.039	14.8	121	0.00
4	C	vinyl chloride	20.000	19.871	0.6	122	0.00
5		bromomethane	20.000	8.786	56.1#	61	-0.01
6		chloroethane	20.000	20.356	-1.8	145	0.00
7		trichlorofluoromethane	20.000	21.759	-8.8	154	0.00
8		diethyl ether	20.000	20.379	-1.9	0	0.00
9		1,1,2-Trichlorotrifluoroeth	20.000	22.956	-14.8	0	0.00
10		acrolein	20.000	0.000	100.0#	0	0.03
11		acetone	20.000	19.761	1.2	0	0.00
12	CM	1,1-dichloroethene	20.000	21.249	-6.2	0	0.00
13		tert-Butyl Alcohol (TBA)	20.000	92.549	-362.7#	0	0.00
14		methylene chloride	20.000	21.219	-6.1	0	0.00
15		carbon disulfide	20.000	22.218	-11.1	0	0.00
16		acrylonitrile	20.000	20.688	-3.4	0	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	35.953	-79.8#	0	0.00
18		trans-1,2-dichloroethene	20.000	19.840	0.8	0	0.00
19		hexane	20.000	19.410	2.9	0	0.00
20		Isopropyl ether (DIPE)	20.000	18.703	6.5	0	0.00
21		vinyl acetate	20.000	23.614	-18.1	149	0.00
22	P	1,1-dichloroethane	20.000	20.392	-2.0	0	0.00
23		Ethyl-t-butyl ether (ETBE)	20.000	17.590	12.1	0	0.00
24		2,2-dichloropropane	20.000	17.398	13.0	0	0.00
25		cis-1,2-dichloroethene	20.000	19.786	1.1	0	0.00
26		2-butanone (MEK)	20.000	18.328	8.4	0	0.00
27		bromochloromethane	20.000	21.029	-5.1	0	0.00
28		Tetrahydrofuran (THF)	20.000	17.937	10.3	0	0.00
29	C	chloroform	20.000	20.226	-1.1	0	0.00
30	S	SS Dibromofluoromethane_MS	10.000	10.025	-0.3	122	0.00
31		1,1,1-trichloroethane	20.000	19.398	3.0	0	0.00
32		carbon tetrachloride	20.000	20.397	-2.0	0	0.00
33		1,1-dichloropropene	20.000	19.848	0.8	0	0.00
34	S	SS 1,2-DCA-d4_MS	10.000	9.794	2.1	118	0.00
35		tert-amyl methyl ether (TAM	20.000	17.831	10.8	0	0.00
36	M	benzene	20.000	21.074	-5.4	0	0.00
37		1,2-dichloroethane	20.000	20.338	-1.7	0	0.00
38	M	trichloroethene	20.000	20.018	-0.1	0	0.00
39	C	1,2-dichloropropane	20.000	19.829	0.9	0	0.00
40		dibromomethane	20.000	20.501	-2.5	0	0.00
41		bromodichloromethane	20.000	20.663	-3.3	0	0.00
42		2-Chloroethoxyethene	20.000	18.828	5.9	114	0.00
43		4-methyl-2-pentanone (MIBK)	20.000	20.468	-2.3	0	0.00
44		cis-1,3-dichloropropene	20.000	19.544	2.3	0	0.00
45	I	Chlorobenzene-D5 IS	10.000	10.000	0.0	122	0.00
46	S	SS Toluene-d8_MS	10.000	10.134	-1.3	123	0.00
47	CM	toluene	20.000	21.026	-5.1	0	0.00
48		trans-1,3-dichloropropene	20.000	19.200	4.0	0	0.00
49		1,1,2-trichloroethane	20.000	21.174	-5.9	0	0.00
50		2-hexanone	20.000	19.173	4.1	0	0.00
51		tetrachloroethene	20.000	21.644	-8.2	0	0.00
52		1,3-dichloropropane	20.000	20.666	-3.3	0	0.00

(#) = Out of Range

use for gases

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2709\SA082702.D Vial: 2
Acq On : 27 Aug 2009 8:17 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5VID0811.M (RTE Integrator)
Title : VOAMS5 08/11/09
Last Update : Mon Aug 31 11:47:04 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
53		dibromochloromethane	20.000	23.429	-17.1	0	0.00
54		1,2-dibromoethane	20.000	20.508	-2.5	0	0.00
55	PM	chlorobenzene	20.000	21.196	-6.0	0	0.00
56		1,1,1,2-tetrachloroethane	20.000	21.651	-8.3	0	0.00
57	C	ethylbenzene	20.000	21.446	-7.2	0	0.00
58		mp-xylene	20.000	43.407	-117.0#	0	0.00
59		o-xylene	20.000	21.447	-7.2	0	0.00
60		styrene	20.000	21.828	-9.1	0	0.00
61	P	bromoform	-1.000	19.606	0.0	0	0.00
62		iso-propylbenzene	20.000	21.702	-8.5	0	0.00
63	S	SS 4-BFB_MS	10.000	10.181	-1.8	125	0.00
64	I	1,4-Dichlorobenzene-D4 IS	10.000	10.000	0.0	137	0.00
65		bromobenzene	20.000	20.155	-0.8	0	0.00
66	P	1,1,2,2-tetrachloroethane	20.000	18.906	5.5	0	0.00
67		1,2,3-trichloropropane	20.000	19.272	3.6	0	0.00
68		trans-1,4-dichloro-2-butene	20.000	0.000	100.0#	0	0.00
69		n-propylbenzene	20.000	20.055	-0.3	0	0.00
70		2-chlorotoluene	20.000	19.879	0.6	0	0.00
71		4-chlorotoluene	20.000	19.540	2.3	0	0.00
72		1,3,5-trimethylbenzene	20.000	20.200	-1.0	0	0.00
73		tert-butylbenzene	20.000	20.186	-0.9	0	0.00
74		1,2,4-trimethylbenzene	20.000	20.621	-3.1	0	0.00
75		sec-butylbenzene	20.000	20.544	-2.7	0	0.00
76		1,3-dichlorobenzeneV	20.000	20.467	-2.3	0	0.00
77		p-isopropyltoluene	20.000	20.669	-3.3	0	0.00
78		1,4-dichlorobenzeneV	20.000	20.321	-1.6	0	0.00
79		1,2-dichlorobenzeneV	20.000	20.321	-1.6	0	0.00
80		n-butylbenzene	20.000	20.322	-1.6	0	0.00
81	S	SS 1,2-DCB-D4_MS	10.000	9.895	1.1	135	0.00
82		1,2-dibromo-3-chloropropane	20.000	19.886	0.6	0	0.00
83		1,3,5-trichlorobenzV	20.000	19.821	0.9	0	0.00
84		1,2,4-trichlorobenzV	20.000	19.657	1.7	0	0.00
85		hexachlorobutadieneV	20.000	19.442	2.8	0	0.00
86		naphthaleneV	20.000	19.317	3.4	0	0.00
87		1,2,3-trichlorobenzV	20.000	19.819	0.9	0	0.00
88	S	SS 2,5-DBT_MS	20.000	18.773	6.1	0	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2709\SA082701.D
Tune Time : 27 Aug 2009 7:41 am

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG2709\SA082702.D

358133 268244 156227

File	Sample	Surrogate Recovery %				Internal Standard Responses		
SA082702.D	STD 20	100	98	101	102	358133	268244	156227
		99	47*					
SA082703.D	STD 2	99	100	100	95	355476	265023	143072
		99	4*					
SA082704.D	BlnkA082	100	101	100	91	340703	255640	131256
		101	0*					
SA082705.D	LCSaA082	100	97	101	100	361701	271877	154800
		99	0*					
SA082706.D	LCSDA082	100	97	100	99	368253	277369	157703
		98	0*					
SA082707.D	82095.16	100	100	101	91	356164	267399	135876
		101	0*					
SA082708.D	82117.03	100	100	100	92	348212	259888	131830
		101	0*					
SA082709.D	82117.01	101	100	100	91	343959	257007	129555
		101	0*					
SA082710.D	82117.02	89	97	101	100	459227	329051	183165
		102	0*					
SA082711.D	BLANK	93	91	100	94	418543	307922	160653
		97	0*					
SA082712.D	82117.02	92	91	100	96	423189	311976	179325
		97	0*					
SA082713.D	82117.02	95	92	100	96	407491	303722	167851
		97	0*					
SA082714.D	BLANK	96	94	99	93	396997	297420	153647
		100	0*					
SA082715.D	82084.29	96	95	100	93	384535	286213	147680
		100	0*					
SA082716.D	82187.01	96	95	100	93	375152	278615	142781
		100	0*					
SA082717.D	82187.02	97	97	100	93	369468	275124	142146
		100	0*					
SA082718.D	82187.03	99	97	99	99	351810	271657	148669
		100	0*					
SA082719.D	82187.04	97	96	100	94	374395	277769	143992
		100	0*					

t - fails 12hr time check * - fails criteria

Created: Fri Aug 28 08:01:43 2009 VOAMS5

eastern analytical, inc.
professional laboratory services

82084

Volatile Organic Analysis
524.2
Initial Calibration and Support Data

Response Factor Report VOAMS5

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Initial Calibration

Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081302.D 20 =SA081111.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
1)	I	Fluorobenzene IS	----------ISTD----------							
2)		dichlorodifluor							0.237	10.88
3)		chloromethane							0.273	15.28
4)		vinyl chloride							0.223	17.67
5)		bromomethane							0.138	21.40
6)		chloroethane							0.156	12.00
7)		trichlorofluoro							0.314	9.59
8)		diethyl ether	0.176	0.162	0.165	0.160	0.159	0.165	0.165	3.30
9)		1,1,2-Trichloro	0.187	0.170	0.178	0.161	0.161	0.170	0.174	7.17
10)		acrolein							0.000#	-1.00
11)		acetone			0.075	0.063	0.058	0.056	0.062#	13.19
12)		1,1-dichloroeth	0.216	0.202	0.196	0.177	0.178	0.186	0.198	10.96
13)		tert-Butyl Alco		0.020	0.020	0.019	0.018	0.018	0.019#	4.24
14)		methylene chlor	0.281	0.274	0.239	0.213	0.203	0.215	0.238	13.15
15)		carbon disulfid	0.303	0.289	0.283	0.264	0.259	0.285	0.283	5.63
16)		acrylonitrile	0.065	0.062	0.063	0.061	0.059	0.061	0.062#	3.00
17)		Methyl-t-butyl	0.579	0.532	0.539	0.525	0.518	0.546	0.547	3.68
18)		trans-1,2-dichl	0.218	0.204	0.201	0.191	0.189	0.198	0.203	5.80
19)		hexane	0.172	0.162	0.159	0.148	0.149	0.162	0.164	8.68
20)		Isopropyl ether	0.697	0.641	0.654	0.639	0.631	0.667	0.664	4.32
21)		vinyl acetate							0.221	11.36
22)		1,1-dichloroeth	0.395	0.362	0.368	0.349	0.349	0.365	0.370	5.52
23)		Ethyl-t-butyl e	0.623	0.592	0.597	0.578	0.572	0.608	0.601	3.28
24)		2,2-dichloropro	0.310	0.303	0.301	0.288	0.285	0.315	0.306	5.02
25)		cis-1,2-dichlor	0.305	0.286	0.287	0.280	0.273	0.287	0.289	3.88
26)		2-butanone (MEK		0.094	0.089	0.085	0.081	0.086	0.087#	4.72
27)		bromochlorometh	0.106	0.102	0.103	0.101	0.099	0.104	0.103	2.84
28)		Tetrahydrofuran		0.067	0.057	0.055	0.053	0.053	0.057#	9.27
29)		chloroform	0.385	0.359	0.362	0.348	0.342	0.360	0.364	4.76
30)		SS Dibromofluor	0.245	0.242	0.242	0.245	0.242	0.242	0.242	1.46
31)		1,1,1-trichloro	0.319	0.299	0.310	0.287	0.293	0.316	0.309	4.57
32)		carbon tetrachl	0.219	0.217	0.225	0.216	0.230	0.258	0.232	9.07
33)		1,1-dichloropro	0.308	0.282	0.295	0.271	0.274	0.294	0.292	5.50
34)		SS 1,2-DCA-d4_M	0.308	0.307	0.305	0.308	0.303	0.297	0.305	1.25
35)		tert-amyl methy	0.583	0.542	0.557	0.539	0.535	0.569	0.562	3.72
36)		benzene	0.880	0.835	0.845	0.808	0.803	0.858	0.853	4.50
37)		1,2-dichloroeth	0.328	0.314	0.314	0.302	0.295	0.307	0.313	4.63
38)		trichloroethene	0.241	0.218	0.219	0.205	0.209	0.217	0.221	5.49
39)		1,2-dichloropro	0.223	0.210	0.216	0.205	0.201	0.214	0.214	3.95
40)		dibromomethane	0.135	0.130	0.128	0.126	0.123	0.130	0.130	3.22
41)		bromodichlorome	0.262	0.243	0.250	0.251	0.257	0.280	0.259	6.30
42)		2-Chloroethoxye							0.107	9.21
43)		4-methyl-2-pent	0.069	0.063	0.065	0.065	0.064	0.068	0.067#	4.52
44)		cis-1,3-dichlor	0.320	0.306	0.319	0.320	0.324	0.359	0.328	6.64
45)		Chlorobenzene-D	0.753	0.750	0.746	0.750	0.754	0.750	0.743	4.31
46)		SS Toluene-d8_M	0.975	0.972	0.976	0.983	0.965	0.970	0.975	0.54
47)		toluene	0.918	0.853	0.875	0.840	0.839	0.904	0.887	4.57
48)		trans-1,3-dichl	0.288	0.272	0.294	0.296	0.301	0.337	0.299	9.37
49)		1,1,2-trichloro	0.160	0.147	0.151	0.149	0.146	0.155	0.153	3.96
50)		2-hexanone	0.145	0.125	0.130	0.127	0.125	0.132	0.132	5.56
51)		tetrachloroethe	0.233	0.210	0.214	0.201	0.203	0.218	0.217	6.03
52)		1,3-dichloropro	0.327	0.311	0.315	0.306	0.302	0.322	0.319	3.92
53)		dibromochlorome	0.146	0.139	0.152	0.160	0.167	0.197	0.165	15.69
54)		1,2-dibromoetha	0.186	0.174	0.181	0.177	0.176	0.187	0.183	3.67
55)		chlorobenzene	0.619	0.573	0.586	0.566	0.560	0.604	0.596	4.84

(#) = Out of Range ### Number of calibration levels exceeded format ###

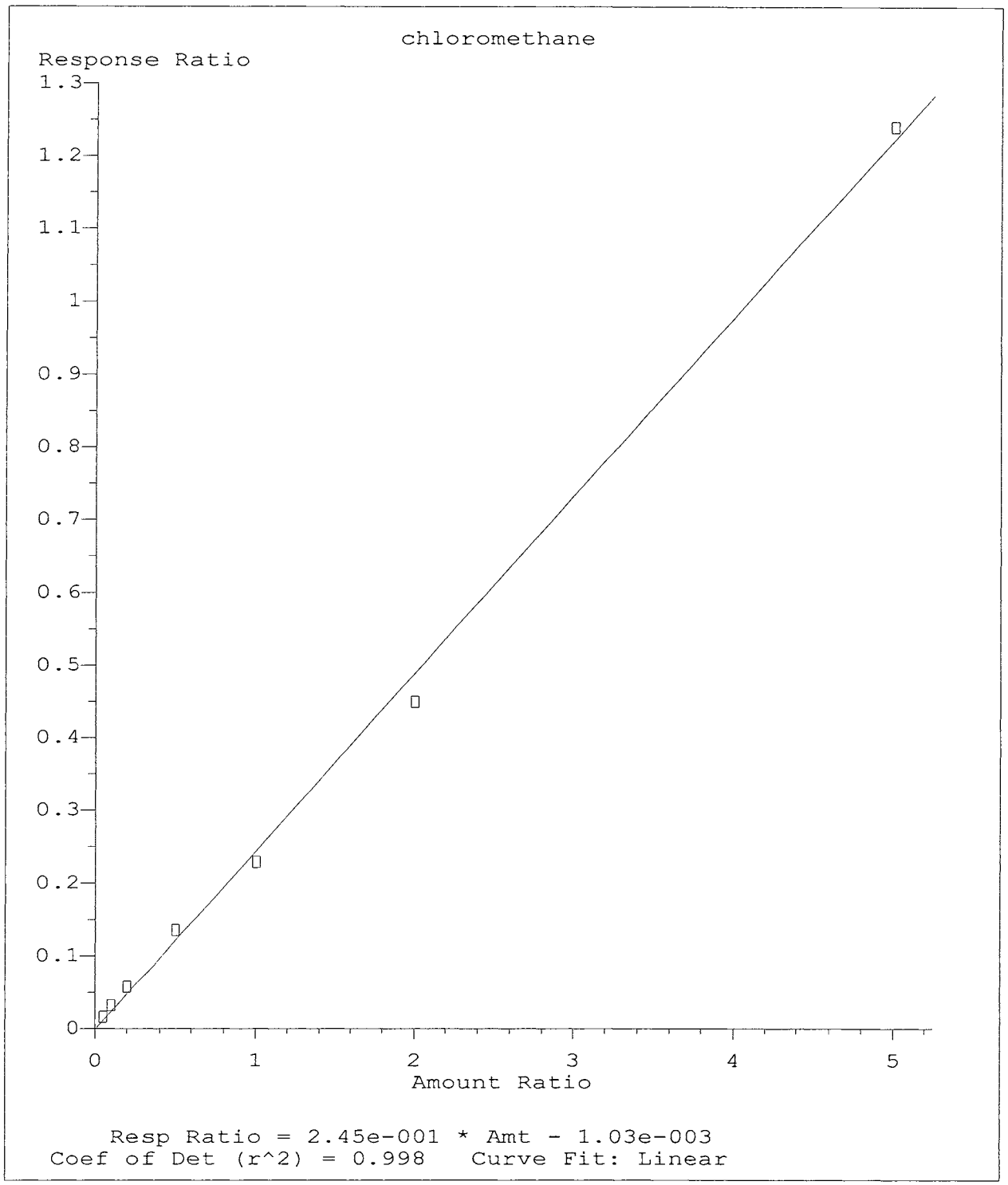
Response Factor Report VOAMS5

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Initial Calibration

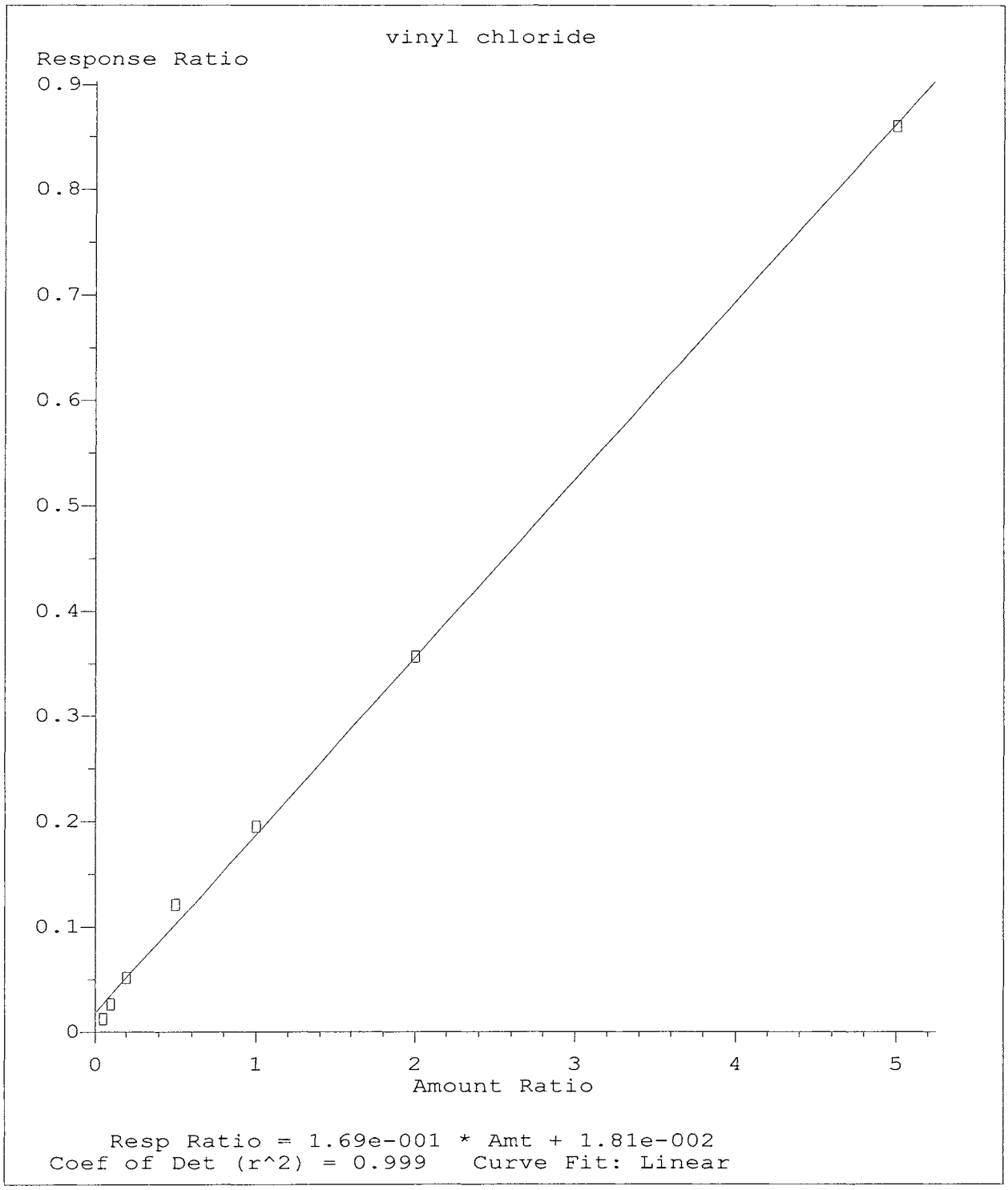
Calibration Files
1 =SA081107.D 2 =SA081108.D 5 =SA081109.D
10 =SA081302.D 20 =SA081111.D 50 =SA081112.D

		Compound	1	2	5	10	20	50	Avg	%RSD
56)		1,1,1,2-tetrach	0.176	0.164	0.176	0.177	0.184	0.210	0.185	10.65
57)		ethylbenzene	1.016	0.943	0.988	0.962	0.965	1.057	1.010	5.43
58)		mp-xylene	0.397	0.369	0.392	0.380	0.380	0.422	0.396	5.09
59)		o-xylene	0.370	0.352	0.372	0.361	0.366	0.404	0.379	5.85
60)		styrene	0.617	0.606	0.637	0.637	0.639	0.706	0.650	6.77
61)		bromoform	0.078	0.070	0.082	0.086	0.097	0.121	0.092#	26.67
62)		iso-propylbenze	0.856	0.808	0.852	0.814	0.835	0.919	0.865	5.95
63)	S	SS 4-BFB_MS	0.370	0.373	0.371	0.378	0.377	0.381	0.372	1.71
64)		1,4-Dichloroben	0.388	0.388	0.393	0.401	0.406	0.414	0.393	3.05
65)		bromobenzene	0.265	0.239	0.250	0.240	0.240	0.260	0.253	4.95
66)		1,1,2,2-tetrach	0.223	0.198	0.210	0.204	0.196	0.220	0.212	5.84
67)		1,2,3-trichloro	0.076	0.067	0.069	0.067	0.066	0.070	0.070#	5.07
68)		n-propylbenzene	1.071	1.026	1.057	1.021	1.039	1.137	1.082	5.34
69)		2-chlorotoluene	0.730	0.682	0.708	0.685	0.684	0.740	0.716	4.25
70)		4-chlorotoluene	0.741	0.678	0.717	0.689	0.695	0.765	0.726	5.15
71)		1,3,5-trimethyl	0.745	0.708	0.755	0.728	0.743	0.816	0.762	6.19
72)		tert-butylbenze	0.621	0.575	0.614	0.591	0.603	0.665	0.635	10.70
73)		1,2,4-trimethyl	0.783	0.743	0.793	0.775	0.787	0.867	0.802	6.45
74)		sec-butylbenzen	0.872	0.816	0.857	0.825	0.849	0.942	0.877	6.34
75)		1,3-dichloroben	0.475	0.428	0.460	0.444	0.444	0.488	0.465	5.43
76)		p-isopropyltolu	0.728	0.684	0.735	0.713	0.728	0.817	0.746	7.05
77)		1,4-dichloroben	0.490	0.449	0.466	0.456	0.444	0.488	0.476	5.32
78)		1,2-dichloroben	0.483	0.419	0.444	0.429	0.428	0.466	0.453	5.85
79)		n-butylbenzene	0.649	0.606	0.639	0.620	0.629	0.703	0.655	6.19
80)	S	SS 1,2-DCB-D4_M	0.358	0.354	0.362	0.368	0.367	0.374	0.359	2.76
81)		1,2-dibromo-3-c	0.039	0.032	0.037	0.037	0.039	0.046	0.039#	15.72
82)		1,3,5-trichloro	0.307	0.273	0.289	0.280	0.277	0.306	0.295	5.94
83)		1,2,4-trichloro	0.289	0.250	0.269	0.258	0.261	0.285	0.276	6.66
84)		hexachlorobutad	0.114	0.105	0.103	0.098	0.099	0.109	0.108	7.86
85)		naphthaleneV	0.662	0.554	0.626	0.613	0.622	0.681	0.636	8.14
86)		1,2,3-trichloro	0.269	0.229	0.248	0.238	0.238	0.261	0.253	6.56
87)		SS 2,5-DBT_MS	0.090	0.075	0.085	0.082	0.085	0.095	0.088#	9.34

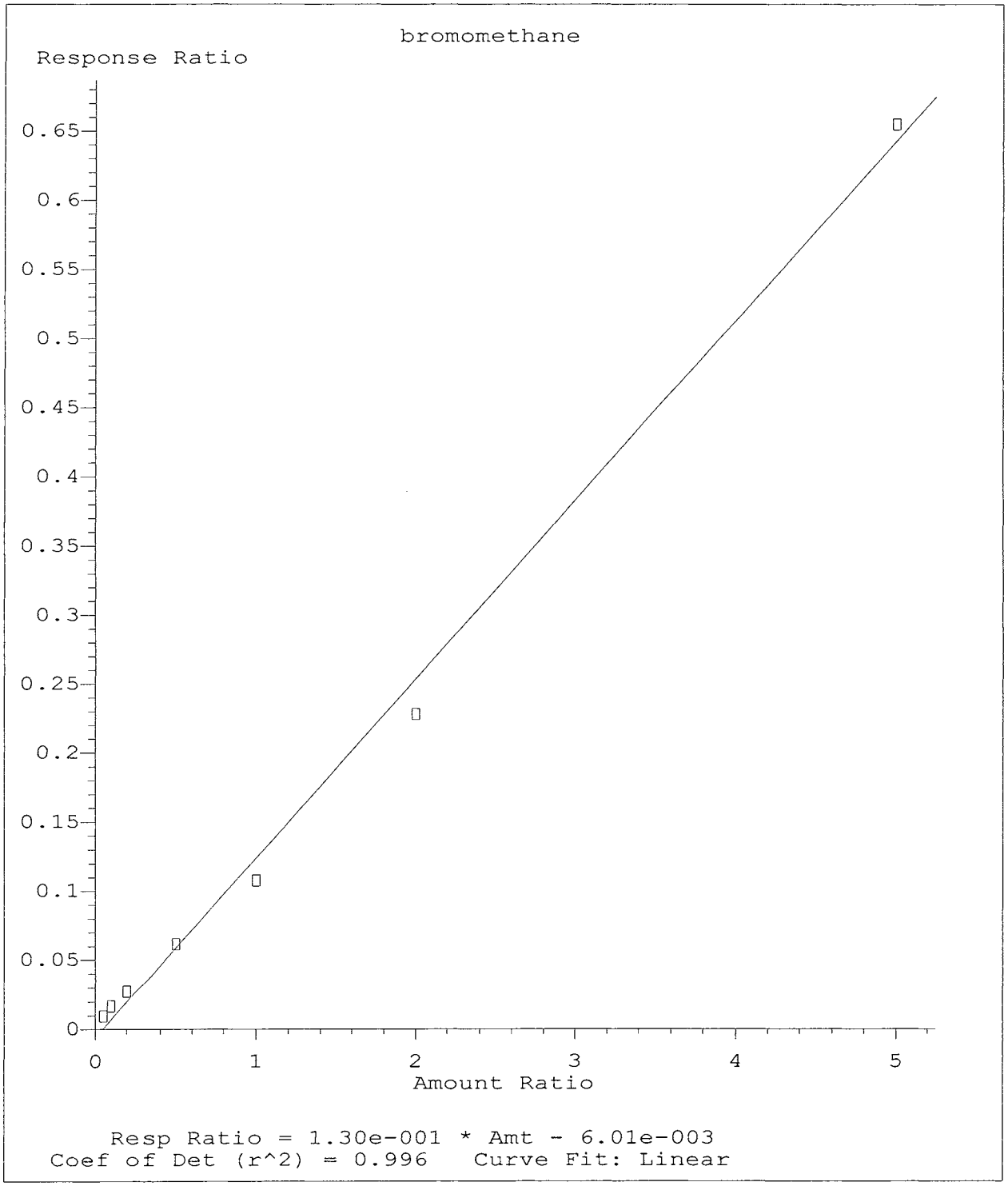
(#) = Out of Range ### Number of calibration levels exceeded format ###



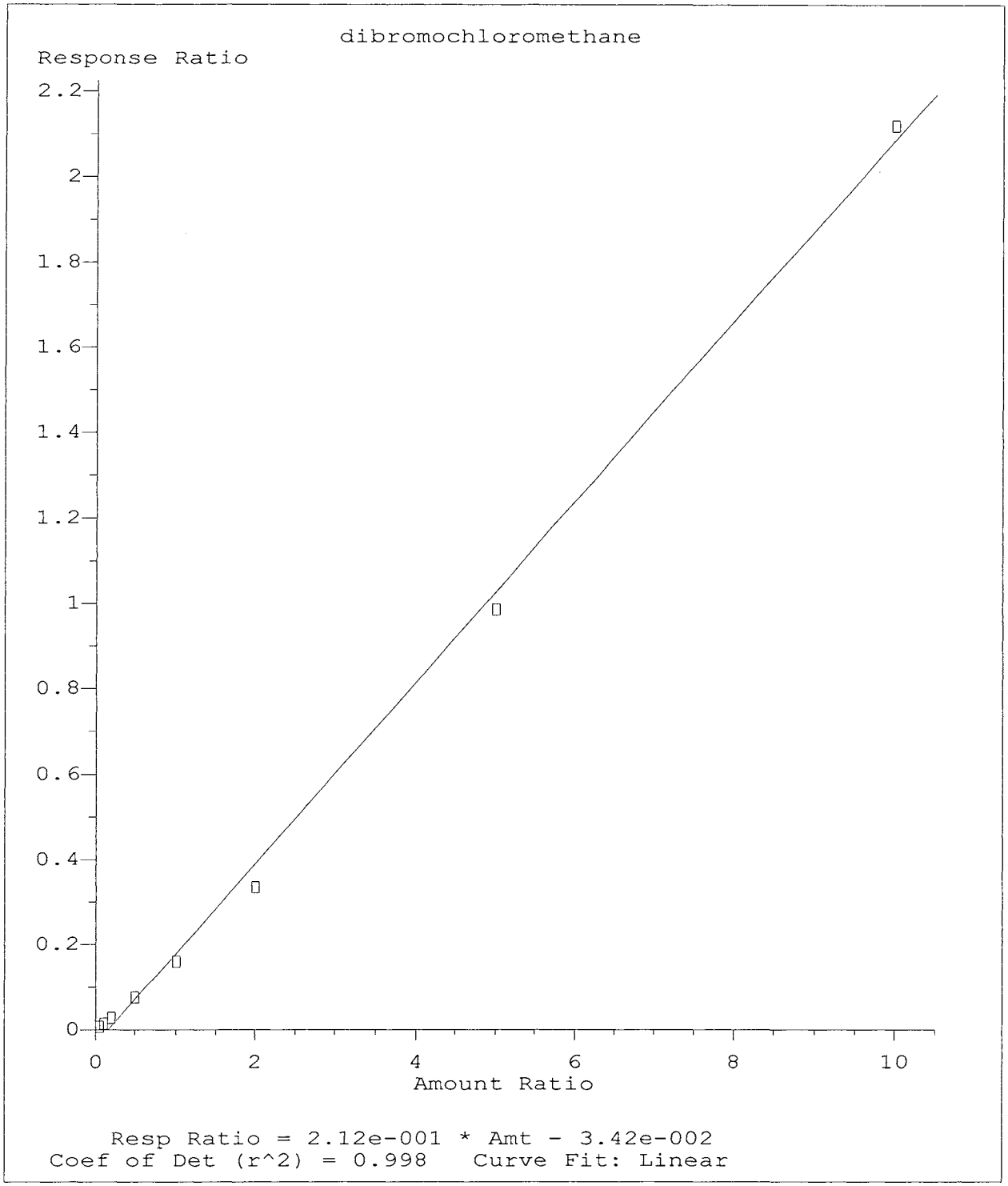
Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009



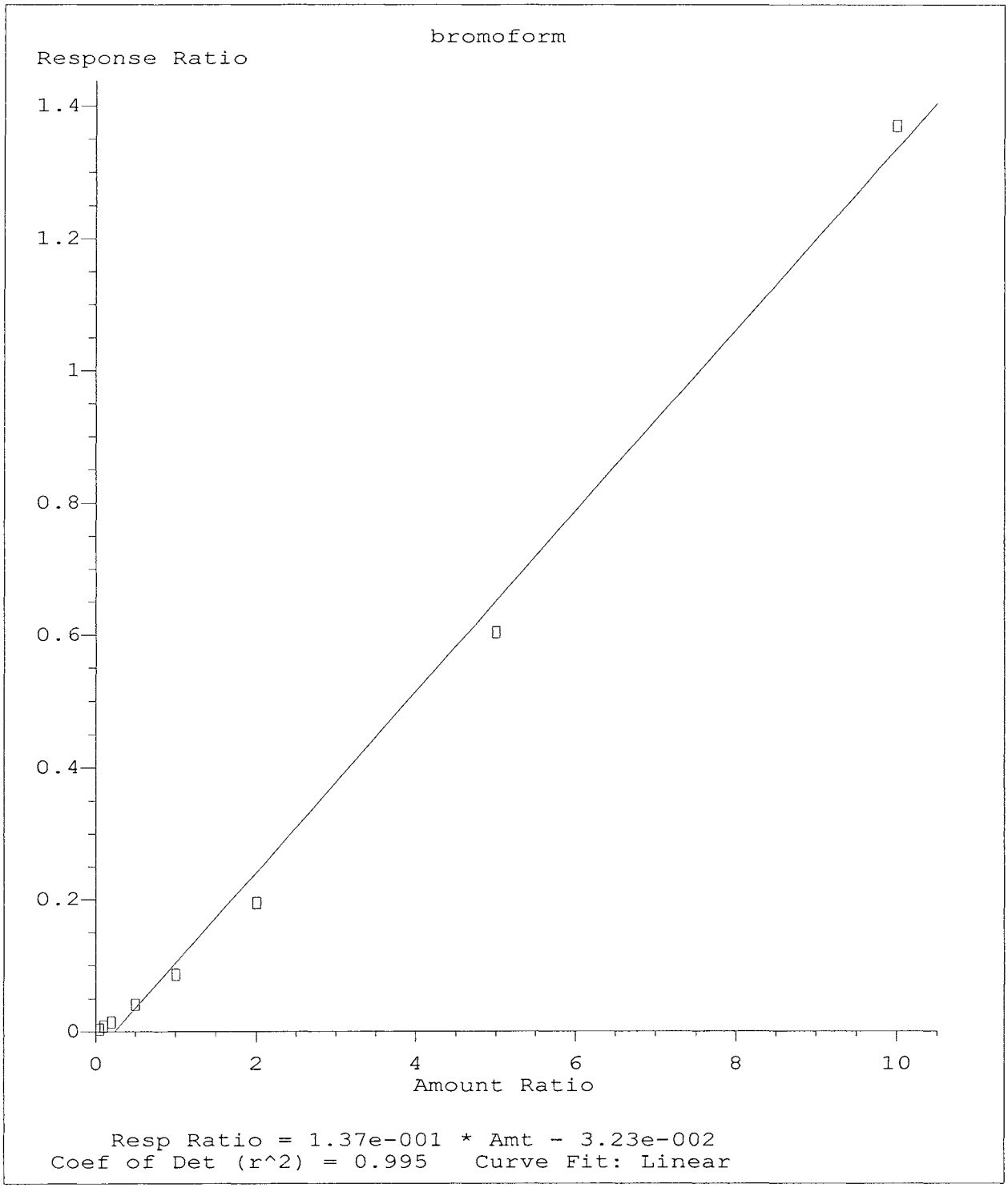
Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009



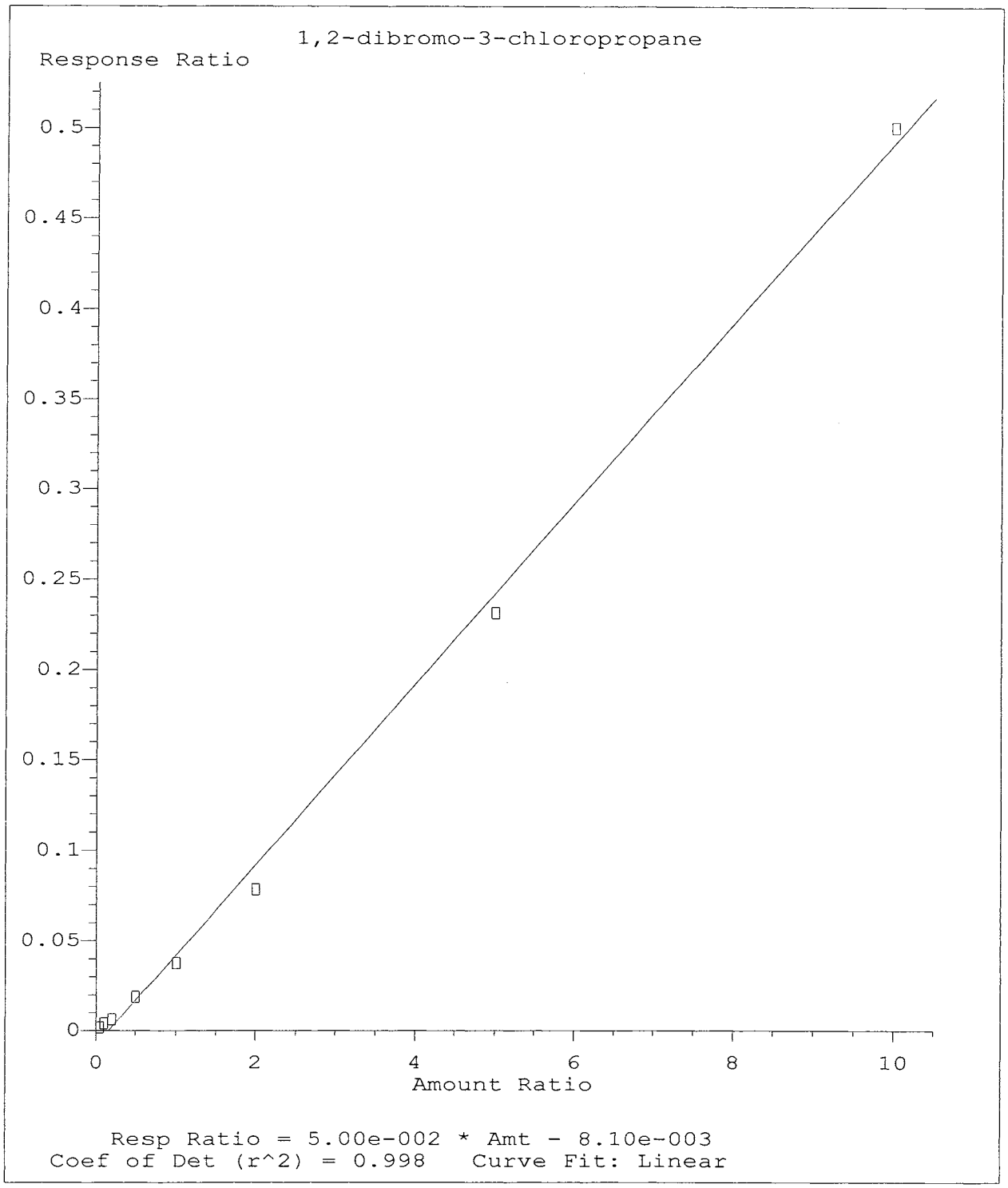
Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009



Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009



Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009



Method Name: W:\1\METHODS\2009\5LID0811.M
Calibration Table Last Updated: Tue Aug 18 12:15:31 2009

IS/SS ID= V- 3522
Standard ID= V- 3518B
Gas Standard ID= V- 3520
LCS/LCSD and/or MS/MSD Standard ID= V- 3521, 3525

Analyst: Blue

Date: 8/28/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	SA082801	BFB 25ng					VOCMS		Auto Final		✓
2		STD10					VOCMS	SLID0811			✓
3		STD0.5					VOCMS				✓
4		MB					VOCMS		TB 8/28/09 0915 Blue =OK		✓
5		82196.01	✓	✓		x1	VOCMS		11DCA verification		
6		82084.00	✓	✓		x1	VOCMS				
7		.21	✓	✓			VOCMS				
8		.22	✓	✓			VOCMS				
9		.24		✓			VOCMS				
10		.31		✓			VOCMS				
11		.32		✓			VOCMS				
12		82116.01	✓	✓		x2	VOCMS		chloroform		
13		82209.01		✓		x1	VOCMS				
14		.02		✓			VOCMS				
15		.03		✓			VOCMS				
16		82210.01		✓			VOCMS				
17		.02		✓			VOCMS				
18		82241.02		✓			VOCMS				
19		82271.01		✓			VOCMS				
20		LCS10					VOCMS		BM, 22DCP ↓ CS2 ↑	✓	✓
21		LCSD10					VOCMS		〃 〃	✓	✓
22		BFB					VOCMS				
23		STD20					VOCMS	SV1D0811	BM, 22DCP		
24		STD2					VOCMS				
25		MB					VOCMS				
26		82224.01		✓		x1	VOCMS				
27		.02		✓			VOCMS				
28		.07		✓			VOCMS				
29		.10		✓			VOCMS				
30		.11		✓			VOCMS				
31		.12		✓			VOCMS				
32		.13		✓			VOCMS				
33		.14		✓			VOCMS				
34		.15		✓			VOCMS				
35		82095.18		✓		x20	VOCMS				
36		BLANK					VOCMS				
37		LCS20					VOCMS				
38		LCSD20					VOCMS				
39							VOCMS				
40							VOCMS				
41							VOCMS				
42							VOCMS				

Samples removed from autosampler, order and pH verified by Blue 8/31/09 1-38

BFB

Data File : C:\MSDCHEM\1\DATA\AUG2809\SA082801.D Vial: 1
Acq On : 28 Aug 2009 9:23 am Operator: BAM
Sample : BFB 25 ng Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2743

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	3865	PASS
75	95	30	60	50.2	9993	PASS
95	95	100	100	100.0	19896	PASS
96	95	5	9	7.2	1431	PASS
173	174	0.00	2	0.5	86	PASS
174	95	50	100	84.7	16842	PASS
175	174	5	9	7.1	1197	PASS
176	174	95	101	98.1	16524	PASS
177	176	5	9	6.2	1029	PASS

SA082801.D 5LID0811.M Mon Aug 31 10:42:06 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2809\SA082802.D Vial: 2
Acq On : 28 Aug 2009 9:59 am Operator: BAM
Sample : STD 10 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 70% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 130%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	112	0.00
2		dichlorodifluoromethane	10.000	8.852	11.5	0	0.00
3		chloromethane	10.000	8.833	11.7	0	0.00
4		vinyl chloride	10.000	10.449	-4.5	0	-0.01
5		bromomethane	10.000	6.113	38.9#	0	-0.01
6		chloroethane	10.000	9.317	6.8	0	0.00
7		trichlorofluoromethane	10.000	9.746	2.5	0	0.00
8		diethyl ether	10.000	9.688	3.1	112	0.00
9		1,1,2-Trichlorotrifluoroeth	10.000	10.031	-0.3	121	0.00
10		acrolein	-1.000	0.000	0.0	0	0.13
11		acetone	10.000	9.503	5.0	103	-0.01
12		1,1-dichloroethene	10.000	9.374	6.3	117	0.00
13		tert-Butyl Alcohol (TBA)	50.000	42.540	14.9	96	0.00
14		methylene chloride	10.000	9.902	1.0	123	0.00
15		carbon disulfide	10.000	9.571	4.3	115	0.00
16		acrylonitrile	10.000	9.983	0.2	113	0.00
17		Methyl-t-butyl ether (MTBE)	20.000	16.816	15.9	98	0.00
18		trans-1,2-dichloroethene	10.000	9.240	7.6	110	0.00
19		hexane	10.000	8.023	19.8	99	0.00
20		Isopropyl ether (DIPE)	10.000	8.512	14.9	99	0.00
21		vinyl acetate	10.000	10.159	-1.6	0	0.00
22		1,1-dichloroethane	10.000	9.375	6.3	111	0.00
23		Ethyl-t-butyl ether (ETBE)	10.000	8.113	18.9	94	0.00
24		2,2-dichloropropane	10.000	7.520	24.8	89	0.00
25		cis-1,2-dichloroethene	10.000	9.228	7.7	106	0.00
26		2-butanone (MEK)	10.000	8.607	13.9	98	0.00
27		bromochloromethane	10.000	10.170	-1.7	116	0.00
28		Tetrahydrofuran (THF)	10.000	8.150	18.5	94	0.00
29		chloroform	10.000	10.077	-0.8	118	0.00
30		SS Dibromofluoromethane_MS	10.000	9.901	1.0	110	0.00
31		1,1,1-trichloroethane	10.000	8.608	13.9	103	0.00
32		carbon tetrachloride	10.000	8.799	12.0	106	0.00
33		1,1-dichloropropene	10.000	8.550	14.5	103	0.00
34		SS 1,2-DCA-d4_MS	10.000	9.823	1.8	109	0.00
35		tert-amyl methyl ether (TAM	10.000	8.049	19.5	94	0.00
36		benzene	10.000	9.868	1.3	116	0.00
37		1,2-dichloroethane	10.000	9.601	4.0	111	0.00
38		trichloroethene	10.000	9.181	8.2	111	0.00
39		1,2-dichloropropane	10.000	9.363	6.4	109	0.00
40		dibromomethane	10.000	9.947	0.5	114	0.00
41		bromodichloromethane	10.000	9.687	3.1	112	0.00
42		2-Chloroethoxyethene	10.000	8.096	19.0	0	0.00
43		4-methyl-2-pentanone (MIBK)	10.000	9.075	9.3	105	0.00
44		cis-1,3-dichloropropene	10.000	8.759	12.4	100	0.00
45		Chlorobenzene-D5 IS	10.000	10.120	-1.2	112	0.00
46		SS Toluene-d8_MS	10.000	10.168	-1.7	113	0.00
47		toluene	10.000	9.749	2.5	115	0.00
48		trans-1,3-dichloropropene	10.000	8.507	14.9	96	0.00
49		1,1,2-trichloroethane	10.000	10.210	-2.1	118	0.00
50		2-hexanone	10.000	8.225	17.8	95	0.00
51		tetrachloroethene	10.000	9.691	3.1	117	0.00
52		1,3-dichloropropane	10.000	9.676	3.2	113	0.00
53		dibromochloromethane	10.000	9.487	5.1	117	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2809\SA082802.D Vial: 2
Acq On : 28 Aug 2009 9:59 am Operator: BAM
Sample : STD 10 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 70% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 130%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
54		1,2-dibromoethane	10.000	9.739	2.6	112	0.00
55		chlorobenzene	10.000	9.990	0.1	118	0.00
56		1,1,1,2-tetrachloroethane	10.000	9.568	4.3	112	0.00
57		ethylbenzene	10.000	9.621	3.8	113	0.00
58		mp-xylene	20.000	19.925	0.4	116	0.00
59		o-xylene	10.000	9.631	3.7	113	0.00
60		styrene	10.000	10.056	-0.6	115	0.00
61		bromoform	10.000	9.410	5.9	126	0.00
62		iso-propylbenzene	10.000	9.425	5.7	112	0.00
63	S	SS 4-BFB_MS	10.000	9.780	2.2	108	0.00
64		1,4-Dichlorobenzene-D4 IS	10.000	10.840	-8.4	119	0.00
65		bromobenzene	10.000	10.263	-2.6	121	0.00
66		1,1,2,2-tetrachloroethane	10.000	9.735	2.7	113	0.00
67		1,2,3-trichloropropane	10.000	9.909	0.9	115	0.00
68		n-propylbenzene	10.000	9.614	3.9	114	0.00
69		2-chlorotoluene	10.000	9.891	1.1	116	0.00
70		4-chlorotoluene	10.000	9.727	2.7	114	0.00
71		1,3,5-trimethylbenzene	10.000	9.781	2.2	115	0.00
72		tert-butylbenzene	10.000	9.504	5.0	114	0.00
73		1,2,4-trimethylbenzene	10.000	10.135	-1.3	117	0.00
74		sec-butylbenzene	10.000	9.677	3.2	115	0.00
75		1,3-dichlorobenzeneV	10.000	10.254	-2.5	120	0.00
76		p-isopropyltoluene	10.000	9.767	2.3	114	0.00
77		1,4-dichlorobenzeneV	10.000	10.398	-4.0	121	0.00
78		1,2-dichlorobenzeneV	10.000	10.313	-3.1	122	0.00
79		n-butylbenzene	10.000	9.599	4.0	113	0.00
80	S	SS 1,2-DCB-D4_MS	10.000	10.684	-6.8	117	0.00
81		1,2-dibromo-3-chloropropane	10.000	8.885	11.2	108	0.00
82		1,3,5-trichlorobenzV	10.000	9.816	1.8	116	0.00
83		1,2,4-trichlorobenzV	10.000	9.438	5.6	113	0.00
84		hexachlorobutadieneV	10.000	9.417	5.8	116	0.00
85		naphthaleneV	10.000	9.280	7.2	108	0.00
86		1,2,3-trichlorobenzV	10.000	9.732	2.7	116	0.00
87		SS 2,5-DBT_MS	10.000	8.315	16.9	101	0.00

GC/MS QA-QC Check Report

Tune File : C:\MSDCHEM\1\DATA\AUG2809\SA082802.D
Tune Time : 28 Aug 2009 9:59 am

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG1109\SA081110.D

				299447
File	Sample	Surrogate Recovery %		Internal Standard Responses
SA082802.D	STD 10	98	107	334743
SA082803.D	STD 0.5	94	102	328198
SA082804.D	MB	92	101	331906
SA082805.D	82196.01	92	102	325618
SA082806.D	82084.20	92	101	323527
SA082807.D	82084.21	93	101	324618
SA082808.D	82084.22	96	105	329222
SA082809.D	82084.24	92	100	327301
SA082810.D	82084.31	92	100	321063
SA082811.D	82084.32	92	101	323240
SA082812.D	82116.01	92	101	319046
SA082813.D	82209.01	92	103	316292
SA082814.D	82209.02	93	101	314627
SA082815.D	82209.03	93	101	317470
SA082816.D	82210.01	91	101	312706
SA082817.D	82210.02	91	102	314167
SA082818.D	82241.02	92	102	314618
SA082819.D	82271.01	91	101	313137
SA082820.D	LCS 10	101	110	330671
SA082821.D	LCSD 10	99	107	336626

t - fails 12hr time check * - fails criteria

Created: Mon Aug 31 10:43:44 2009 VOAMS5

IS/SS ID= V- 3522
Standard ID= V- 3518B
Gas Standard ID= V- 3520
LCS/LCSD and/or MS/MSD Standard ID= V- 3521, 3514

Analyst: [illegible]

Date: 8/25/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	pH<2	A
1	5A083501	BFB					VOCMS		Auto Find		✓
2		BFB 25ng					VOCMS	5L1D0811	Auto Find		✓
3		STD20					VOCMS	5V1D0811	22DCP, BM, CM ↓ / 524: BM ↓		✓
4		STD2					VOCMS				✓
5		MB					VOCMS				✓
6		81809.01	✓	✓		x1	VOCMS	(524)	acetone verification		
7		82084.30		✓		1	VOCMS	(524)	1 vial only ~~use previous window~~ (footnote on report)		LCS
8		81992.01	✓	✓		x50	VOCMS				
9		~~82084.21~~	✓	✓		x1	VOCMS		82010.03 x2		
10		~~.22 Blk~~	✓	✓		1	VOCMS		82010.05 x5		
11		82084.24		✓			VOCMS				
12		.29		✓			VOCMS		RR samples (524)		
13		.31		✓			VOCMS				
14		.32		✓			VOCMS				
15		.33		✓		1	VOCMS		0645 Syringe not homed.		
16		~~82117.01~~		✓		~~x10~~	VOCMS		82084.21 x1		
17		~~.02~~		✓		~~x10 Blk~~	VOCMS		82084.22 x1		
18		.03		✓		x1	VOCMS				
19		~~B~~ LCS20		✓			VOCMS				
20		~~LCSD20 Blk~~					VOCMS		Blank		
21		BFB 25ng					VOCMS		Auto Find		✓
22		STD10					VOCMS	5L1D0811	BM, 22DCP ↓	✓	✓
23		STD0.5					VOCMS				
24		MB					VOCMS				
25		~~82030.07~~		✓		x1	VOCMS		~~8~~ LCS10		
26		82038.01		✓		1	VOCMS		LCSD10		
27		1 .02		✓			VOCMS		~~Blk 82107.01~~ 82030.07		
28		82031.01		✓			VOCMS		82196.01		
29		82070.01		✓			VOCMS		.02		
30		82073.07		✓			VOCMS		~~Blk 82030.07~~ 82107.01		
31		82107.01		✓			VOCMS		82038.01		
32		82116.01		✓			VOCMS		.02		
33		.02		✓			VOCMS		82115.01		
34		.03		✓			VOCMS		82116.01		
35		82115.01		✓			VOCMS		1 .02		
36		~~82133.01~~		✓			VOCMS		~~82133.01~~ 82116.03		
37		1 .02		✓			VOCMS		~~TB 82133.02~~ 82039.04		
38		LCS10		✓			VOCMS		82070.01		
39		~~LCSD10 Blk~~		✓		1	VOCMS	1	82073.07		
40				✓		x1	VOCMS	1	82133.01		
41							VOCMS	1	1 .02		
							VOCMS				

Samples removed from autosampler, order and pH verified by [illegible] 8/27/09 1-41

BFB

Data File : C:\MSDCHEM\1\DATA\AUG09\AUG2509\SA082502.D Vial: 2
Acq On : 25 Aug 2009 9:50 am Operator: BAM
Sample : BFB 25 NG Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009

AutoFind: Scans 2750, 2751, 2752; Background Corrected with Scan 2742

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	4143	PASS
75	95	30	60	52.5	11115	PASS
95	95	100	100	100.0	21152	PASS
96	95	5	9	7.5	1582	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.7	17485	PASS
175	174	5	9	7.3	1279	PASS
176	174	95	101	97.2	16996	PASS
177	176	5	9	7.1	1200	PASS

SA082502.D 5LID0811.M Tue Sep 01 12:04:48 2009

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2509\SA082503.D Vial: 3
Acq On : 25 Aug 2009 10:27 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 70% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 130%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	104	0.00
2		dichlorodifluoromethane	10.000	16.716	-67.2#	0	0.00
3		chloromethane	10.000	15.872	-58.7#	0	0.00
4		vinyl chloride	10.000	18.630	-86.3#	0	-0.01
5		bromomethane	10.000	9.855	1.4	0	0.00
6		chloroethane	10.000	18.668	-86.7#	0	0.00
7		trichlorofluoromethane	10.000	18.991	-89.9#	0	0.00
8		diethyl ether	10.000	20.538	-105.4#	219	0.00
9		1,1,2-Trichlorotrifluoroeth	10.000	18.899	-89.0#	211	0.00
10		acrolein	-1.000	0.000	0.0	0	-5.34#
11		acetone	10.000	19.217	-92.2#	193	0.00
12		1,1-dichloroethene	10.000	17.972	-79.7#	208	0.00
13		tert-Butyl Alcohol (TBA)	50.000	88.514	-77.0#	185	-0.01
14		methylene chloride	10.000	19.363	-93.6#	223	0.00
15		carbon disulfide	10.000	19.240	-92.4#	214	0.00
16		acrylonitrile	10.000	20.433	-104.3#	215	-0.01
17		Methyl-t-butyl ether (MTBE)	20.000	35.233	-76.2#	190	0.00
18		trans-1,2-dichloroethene	10.000	17.418	-74.2#	192	0.00
19		hexane	10.000	16.031	-60.3#	183	0.00
20		Isopropyl ether (DIPE)	10.000	18.115	-81.1#	195	0.00
21		vinyl acetate	10.000	22.869	-128.7#	0	0.00
22		1,1-dichloroethane	10.000	18.761	-87.6#	206	0.00
23		Ethyl-t-butyl ether (ETBE)	10.000	17.307	-73.1#	186	0.00
24		2,2-dichloropropane	10.000	15.459	-54.6#	170	0.00
25		cis-1,2-dichloroethene	10.000	19.103	-91.0#	204	0.00
26		2-butanone (MEK)	10.000	17.923	-79.2#	189	0.00
27		bromochloromethane	10.000	19.793	-97.9#	210	0.00
28		Tetrahydrofuran (THF)	10.000	17.147	-71.5#	183	0.00
29		chloroform	10.000	19.924	-99.2#	215	0.00
30		SS Dibromofluoromethane_MS	10.000	10.147	-1.5	104	0.00
31		1,1,1-trichloroethane	10.000	16.577	-65.8#	185	0.00
32		carbon tetrachloride	10.000	16.948	-69.5#	188	0.00
33		1,1-dichloropropene	10.000	17.271	-72.7#	193	0.00
34		SS 1,2-DCA-d4_MS	10.000	10.218	-2.2	105	0.00
35		tert-amyl methyl ether (TAM	10.000	17.308	-73.1#	187	0.00
36		benzene	10.000	19.246	-92.5#	210	0.00
37		1,2-dichloroethane	10.000	20.054	-100.5#	215	0.00
38		trichloroethene	10.000	18.118	-81.2#	202	0.00
39		1,2-dichloropropane	10.000	19.121	-91.2#	207	0.00
40		dibromomethane	10.000	19.938	-99.4#	212	0.00
41		bromodichloromethane	10.000	20.001	-100.0#	213	0.00
42		2-Chloroethoxyethene	10.000	18.093	-80.9#	0	0.00
43		4-methyl-2-pentanone (MIBK)	10.000	19.012	-90.1#	203	0.00
44		cis-1,3-dichloropropene	10.000	18.857	-88.6#	200	0.00
45		Chlorobenzene-D5 IS	10.000	10.088	-0.9	103	0.00
46		SS Toluene-d8_MS	10.000	10.149	-1.5	104	0.00
47		toluene	10.000	19.050	-90.5#	208	0.00
48		trans-1,3-dichloropropene	10.000	18.863	-88.6#	198	0.00
49		1,1,2-trichloroethane	10.000	20.065	-100.7#	214	0.00
50		2-hexanone	10.000	18.237	-82.4#	196	0.00
51		tetrachloroethene	10.000	17.783	-77.8#	200	0.00
52		1,3-dichloropropane	10.000	19.989	-99.9#	216	0.00
53		dibromochloromethane	10.000	17.817	-78.2#	223	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : W:\1\DATA\2009\AUG09\AUG2509\SA082503.D Vial: 3
Acq On : 25 Aug 2009 10:27 am Operator: BAM
Sample : STD 20 Inst : VOAMS5
Misc : x1; 5mL Multiplr: 1.00
MS Integration Params: rteint.p

Method : W:\1\METHODS\2009\5LID0811.M (RTE Integrator)
Title : VOAMS5 01/02/2009
Last Update : Tue Aug 18 12:15:31 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 70% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 130%

		Compound	Amount	Calc.	%Dev Area%	Dev(min)
54		1,2-dibromoethane	10.000	19.744	-97.4# 210	0.00
55		chlorobenzene	10.000	19.538	-95.4# 213	0.00
56		1,1,1,2-tetrachloroethane	10.000	19.566	-95.7# 212	0.00
57		ethylbenzene	10.000	19.264	-92.6# 209	0.00
58		mp-xylene	20.000	39.384	-96.9# 213	0.00
59		o-xylene	10.000	19.439	-94.4# 211	0.00
60		styrene	10.000	20.424	-104.2# 216	0.00
61		bromoform	10.000	16.884	-68.8# 240	0.00
62		iso-propylbenzene	10.000	19.115	-91.1# 210	0.00
63	S	SS 4-BFB_MS	10.000	10.294	-2.9 105	0.00
64		1,4-Dichlorobenzene-D4 IS	10.000	10.749	-7.5 109	0.00
65		bromobenzene	10.000	20.172	-101.7# 220	0.00
66		1,1,2,2-tetrachloroethane	10.000	19.511	-95.1# 210	0.00
67		1,2,3-trichloropropane	10.000	19.818	-98.2# 214	0.00
68		n-propylbenzene	10.000	19.312	-93.1# 212	0.00
69		2-chlorotoluene	10.000	19.930	-99.3# 216	0.00
70		4-chlorotoluene	10.000	19.769	-97.7# 215	0.00
71		1,3,5-trimethylbenzene	10.000	19.808	-98.1# 215	0.00
72		tert-butylbenzene	10.000	18.939	-89.4# 211	0.00
73		1,2,4-trimethylbenzene	10.000	20.380	-103.8# 219	0.00
74		sec-butylbenzene	10.000	19.399	-94.0# 213	0.00
75		1,3-dichlorobenzeneV	10.000	20.063	-100.6# 218	0.00
76		p-isopropyltoluene	10.000	19.853	-98.5# 215	0.00
77		1,4-dichlorobenzeneV	10.000	20.216	-102.2# 218	0.00
78		1,2-dichlorobenzeneV	10.000	20.236	-102.4# 221	0.00
79		n-butylbenzene	10.000	19.557	-95.6# 214	0.00
80	S	SS 1,2-DCB-D4_MS	10.000	10.717	-7.2 109	0.00
81		1,2-dibromo-3-chloropropane	10.000	16.730	-67.3# 209	0.00
82		1,3,5-trichlorobenzV	10.000	19.609	-96.1# 214	0.00
83		1,2,4-trichlorobenzV	10.000	19.358	-93.6# 214	0.00
84		hexachlorobutadieneV	10.000	18.531	-85.3# 211	0.00
85		naphthaleneV	10.000	19.936	-99.4# 214	0.00
86		1,2,3-trichlorobenzV	10.000	19.541	-95.4# 215	0.00
87		SS 2,5-DBT_MS	10.000	17.621	-76.2# 198	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

GC/MS QA-QC Check Report

Tune File : W:\1\DATA\2009\AUG09\AUG2409\SA082441.D
Tune Time : 25 Aug 2009 7:50 am

Daily Calibration File : C:\MSDCHEM\1\DATA\AUG1109\SA081110.D

299447

File	Sample	Surrogate Recovery %		Internal Standard Responses
SA082441.D	LCS 20	104	107	308193
SA082442.D	LCSD 20	102	104	320365
SA082503.D	STD 20	103	107	310059
SA082504.D	STD 2	98	99	306108
SA082505.D	MB	95	97	299631
SA082506.D	81809.01	94	96	297265
SA082507.D	82084.30	95	100	295594

t - fails 12hr time check * - fails criteria

Created: Thu Sep 03 14:05:41 2009 VOAMS5

eastern analytical, inc.
professional laboratory services

82084

Volatile Organic Analysis
1,4-Dioxane
Initial Calibration and Support Data

Response Factor Report VOAMS2

Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09
Last Update : Wed Aug 26 10:46:02 2009
Response via : Initial Calibration

Calibration Files
1 =SA082508.D 20 =SA082011.D 10 =SA082010.D
50 =SA082012.D 5 =SA082019.D 2 =SA082509.D

		Compound	1	20	10	50	5	2	Avg	%RSD
1)	I	Fluorobenzene IS	----------ISTD----------							
2)		1,4-dioxaneV	0.030	0.033	0.035	0.032	0.028	0.031	0.032#	9.46
3)	S	SS Toluene-d8_M	1.093	1.070	1.109	1.062	1.059	1.097	1.083	1.76
4)	S	SS 4-BFB_MS	0.372	0.366	0.390	0.349	0.347	0.372	0.366	4.04

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report VOAMS2

Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09
Last Update : Wed Aug 26 10:46:02 2009
Response via : Initial Calibration
Total Cpnds : 4

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Fluorobenzene IS	96	6.94	1.000	A	1	A	B
2		1,4-dioxaneV	88	7.77	1.120	A	2	A	B
3	S	SS Toluene-d8_MS	98	8.64	1.244	A	1	A	B
4	S	SS 4-BFB_MS	95	11.80	1.700	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

2SIM0825.M Mon Aug 31 14:05:01 2009

IS/SS ID= V-3522
Standard ID= V-3523
LCS/LCSD and/or MS/MSD Standard ID= V-3524

Analyst: KG

Date: 8/27/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	A
1	ZA082701	Blank		✓		x1	VOC NSI			
2	2	BFB		✓			VOC ↓		autofind	
3	3	STD5		✓			VOC SIM	2SIM0825		
4	4	Blank		✓			VOC			
5	5	LCS		✓			VOC			
6	6	LCSD		✓			VOC			
7	7	82084-03		✓			VOC			
8	8	03MS		✓			VOC			
9	9	03MSD		✓			VOC			
10	10	04		✓			VOC			
11	11	05		✓			VOC			
12	12	06		✓			VOC			
13	13	07		✓			VOC			
14	14	08		✓			VOC			
15	15	22		✓			VOC			
16	16	29		✓			VOC			
17	17	33		✓		↓	VOC ↓	↓		
							VOC			
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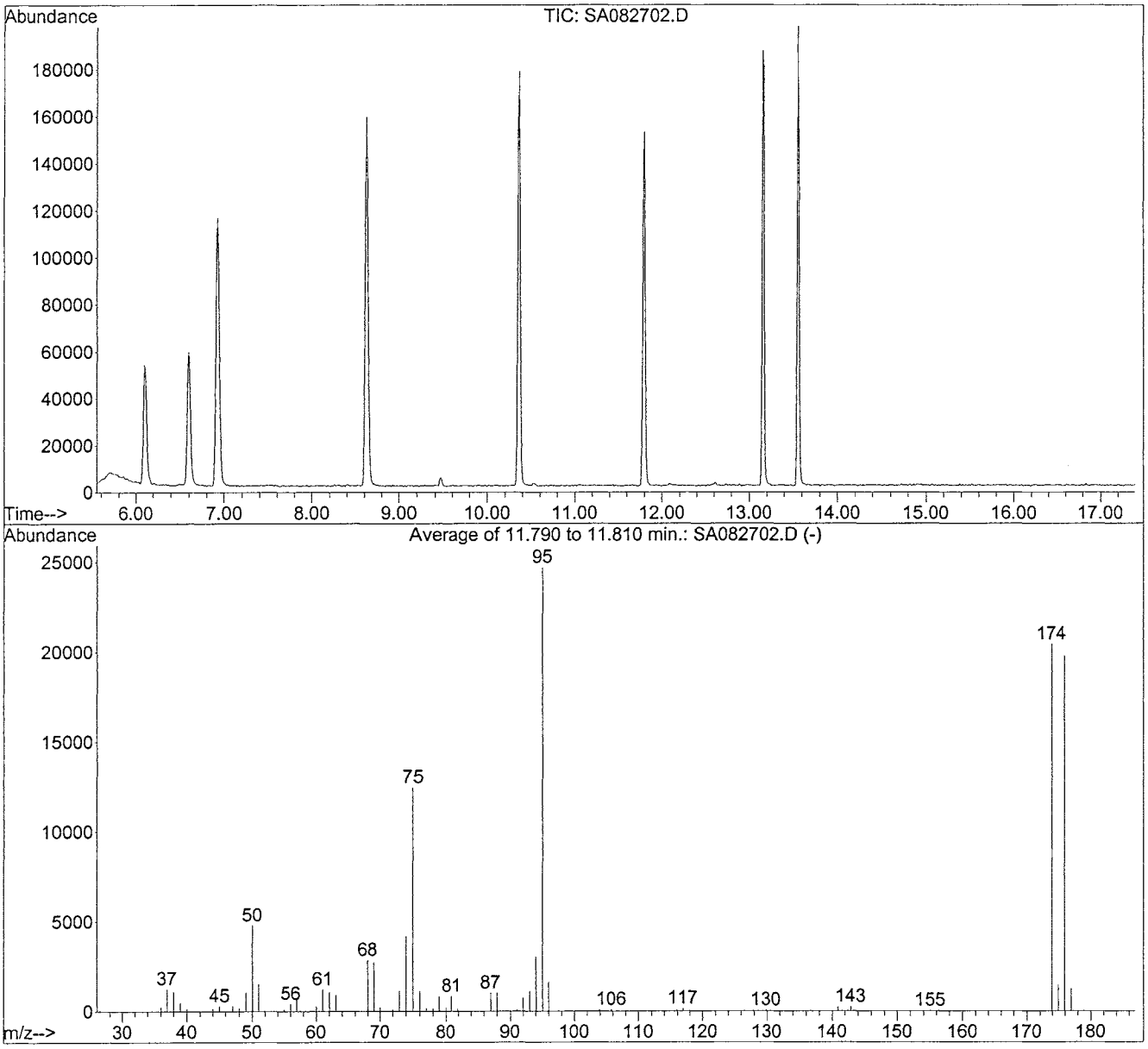
Samples removed from autosampler, order verified by KG 8/28/09

Data File : V:\1\DATA\AUG2709\SA082702.D
Acq On : 27 Aug 2009 10:21 am
Sample : BFB
Misc : X1;5mL
MS Integration Params: INTP23.P
Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09

Vial: 2
Operator: VG
Inst : VOAMS2
Multiplr: 1.00



Spectrum Information: Average of 11.790 to 11.810 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	4800	PASS
75	95	30	60	50.5	12472	PASS
95	95	100	100	100.0	24706	PASS
96	95	5	9	6.6	1638	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	82.7	20427	PASS
175	174	5	9	7.1	1451	PASS
176	174	95	101	96.8	19764	PASS
177	176	5	9	6.3	1252	PASS

Evaluate Continuing Calibration Report

Data File : V:\1\DATA\AUG2709\SA082703.D Vial: 3
Acq On : 27 Aug 2009 11:10 am Operator: VG
Sample : STD5 Inst : VOAMS2
Misc : X1;5mL Multiplr: 1.00
MS Integration Params: INTP23.P

Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09
Last Update : Wed Aug 26 10:46:02 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	96	-0.01
2		1,4-dioxaneV	5.000	4.654	6.9	102	-0.01
3	S	SS Toluene-d8_MS	10.000	10.110	-1.1	99	0.00
4	S	SS 4-BFB_MS	10.000	10.233	-2.3	103	0.00

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AUG2709\SA082702.D
Tune Time : 27 Aug 2009 10:21 am

Daily Calibration File : C:\HPCHEM\1\DATA\AUG2709\SA082703.D

				286165
File	Sample	Surrogate Recovery %		Internal Standard Responses
SA082703.D	STD5	101	102	286165
SA082704.D	BLANK	101	103	288065
SA082705.D	LCS5	102	105	285026
SA082706.D	LCSD5	102	103	290839
SA082707.D	82084.03	103	104	291027
SA082708.D	82084.03	106	107	289012
SA082709.D	82084.03	103	103	300428
SA082710.D	82084.04	103	104	297149
SA082711.D	82084.05	102	102	297228
SA082712.D	82084.06	103	103	303650
SA082713.D	82084.07	103	102	301873
SA082714.D	82084.08	102	104	300485
SA082715.D	82084.22	102	103	301059
SA082716.D	82084.29	102	102	301204
SA082717.Dt	82084.33	102	103	294427

t - fails 12hr time check * - fails criteria

Created: Fri Aug 28 09:28:32 2009 VOAMS2

IS/SS ID= V- 3522
Standard ID= V- 3523
LCS/LCSD and/or MS/MSD Standard ID= V- 3524

Analyst: VG

Date: 8/28/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	A
1	SA082801	Blank		✓		X1	VOC MSI			
2	2	BFB		✓			VOC ↓		autotune	
3	3	STD5		✓			VOC SIM	25IM0825		
4	4	Blank		✓			VOC			
5	5	LCS		✓			VOC			
6	6	LCSD		✓			VOC			
7	7	820834.22	✓	✓			VOC			
8	8	06	✓	✓		↓	VOC			
9	9	03	✓	✓		X10	VOC			
10	10	03MS	✓	✓			VOC			
11	11	03MSD	✓	✓			VOC			
12	12	04	✓	✓			VOC			
13	13	05	✓	✓			VOC			
14	14	08	✓	✓		↓	VOC			
15	15	07	✓	✓		X20	VOC ↓			
							VOC			
							VOC	8/28/09		
16	16	Blank		✓		X1	VOC MSI			
17	17	BFB		✓			VOC ↓		433	
18	18	STD5		✓			VOC SIM			
19	19	Blank		✓			VOC			
20	20	LCS		✓			VOC			
21	21	LCSD		✓			VOC			
22	22	821690 1		✓			VOC			
23	23	02		✓			VOC			
24	24	03		✓			VOC			
25	25	04		✓			VOC			
26	26	05		✓			VOC			
27	27	07		✓			VOC			
28	28	09		✓		↓	VOC ↓			
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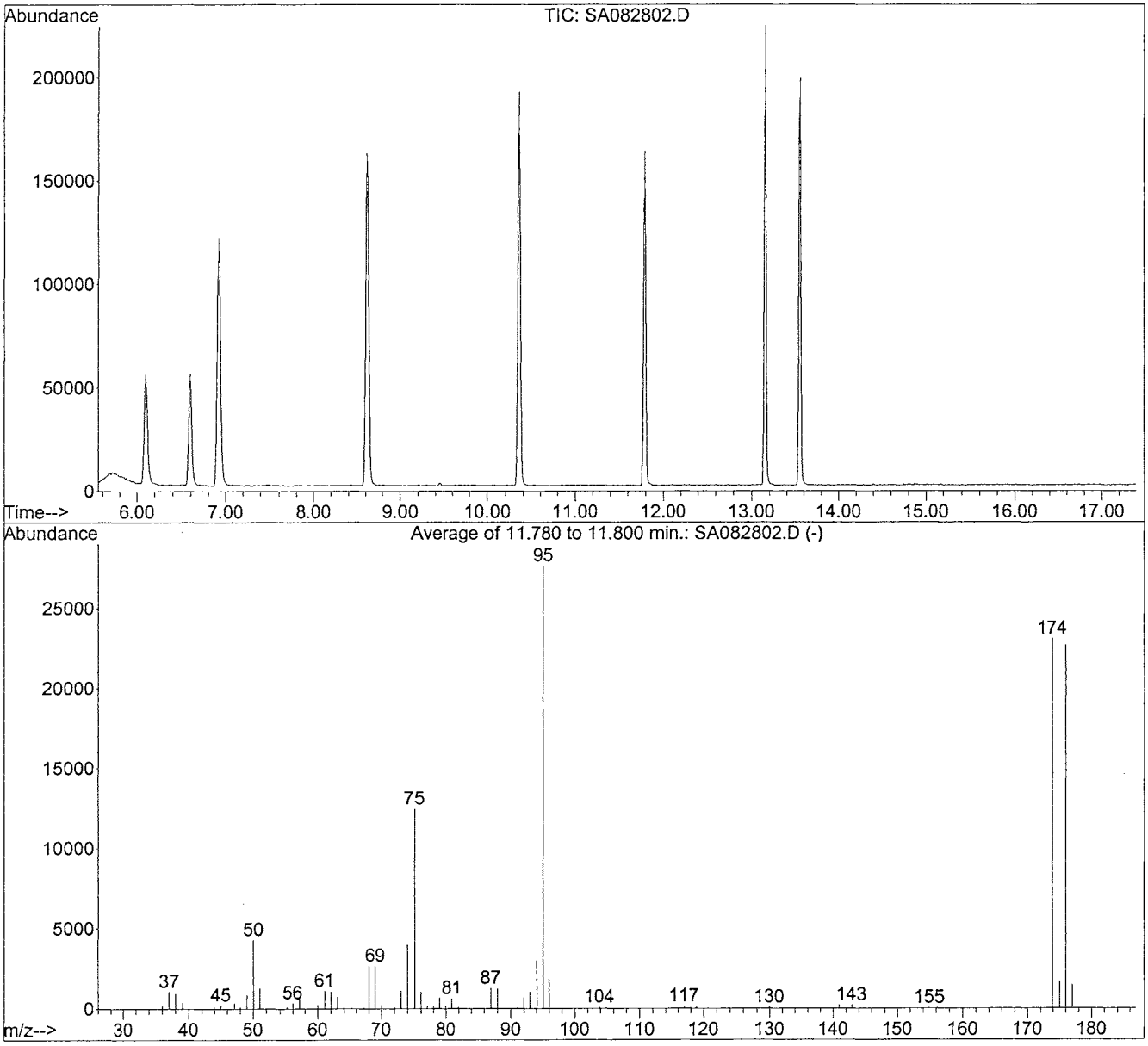
Samples removed from autosampler, order verified by 9/1/09

Data File : V:\1\DATA\AUG2809\SA082802.D
Acq On : 28 Aug 2009 9:58 am
Sample : BFB
Misc : X1;5mL
MS Integration Params: INTP23.P
Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09

Vial: 2
Operator: VG
Inst : VOAMS2
Multiplr: 1.00



Spectrum Information: Average of 11.780 to 11.800 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	4296	PASS
75	95	30	60	45.1	12472	PASS
95	95	100	100	100.0	27661	PASS
96	95	5	9	6.6	1833	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	83.5	23091	PASS
175	174	5	9	7.4	1699	PASS
176	174	95	101	98.2	22683	PASS
177	176	5	9	6.5	1484	PASS

Evaluate Continuing Calibration Report

Data File : V:\1\DATA\AUG2809\SA082803.D Vial: 3
Acq On : 28 Aug 2009 10:48 am Operator: VG
Sample : STD5 Inst : VOAMS2
Misc : X1;5mL Multiplr: 1.00
MS Integration Params: INTP23.P

Method : V:\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09
Last Update : Wed Aug 26 10:46:02 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	101	-0.01
2		1,4-dioxaneV	5.000	4.978	0.4	116	-0.01
3	S	SS Toluene-d8_MS	10.000	10.160	-1.6	105	-0.01
4	S	SS 4-BFB_MS	10.000	10.125	-1.3	108	-0.01

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AUG2809\SA082802.D
Tune Time : 28 Aug 2009 9:58 am

Daily Calibration File : C:\HPCHEM\1\DATA\AUG2809\SA082803.D

303345

File	Sample	Surrogate Recovery %		Internal Standard Responses
SA082803.D	STD5	102	101	303345
SA082804.D	BLANK	101	100	300917
SA082805.D	LCS5	102	104	296234
SA082806.D	LCSD5	103	103	299349
SA082807.D	82084.22	101	101	301291
SA082808.D	82084.06	102	101	296801
SA082809.D	82084.03	101	103	289993
SA082810.D	82084.03	103	104	291318
SA082811.D	82084.03	104	104	294068
SA082812.D	82084.04	101	102	293938
SA082813.D	82084.05	103	102	292248
SA082814.D	82084.08	101	102	293611
SA082815.D	82084.07	102	102	285632

t - fails 12hr time check * - fails criteria

Created: Mon Aug 31 10:09:06 2009 VOAMS2

IS/SS ID= V- 3522
Standard ID= V- 3523
LCS/LCSD and/or MS/MSD Standard ID= V- 3524

Analyst: VG

Date: 9/1/09

ALS	Data File	Sample Name	RR	AQ	SO	Dilution	Aq Meth	Anal Meth	Comments	A
1	SA090101	BFB		✓		x1	VOC MSI		autofind	
2	2	STD5		✓		↓	VOC SIM			
3	3	Blank		✓			VOC ↓			
4	4	LCS5		✓			VOC			
5	5	LCSD5		✓			VOC			
6	6	82084.33	✓	✓			VOC			
							VOC			
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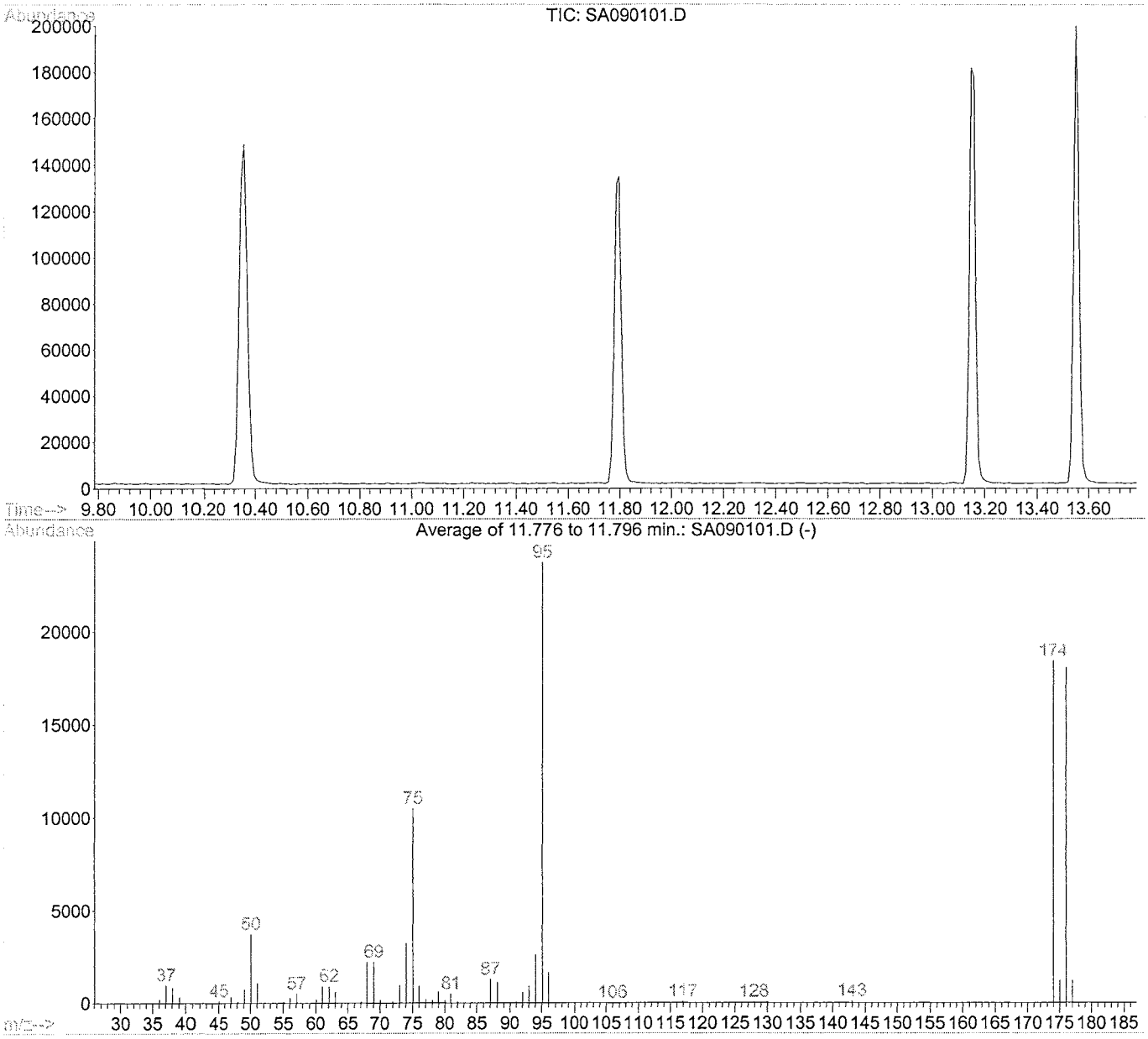
Samples removed from autosampler, order verified by [signature] 9/2/09

Data File : C:\HPCHEM\1\DATA\SEP0109\SA090101.D Vial: 1
Acq On : 1 Sep 2009 12:23 pm Operator: VG
Sample : BFB Inst : VOAMS2
Misc : X1;5mL Multiplr: 1.00
MS Integration Params: INTP23.P
Method : C:\HPCHEM\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09



Spectrum Information: Average of 11.776 to 11.796 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.8	3752	PASS
75	95	30	60	44.3	10519	PASS
95	95	100	100	100.0	23767	PASS
96	95	5	9	7.0	1666	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.6	18447	PASS
175	174	5	9	6.6	1222	PASS
176	174	95	101	98.0	18082	PASS
177	176	5	9	6.7	1214	PASS

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\SEP0109\SA090102.D Vial: 2
Acq On : 1 Sep 2009 1:12 pm Operator: VG
Sample : STD5 Inst : VOAMS2
Misc : X1;5mL Multiplr: 1.00
MS Integration Params: INTP23.P

Method : C:\HPCHEM\1\METHODS\2009\2SIM0825.M (RTE Integrator)
Title : VOAMS2 4/8/09
Last Update : Wed Aug 26 10:46:02 2009
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene IS	10.000	10.000	0.0	98	0.00
2		1,4-dioxaneV	5.000	5.990	-19.8	135	-0.02
3	S	SS Toluene-d8_MS	10.000	10.232	-2.3	102	-0.01
4	S	SS 4-BFB_MS	10.000	10.427	-4.3	108	0.00

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\SEP0109\SA090101.D
Tune Time : 1 Sep 2009 12:23 pm

Daily Calibration File : C:\HPCHEM\1\DATA\SEP0109\SA090102.D

File	Sample	Surrogate Recovery %		Internal Standard Responses
				293188
SA090102.D	STD5	102	104	293188
SA090103.D	BLANK	101	105	288362
SA090104.D	LCS	103	107	289390
SA090105.D	LCSD	104	107	286814
SA090106.D	82084.33	103	107	285489

t - fails 12hr time check * - fails criteria

Created: Wed Sep 02 10:43:15 2009 VOAMS2

eastern analytical, inc.
professional laboratory services

82084

Semi-Volatile Organic Analysis
EDB/DBCP 8011/504
Initial Calibration and Support Data

Response Factor Report ECD

Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009

8/19/09

Calibration Files
0.01 =SV10309.D 0.02 =SV10310.D 0.05 =SV10311.D
0.07 =SV10312.D 0.1 =SV10313.D 0.25 =SV10314.D

	Compound	0.01	0.02	0.05	0.07	0.1	0.25	Avg		%RSD
1) TM	EDB	4.489	3.800	4.179	3.786	3.731	3.070	3.843	E4	12.46
2) S	1,1,1,2-TCA		7.637	8.329	8.474	8.464	7.823	8.145	E4	4.78
3) TM	DBCP	5.615	5.719	5.290	4.870	4.960	4.289	5.124	E4	10.37

Signal #2 Calibration Files
0.01 =SV10309.D 0.02 =SV10310.D 0.05 =SV10311.D
0.07 =SV10312.D 0.1 =SV10313.D 0.25 =SV10314.D

	Compound	0.01	0.02	0.05	0.07	0.1	0.25	Avg		%RSD
1) TM	EDB	2.758	2.574	2.571	2.316	2.346	1.784	2.392	E5	14.19
2) S	1,1,1,2-TCA	4.311	4.342	4.158	4.101	4.201	3.740	4.142	E5	5.24
3) TM	DBCP	1.823	1.946	1.989	1.884	1.999	1.959	1.933	E5	3.50

- ALL <20%.
- AVG. USED.

JHS 8/19/09

(#) = Out of Range

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10309.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10309.D\ECD2B.CH
Acq On : 17 Aug 2009 3:06 pm Operator:
Sample : EDB/DBCP 0.01 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:19 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:18:01 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.35	614	4311	0.007m	0.011m#
Spiked Amount 0.100	Range 65 - 135		Recovery =		7.00%#	11.00%#
Target Compounds						
1) TM EDB	1.98	2.17	449	2758	0.012	0.015m
3) TM DBCP	3.24	3.67	562	1823	0.012m	0.009

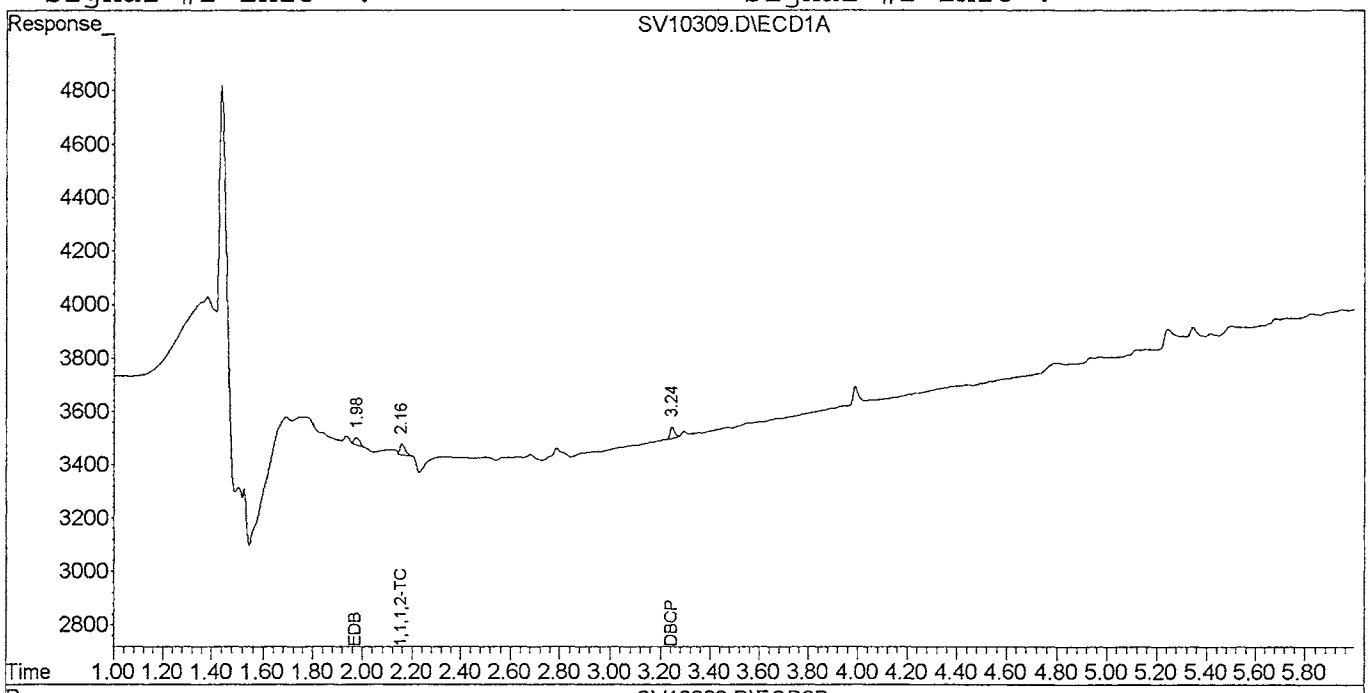
✓ HS 8/19/09

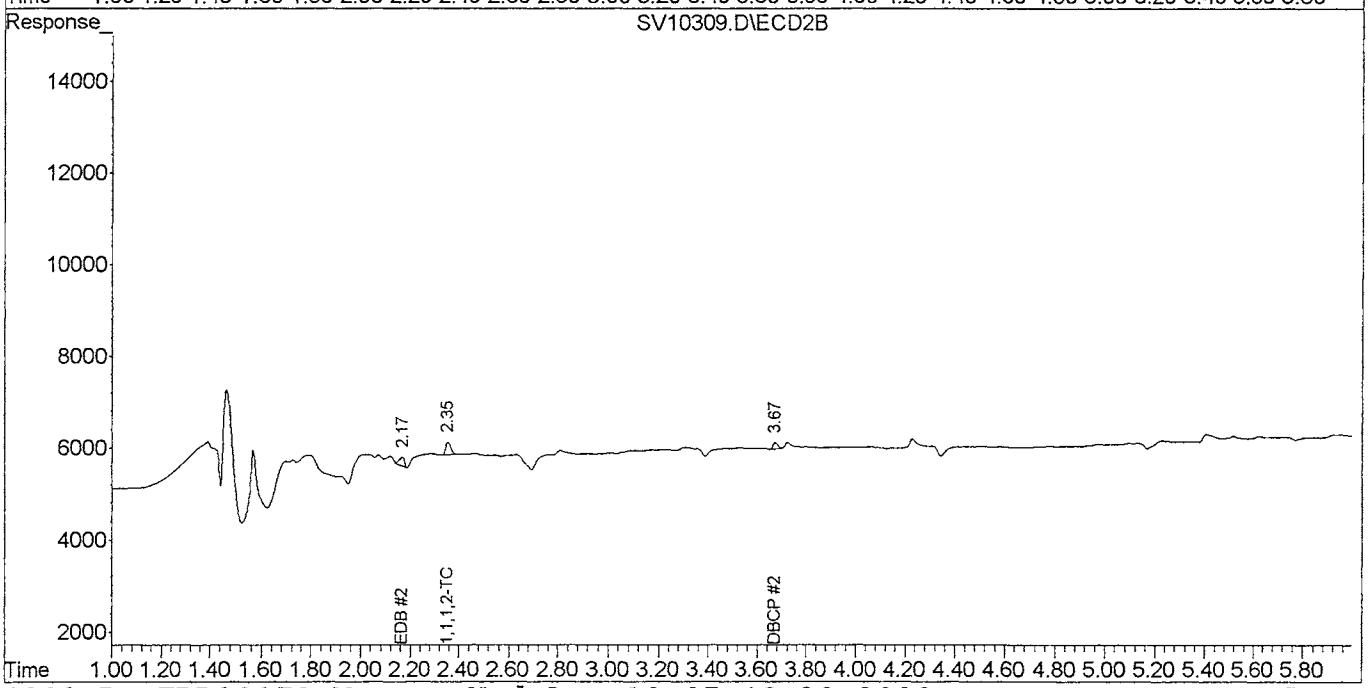
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10309.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10309.D\ECD2B.CH
Acq On : 17 Aug 2009 3:06 pm Operator:
Sample : EDB/DBCP 0.01 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:19 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:18:01 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10310.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10310.D\ECD2B.CH
Acq On : 17 Aug 2009 3:21 pm Operator:
Sample : EDB/DBCP 0.02 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:47 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:19:21 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.35	1527	8684	0.020m	0.021m
Spiked Amount 0.100	Range 65 - 135		Recovery =		20.00%#	21.00%#
Target Compounds						
1) TM EDB	1.97	2.21	760	5148	0.019	0.022
3) TM DBCP	3.25	3.67	1144	3891	0.022	0.021

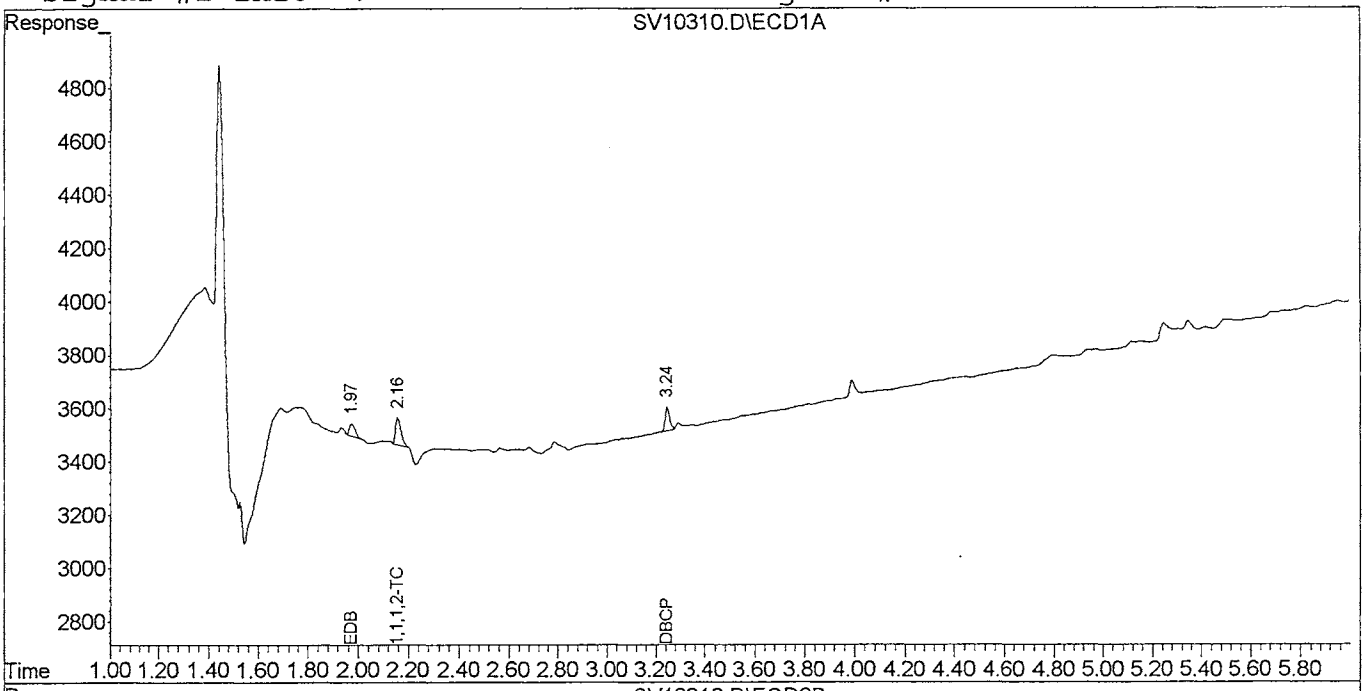
✓ HS 8/19/09

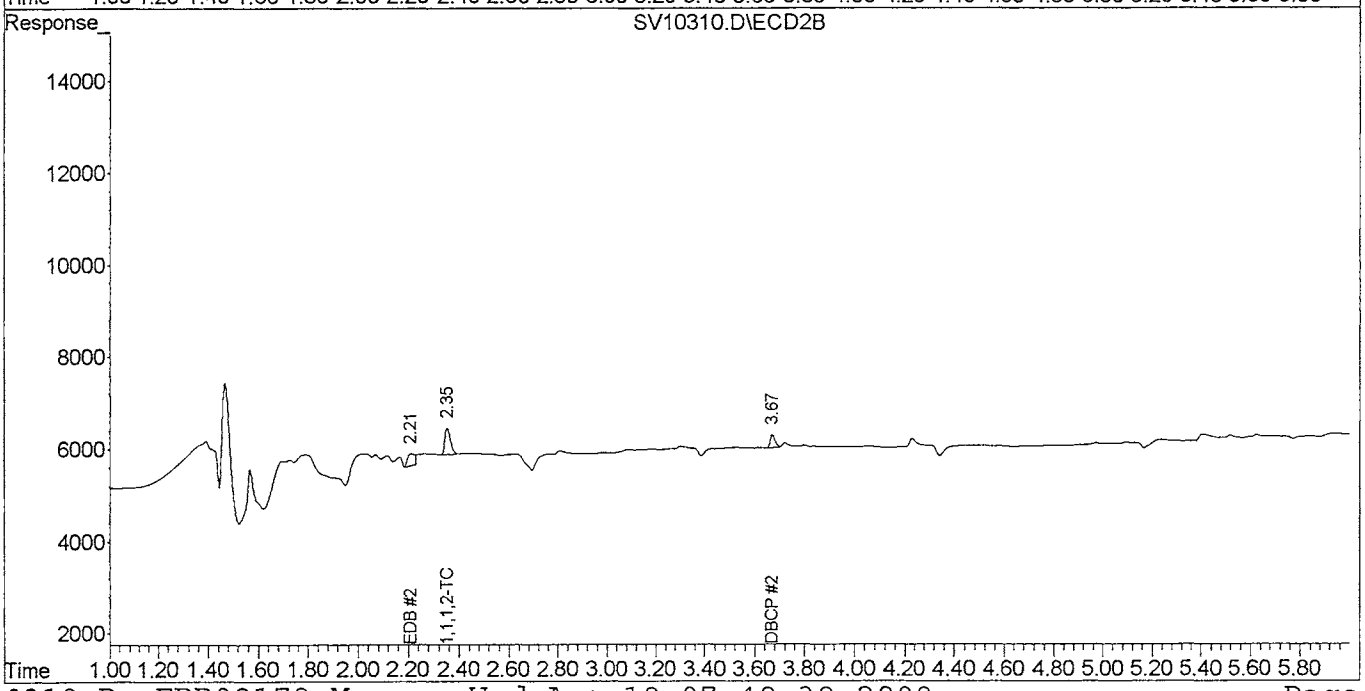
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10310.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10310.D\ECD2B.CH
Acq On : 17 Aug 2009 3:21 pm Operator:
Sample : EDB/DBCP 0.02 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:47 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:19:21 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10311.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10311.D\ECD2B.CH
Acq On : 17 Aug 2009 3:51 pm Operator:
Sample : EDB/DBCP 0.05 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:47:59 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.35	4164	20792	0.054m	0.050m
Spiked Amount 0.100	Range 65 - 135		Recovery =		54.00%#	50.00%#
Target Compounds						
1) TM EDB	1.97	2.21	2090	12853	0.052	0.053
3) TM DBCP	3.25	3.67	2645	9947	0.049	0.052

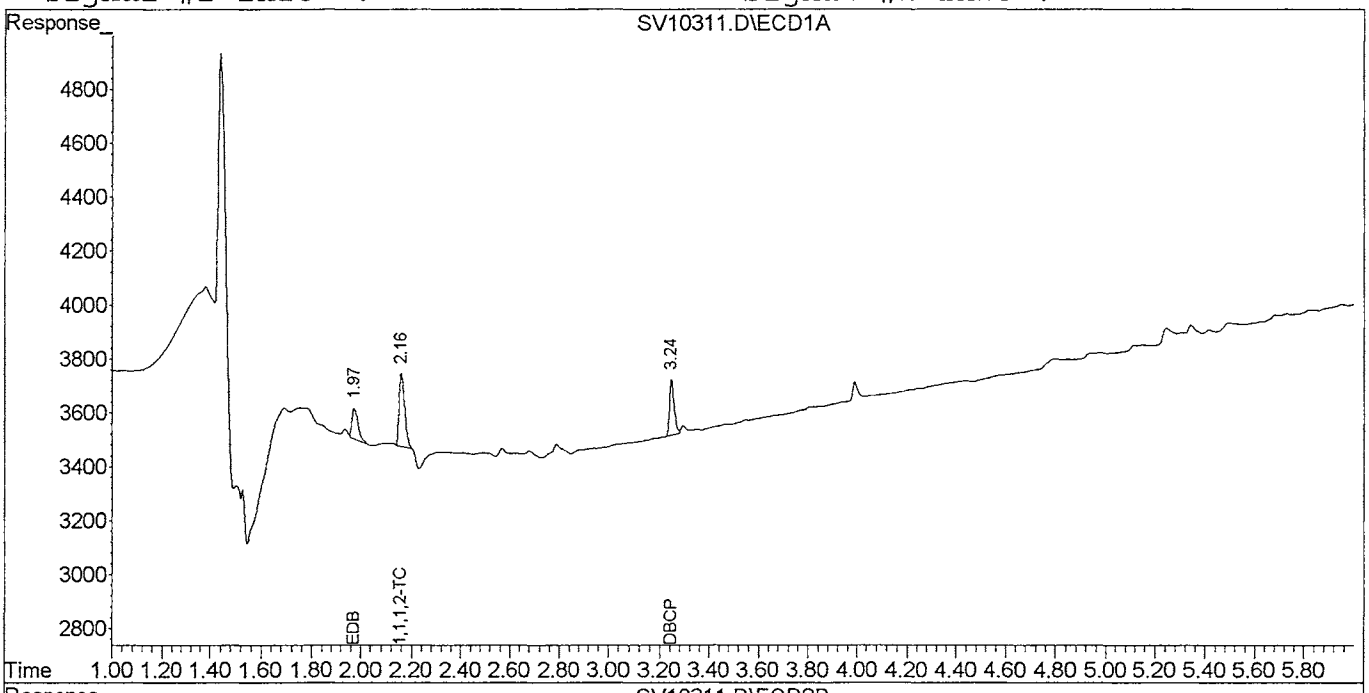
✓ AS 8/19/09

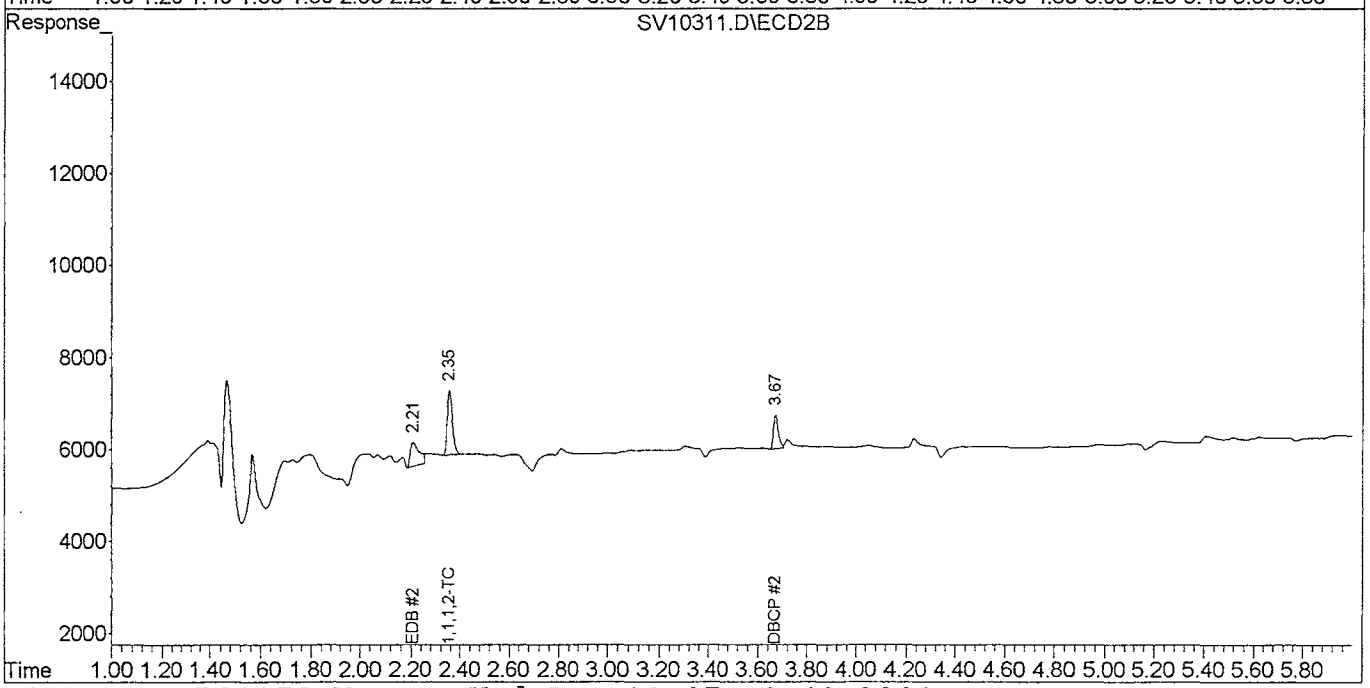
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10311.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10311.D\ECD2B.CH
Acq On : 17 Aug 2009 3:51 pm Operator:
Sample : EDB/DBCP 0.05 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 17 15:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:47:59 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10312.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10312.D\ECD2B.CH
Acq On : 17 Aug 2009 4:06 pm Operator:
Sample : EDB/DBCP 0.075 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:39 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:49:01 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.35	6356	30760	0.076m	0.074m
Spiked Amount 0.100	Range 65 - 135		Recovery =		76.00%	74.00%
Target Compounds						
1) TM EDB	1.97	2.21	2839	17371	0.070	0.071
3) TM DBCP	3.24	3.67	3652	14133	0.068	0.073

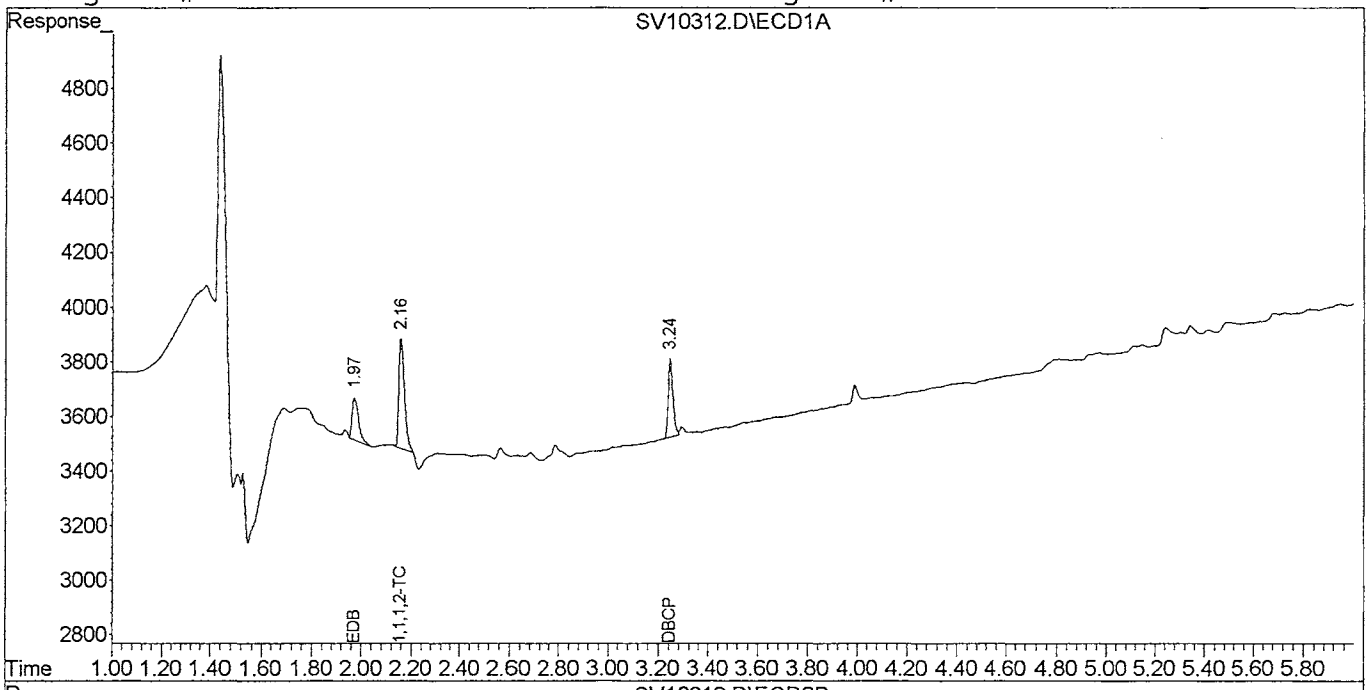
✓ 8/19/09 RLS

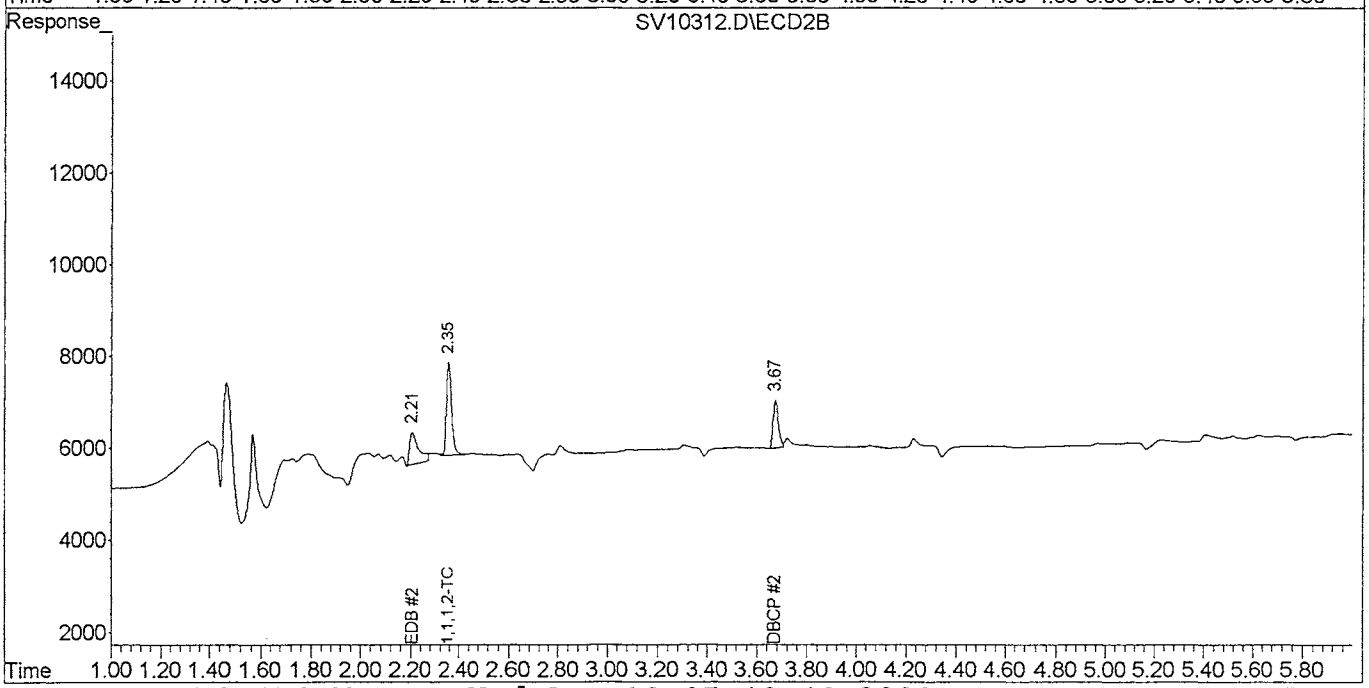
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10312.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10312.D\ECD2B.CH
Acq On : 17 Aug 2009 4:06 pm Operator:
Sample : EDB/DBCP 0.075 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:39 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 17 15:49:01 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10313.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10313.D\ECD2B.CH
Acq On : 17 Aug 2009 4:21 pm Operator:
Sample : EDB/DBCP 0.1 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:40 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:39:50 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	8464	42008	0.101m	0.101
Spiked Amount 0.100	Range 65 - 135		Recovery =		101.00%	101.00%
Target Compounds						
1) TM EDB	1.97	2.21	3731	23463	0.094	0.097m
3) TM DBCP	3.25	3.67	4960	19989	0.095	0.104

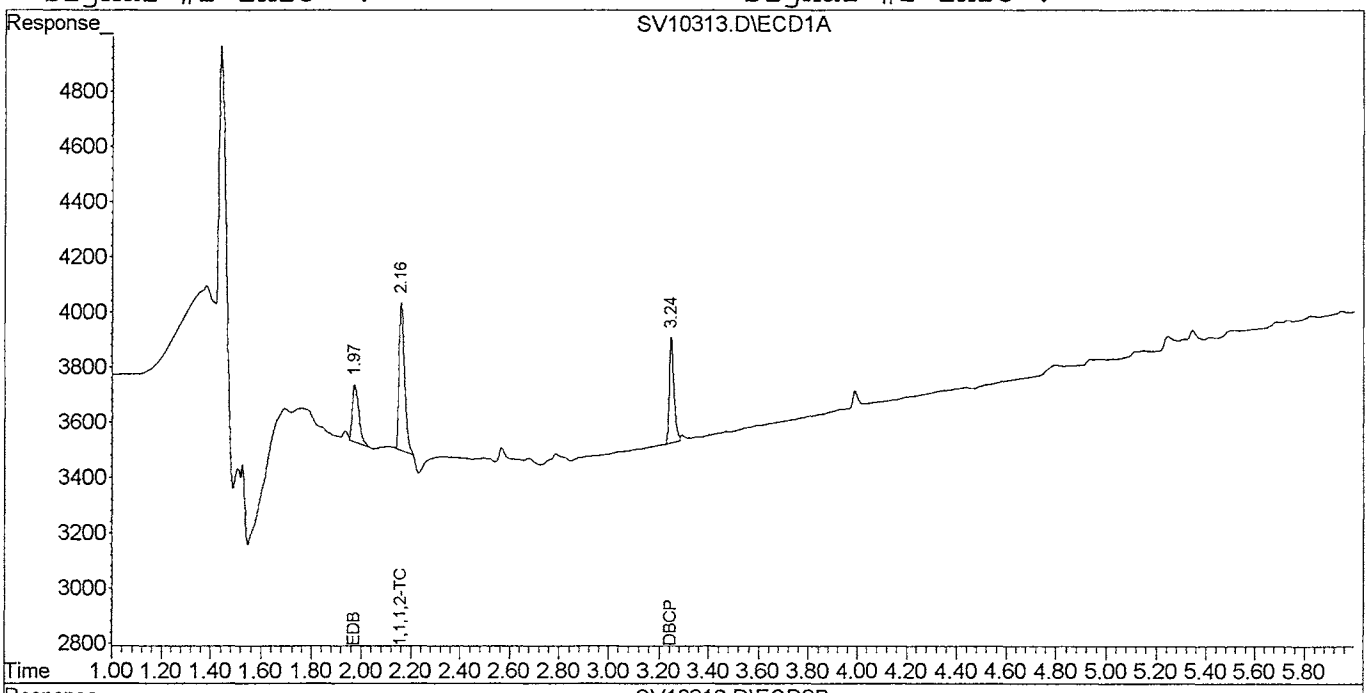
VAS 8/19/09

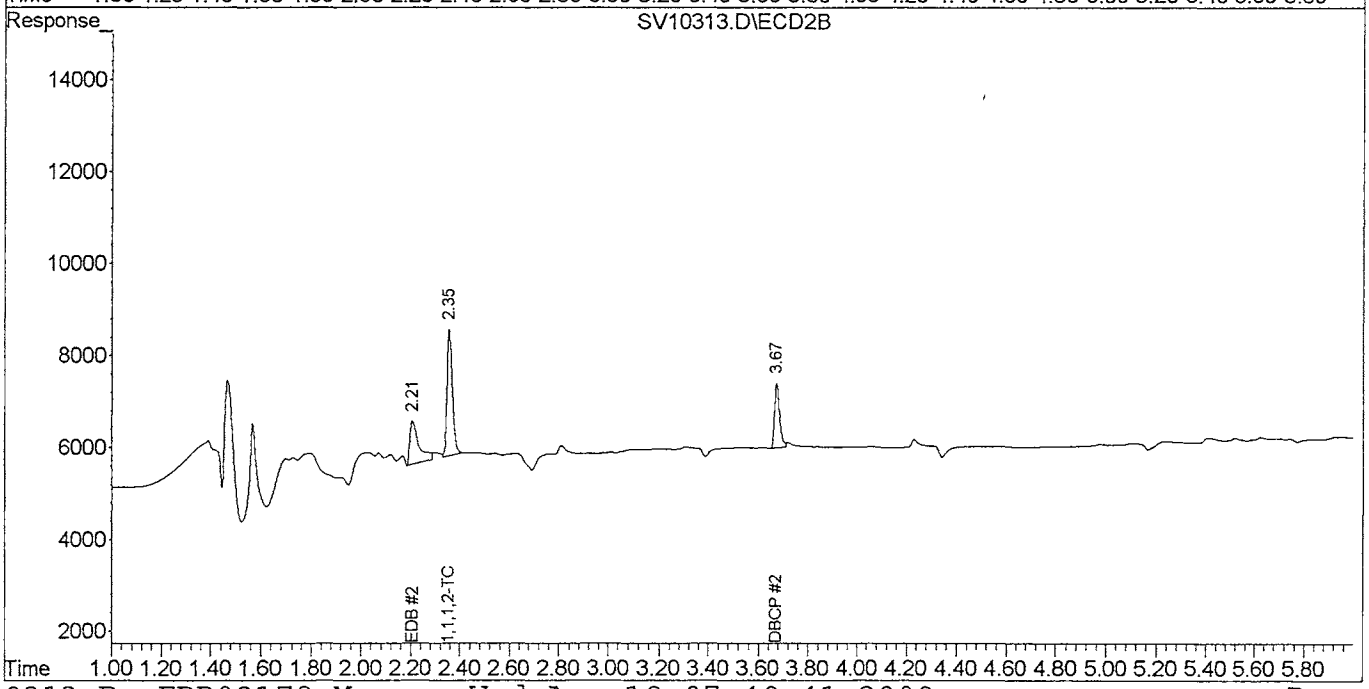
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10313.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10313.D\ECD2B.CH
Acq On : 17 Aug 2009 4:21 pm Operator:
Sample : EDB/DBCP 0.1 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:40 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:39:50 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10314.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10314.D\ECD2B.CH
Acq On : 17 Aug 2009 4:36 pm Operator:
Sample : EDB/DBCP 0.25 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:40 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:40:43 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

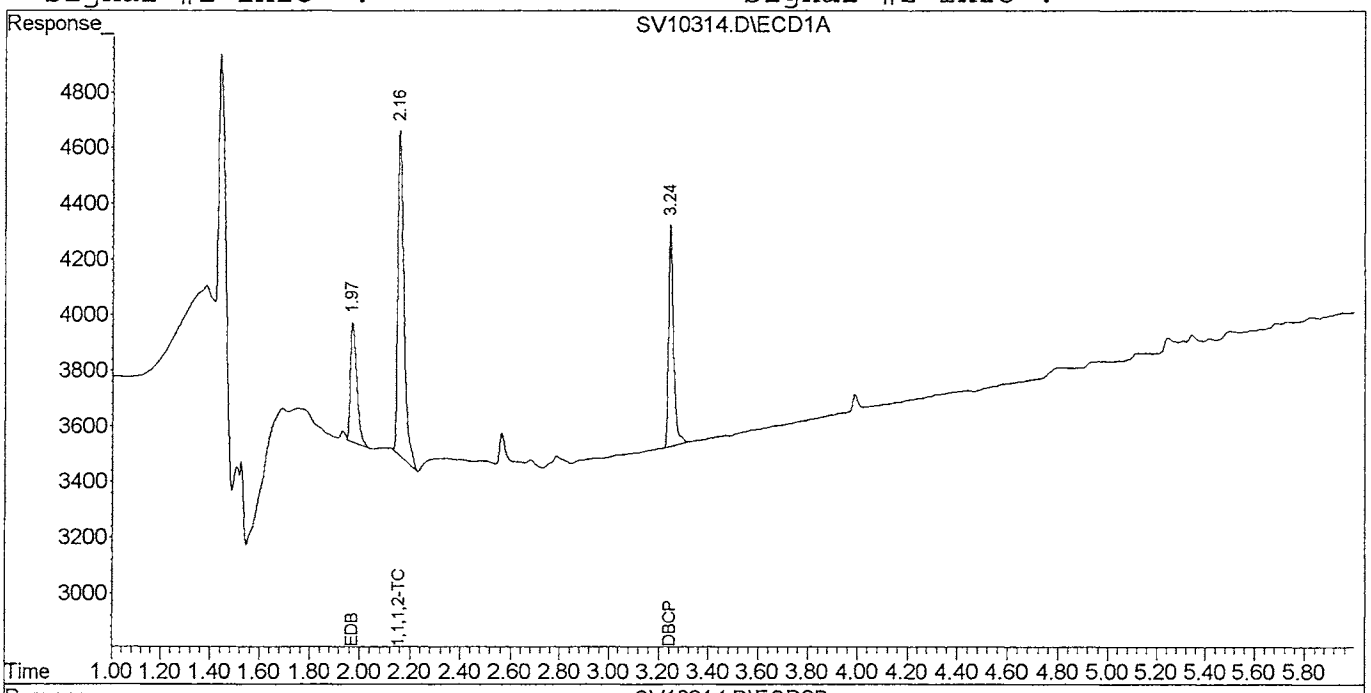
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	19557	93505	0.238	0.221
Spiked Amount 0.100	Range 65 - 135		Recovery =		238.00%#	221.00%#
Target Compounds						
1) TM EDB	1.97	2.21	7674	44612	0.192	0.178
3) TM DBCP	3.24	3.67	10724	48964	0.203	0.254 #

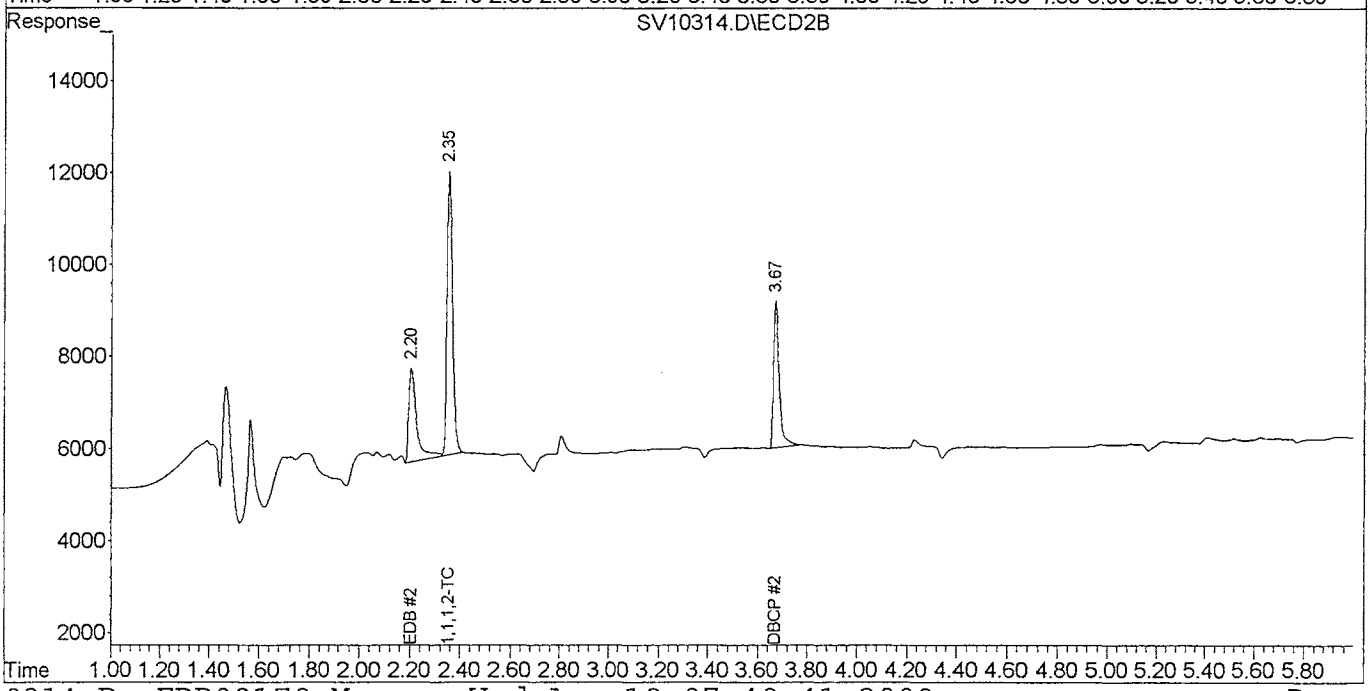
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10314.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10314.D\ECD2B.CH
Acq On : 17 Aug 2009 4:36 pm Operator:
Sample : EDB/DBCP 0.25 UG/L Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:40 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:40:43 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Spike Recovery and RPD Summary Report - WATER

Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration

Non-Spiked Sample: SV10315B.D

8/19/09

	Spike Sample	Spike Duplicate Sample
File ID :	SV10320V.D	SV10321V.D
Sample :	LCSaA081709EDB1	LCSDA081709EDB1
Acq Time:	17 Aug 2009 6:22 pm	17 Aug 2009 6:52 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
EDB	0.0	0	0	0	106	108	2	20	70-130
DBCP	0.0	0	0	0	99	100	2	20	70-130
EDB #2	0.0	0	0	0	99	86	14	20	70-130
DBCP #2	0.0	0	0	0	103	105	2	20	70-130

- Fails Limit Check

VHS 8/19/09

EDB08179.M Wed Aug 19 08:09:59 2009

EDB/DBCP CV REPORT

Sample Name LCSaA081709EDB1 CV Amount (ug/L) 0.100
Data File Name SV10320V.D
Date Acquired 8/17/2009 6:22

8/19/09

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.113	113%	Pass
EDB	1.973	1.974	0.0200	Pass	0.106	106%	Pass
DBCP	3.245	3.246	0.0200	Pass	0.099	99%	Pass
1,1,1,2-TCA #2					0.101	101%	Pass
EDB #2	2.207	2.206	0.0100	Pass	0.099	99%	Pass
DBCP #2	3.673	3.671	0.0100	Pass	0.103	103%	Pass

JHS 8/19/09

* CURVE 2nd SOURCE

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10320V.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10320V.D\ECD2B.CH
Acq On : 17 Aug 2009 6:22 pm Operator:
Sample : LCSaA081709EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9221	41957	0.113m	0.101
Spiked Amount 0.100	Range 65 - 135		Recovery =		113.00%	101.00%
Target Compounds						
1) TM EDB	1.97	2.21	4069	23564	0.106	0.099m
3) TM DBCP	3.24	3.67	5068	19978	0.099	0.103

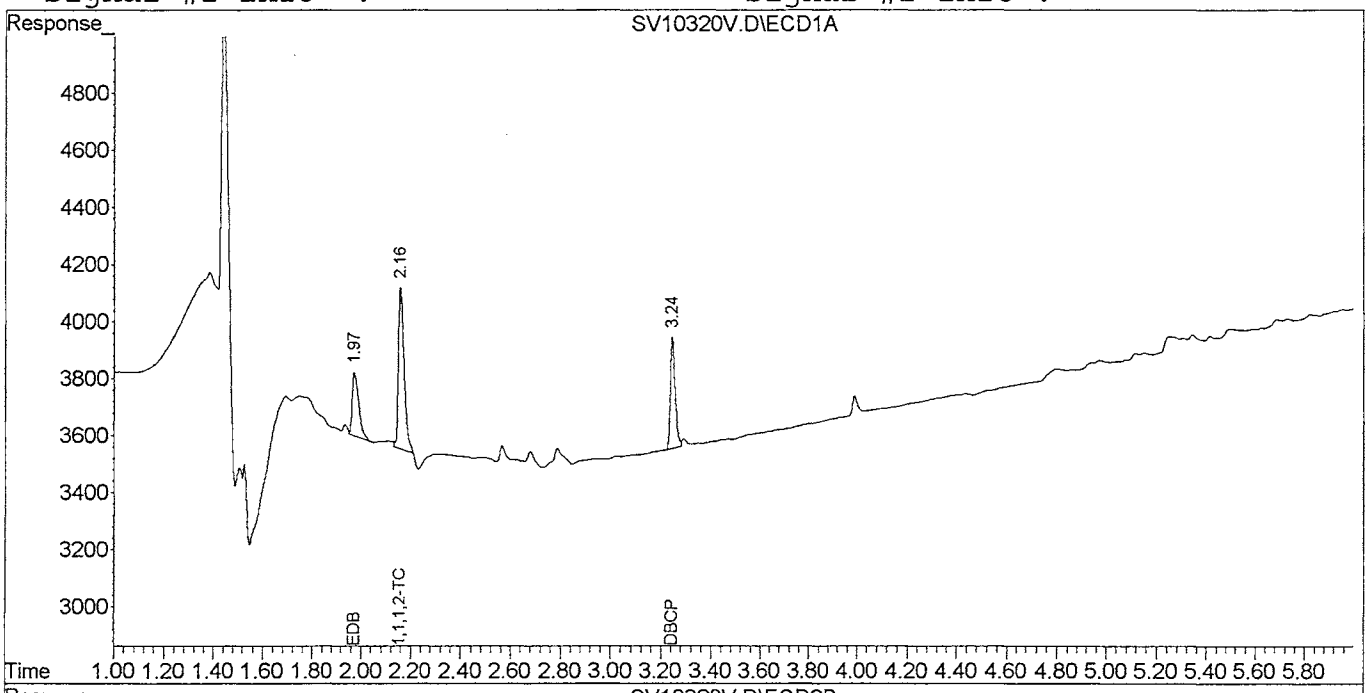
VDS 8/19/09

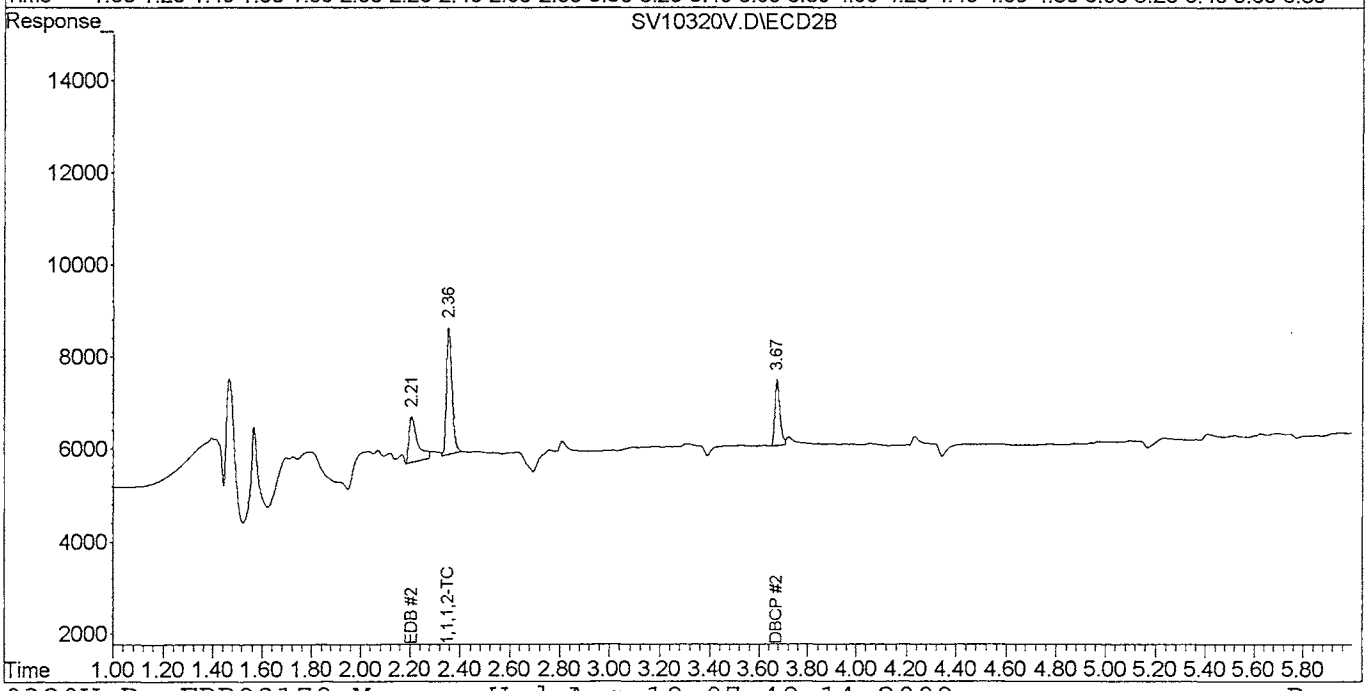
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10320V.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10320V.D\ECD2B.CH
Acq On : 17 Aug 2009 6:22 pm Operator:
Sample : LCSaA081709EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP CV REPORT

Sample Name LCSDA081709EDB1 CV Amount (ug/L) 0.100
Data File Name SV10321V.D
Date Acquired 8/17/2009 6:52

8/19/09

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.114	114%	Pass
EDB	1.973	1.974	0.0200	Pass	0.108	108%	Pass
DBCP	3.245	3.246	0.0200	Pass	0.100	100%	Pass
1,1,1,2-TCA #2					0.101	101%	Pass
EDB #2	2.208	2.206	0.0100	Pass	0.086	86%	Pass
DBCP #2	3.673	3.671	0.0100	Pass	0.105	105%	Pass

VTS 8/19/09

* CURVE 2nd SOURCE

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10321V.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10321V.D\ECD2B.CH
Acq On : 17 Aug 2009 6:52 pm Operator:
Sample : LCSDA081709EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/19/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9286	41735	0.114m	0.101m
Spiked Amount 0.100	Range 65 - 135		Recovery =		114.00%	101.00%
Target Compounds						
1) TM EDB	1.97	2.21	4163	20506	0.108	0.086
3) TM DBCP	3.25	3.67	5148	20375	0.100	0.105

JHS 8/19/09

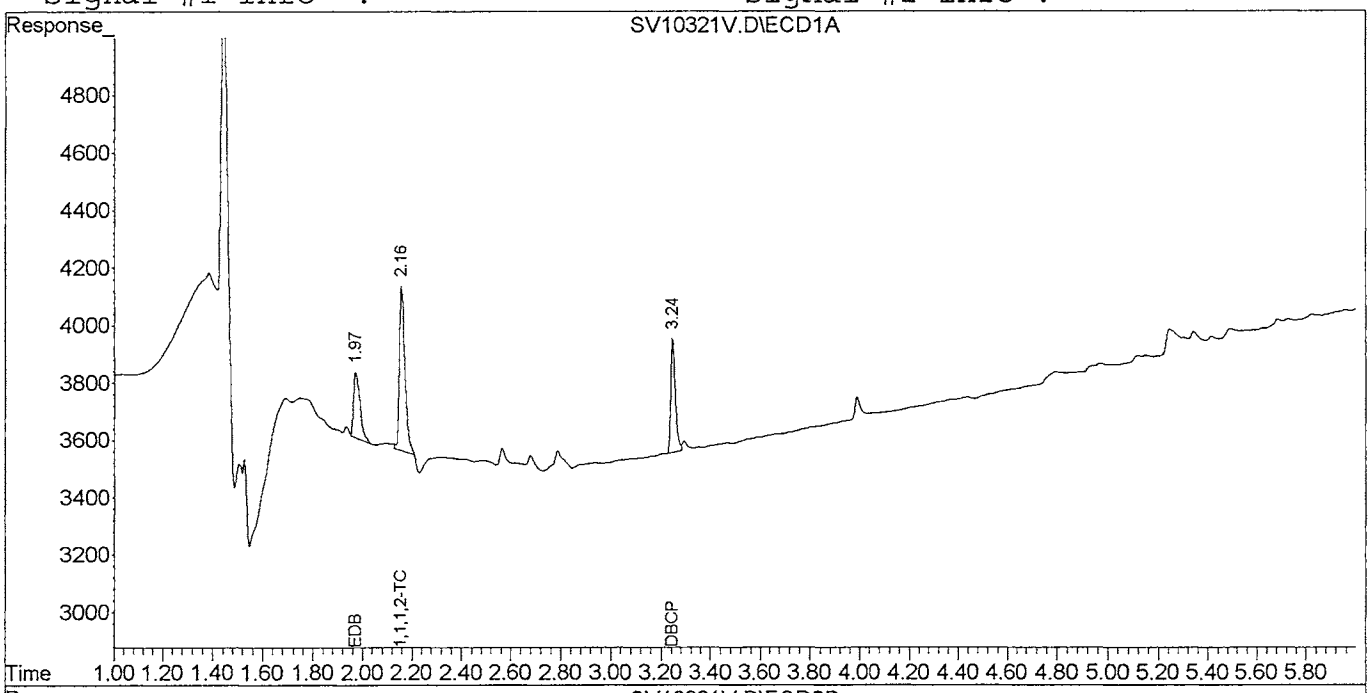
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

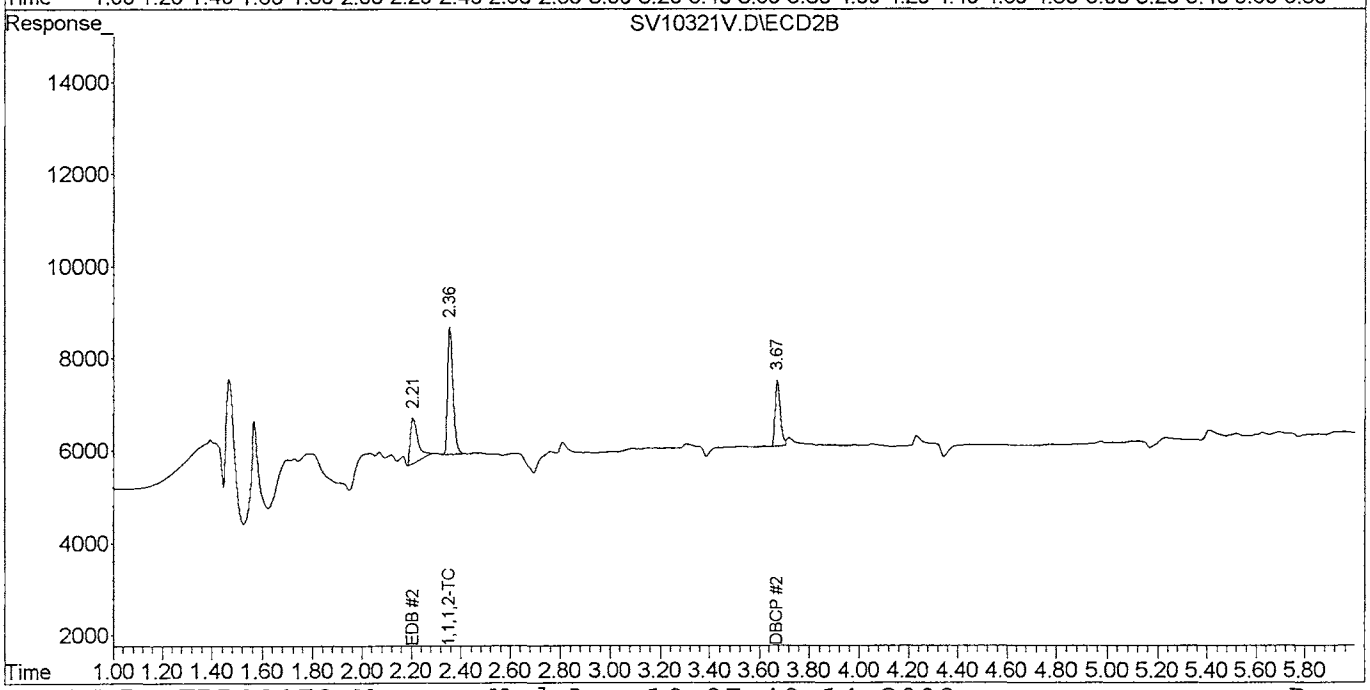
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\081709\SV10321V.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\1\DATA\081709\SV10321V.D\ECD2B.CH
Acq On : 17 Aug 2009 6:52 pm Operator:
Sample : LCSDA081709EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 19 7:48 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Spike Recovery and RPD Summary Report - WATER

Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration

Non-Spiked Sample: SV10330B.D

8/24/09

	Spike Sample	Spike Duplicate Sample
File ID :	SV10327V.D	SV10328V.D
Sample :	LCSa082409EDB1	LCSD082409EDB1
Acq Time:	24 Aug 2009 9:35 am	24 Aug 2009 10:05 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
EDB	0.0	0	0	0	103	103	1	20	70-130
DBCP	0.0	0	0	0	103	103	1	20	70-130
EDB #2	0.0	0	0	0	117	120	2	20	70-130
DBCP #2	0.0	0	0	0	109	113	4	20	70-130

- Fails Limit Check

EDB08179.M Mon Aug 24 10:58:21 2009

EDB/DBCP CV REPORT

Sample Name LCSa082409EDB1 CV Amount (ug/L) 0.100
Data File Name SV10327V.D
Date Acquired 8/24/2009 9:35

8/24/09

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.120	120%	Pass
EDB	1.975	1.974	0.0200	Pass	0.103	103%	Pass
DBCP	3.248	3.246	0.0200	Pass	0.103	103%	Pass
1,1,1,2-TCA #2					0.099	99%	Pass
EDB #2	2.212	2.206	0.0100	Pass	0.117	117%	Pass
DBCP #2	3.677	3.671	0.0100	Pass	0.109	109%	Pass

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10327V.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10327V.D\ECD2B.CH
Acq On : 24 Aug 2009 9:35 am Operator:
Sample : LCSa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:00 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

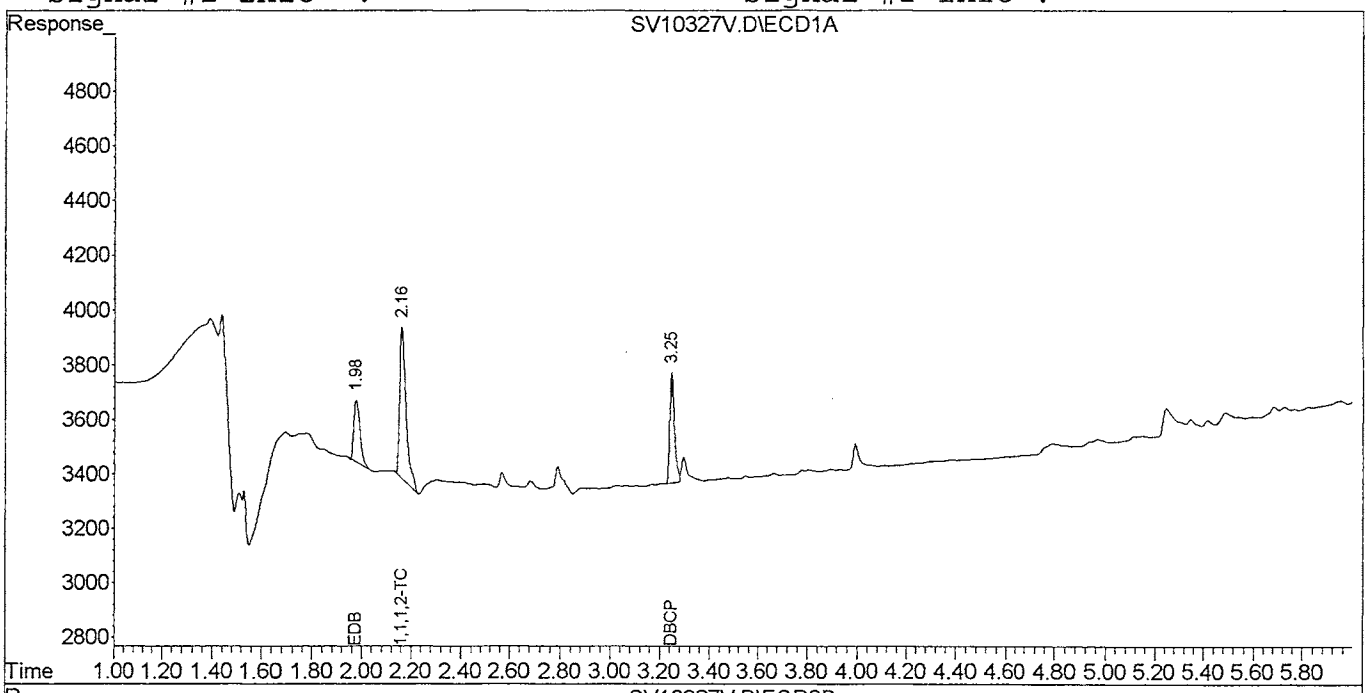
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9775	40984	0.120	0.099
Spiked Amount 0.100	Range 65 - 135		Recovery =		120.00%	99.00%
Target Compounds						
1) TM EDB	1.98	2.21	3948	28045	0.103	0.117
3) TM DBCP	3.25	3.68	5287	21050	0.103	0.109

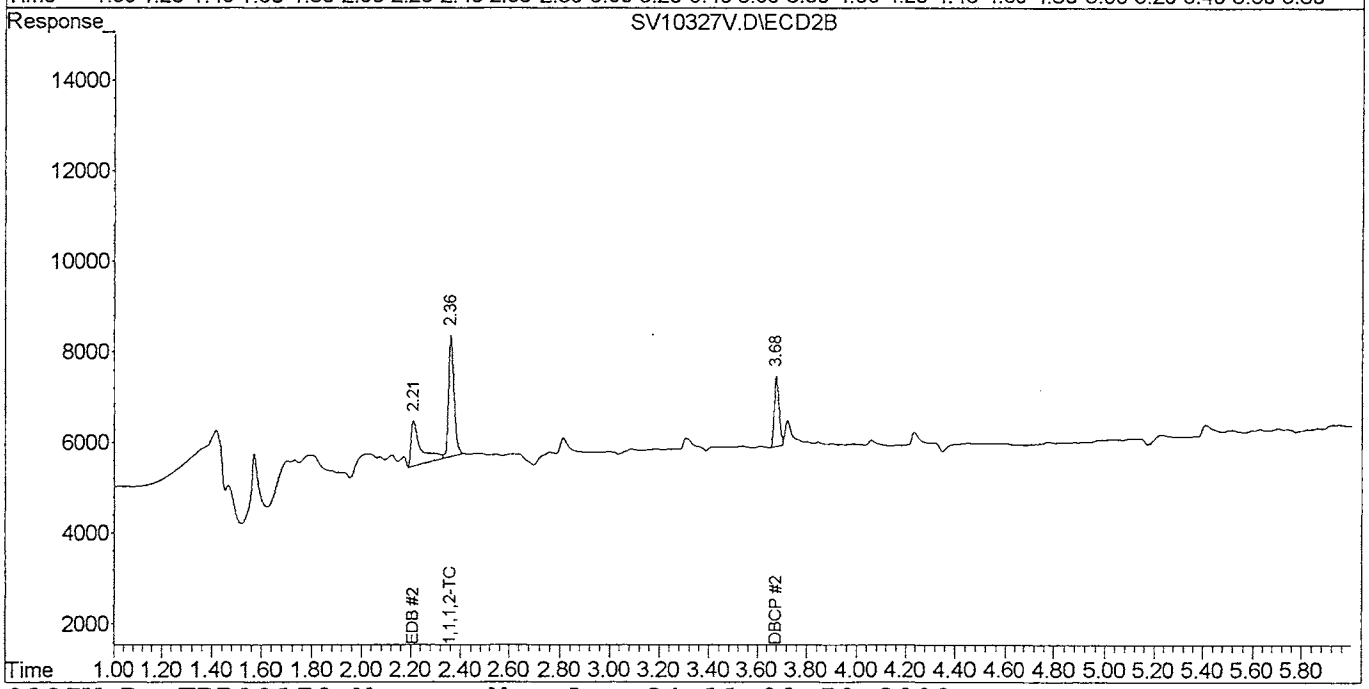
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10327V.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10327V.D\ECD2B.CH
Acq On : 24 Aug 2009 9:35 am Operator:
Sample : LCSa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:00 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP CV REPORT

Sample Name LCSD082409EDB1 CV Amount (ug/L) 0.100
Data File Name SV10328V.D
Date Acquired 8/24/2009 10:05

8/24/09

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.122	122%	Pass
EDB	1.975	1.974	0.0200	Pass	0.103	103%	Pass
DBCP	3.247	3.246	0.0200	Pass	0.103	103%	Pass
1,1,1,2-TCA #2					0.102	102%	Pass
EDB #2	2.211	2.206	0.0100	Pass	0.120	120%	Pass
DBCP #2	3.677	3.671	0.0100	Pass	0.113	113%	Pass

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10328V.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10328V.D\ECD2B.CH
Acq On : 24 Aug 2009 10:05 am Operator:
Sample : LCSD082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:16 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9966	42147	0.122	0.102
Spiked Amount 0.100	Range 65 - 135		Recovery =		122.00%	102.00%
Target Compounds						
1) TM EDB	1.97	2.21	3976	28656	0.103	0.120
3) TM DBCP	3.25	3.68	5256	21835	0.103	0.113

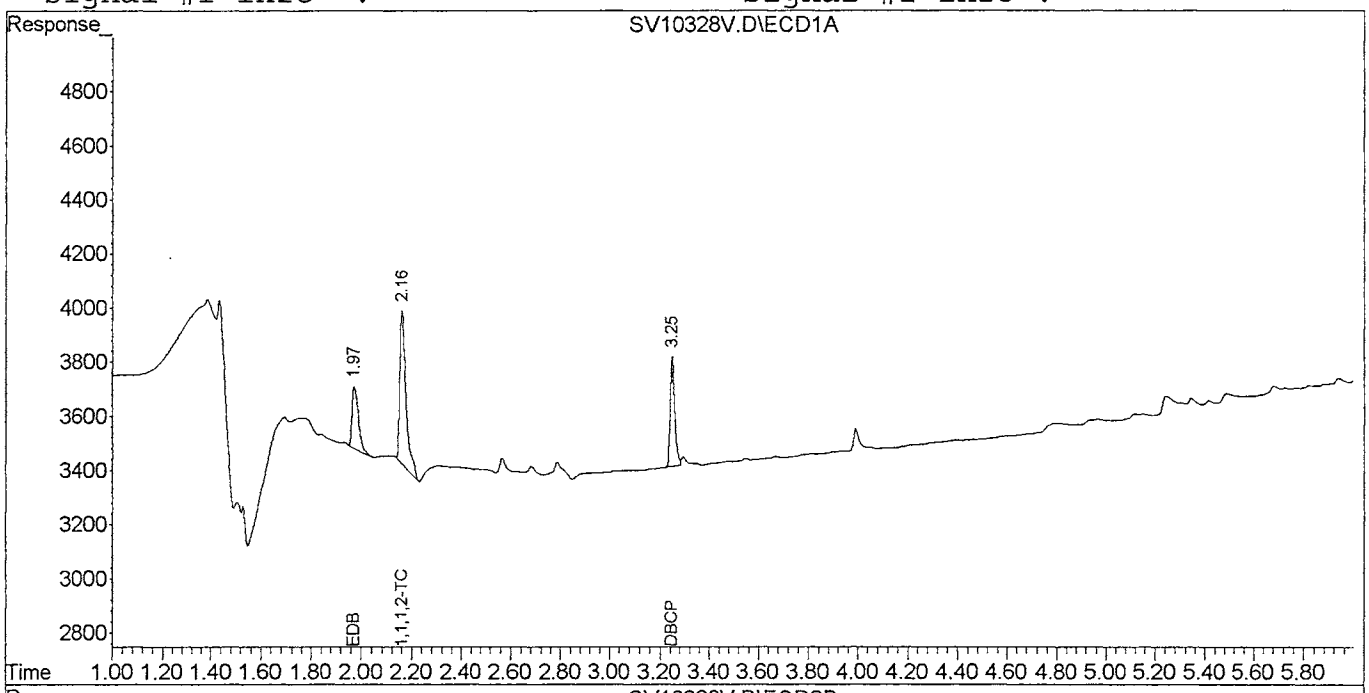
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

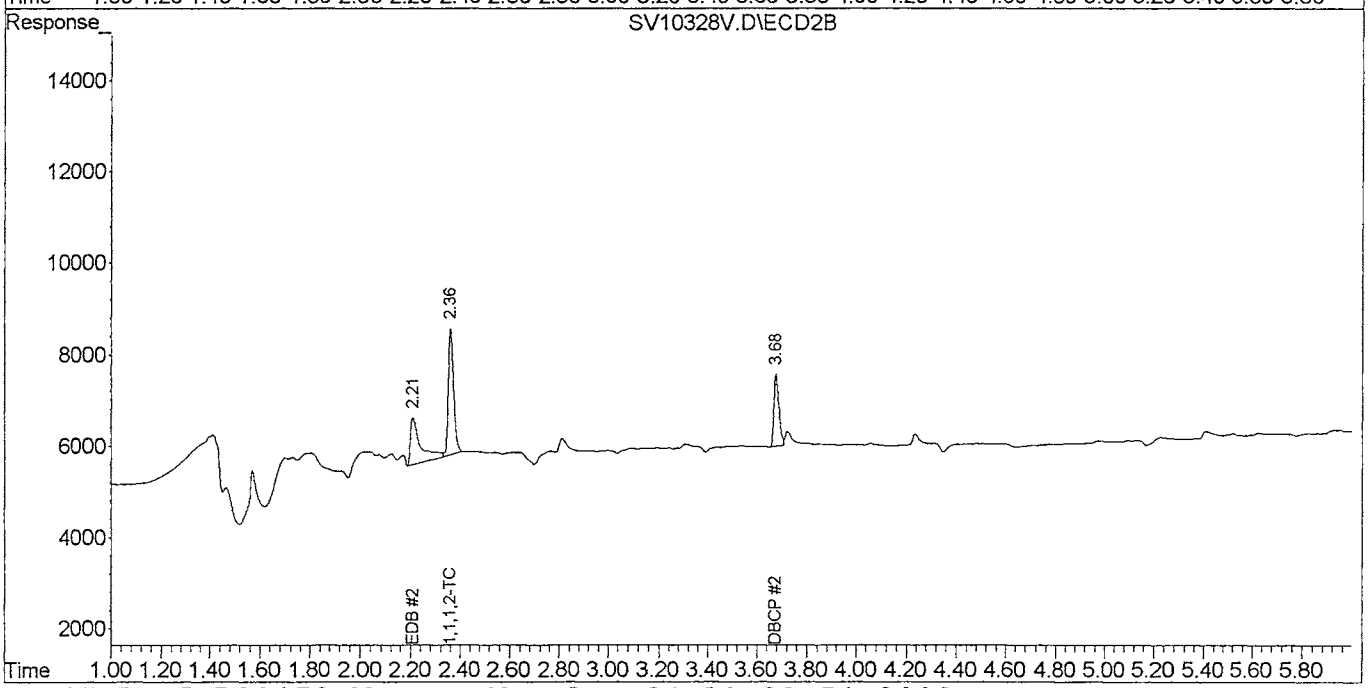
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10328V.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10328V.D\ECD2B.CH
Acq On : 24 Aug 2009 10:05 am Operator:
Sample : LCSD082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:16 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP MDL CHECK REPORT

Sample Name MDLa082409EDB1
Data File Name SV10329.D
Date Acquired 8/24/2009 10:20

8/24/09

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (60-140%)
1,1,1,2-TCA					0.131	131%	Pass
EDB	1.977	1.975	0.0200	Pass	0.024	120%	Pass
DBCP	3.247	3.247	0.0200	Pass	0.023	117%	Pass
1,1,1,2-TCA #2					0.109	109%	Pass
EDB #2	2.218	2.211	0.0100	Pass	0.022	111%	Pass
DBCP #2	3.678	3.677	0.0100	Pass	0.022	110%	Pass

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10329.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10329.D\ECD2B.CH
Acq On : 24 Aug 2009 10:20 am Operator:
Sample : MDLa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 11:00 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	10654	45060	0.131	0.109
Spiked Amount 0.100	Range 65 - 135		Recovery =		131.00%	109.00%
Target Compounds						
1) TM EDB	1.98	2.22	921	5298	0.024	0.022m
3) TM DBCP	3.25	3.68	1197	4268	0.023	0.022

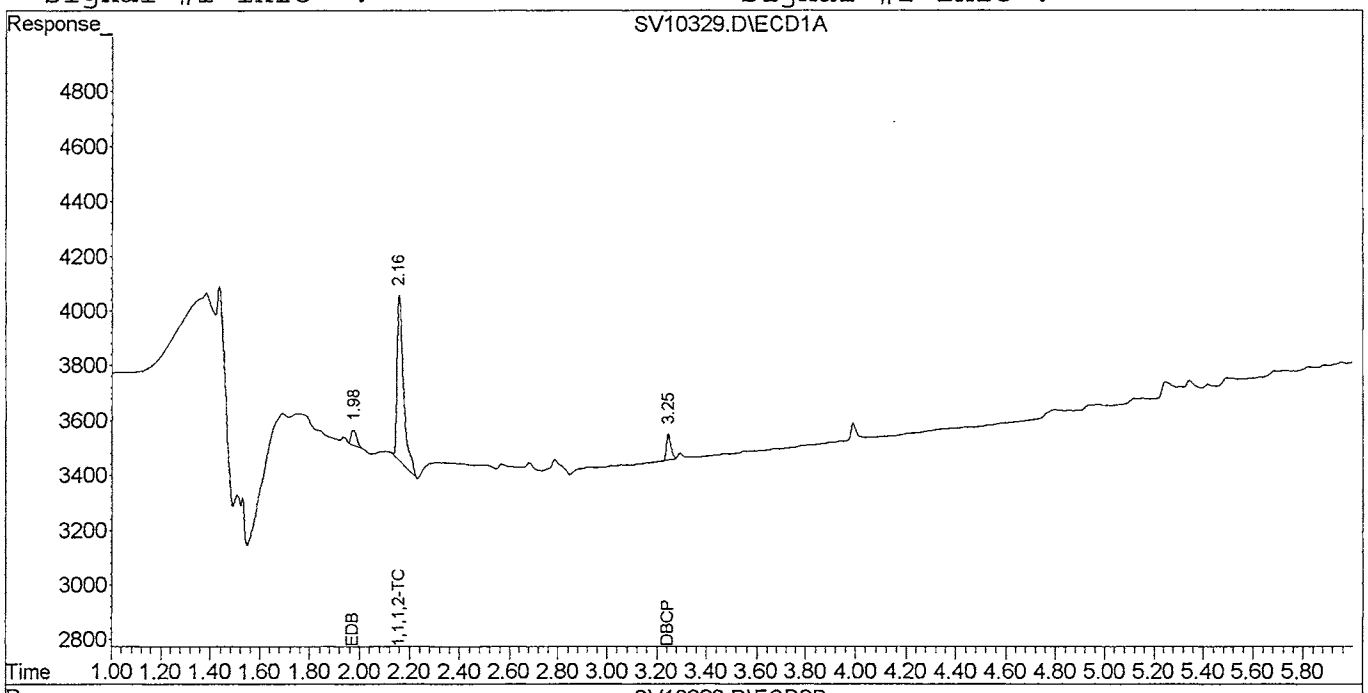
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

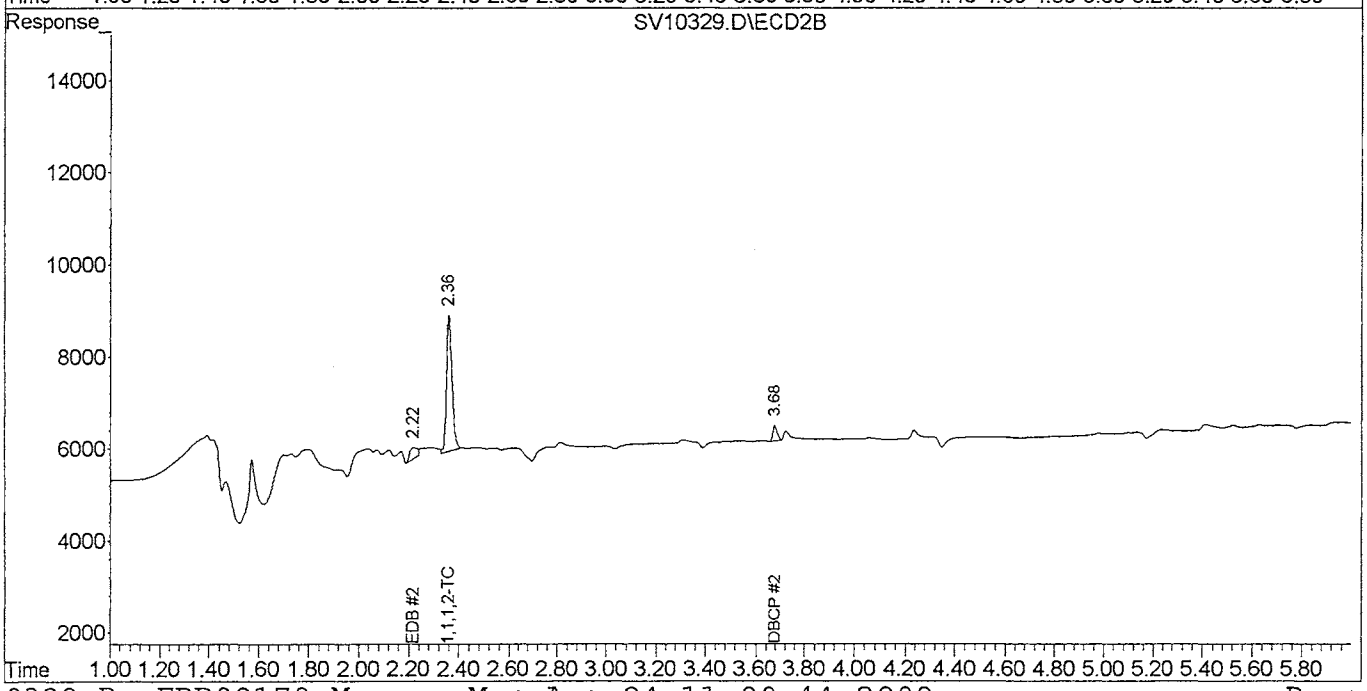
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10329.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10329.D\ECD2B.CH
Acq On : 24 Aug 2009 10:20 am Operator:
Sample : MDLa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 11:00 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP SAMPLE REPORT

Sample Name BLNKA082409EDB1
Data File Name SV10330B.D
Date Acquired 8/24/2009 10:35

Dilution (1:X) 1

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (65-135%)	Inst DL (ug/L)	Prelim Hit (ug/L)	Hit Confirmed
1,1,1,2-TCA					**0.109**	**109%**	**Pass**			
EDB	0.0000	1.9739	0.0200	**FAIL**	**0.000**			0.02		
DBCP	3.2945	3.2463	0.0200	**FAIL**	**0.046**			0.02		
1,1,1,2-TCA #2					**0.102**	**102%**	**Pass**			
EDB #2	2.1710	2.2060	0.0100	**FAIL**	**0.013**			0.02		
DBCP #2	3.7241	3.6706	0.0100	**FAIL**	**0.041**			0.02		

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10330B.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10330B.D\ECD2B.CH
Acq On : 24 Aug 2009 10:35 am Operator:
Sample : BLNKA082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:41 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	8858	42330	0.109m	0.102
Spiked Amount 0.100	Range 65 - 135		Recovery =		109.00%	102.00%
Target Compounds						
1) TM EDB	0.00	2.17	0	3145	N.D.	0.013
3) TM DBCP	3.29	3.72	2360	7929	0.046	0.041

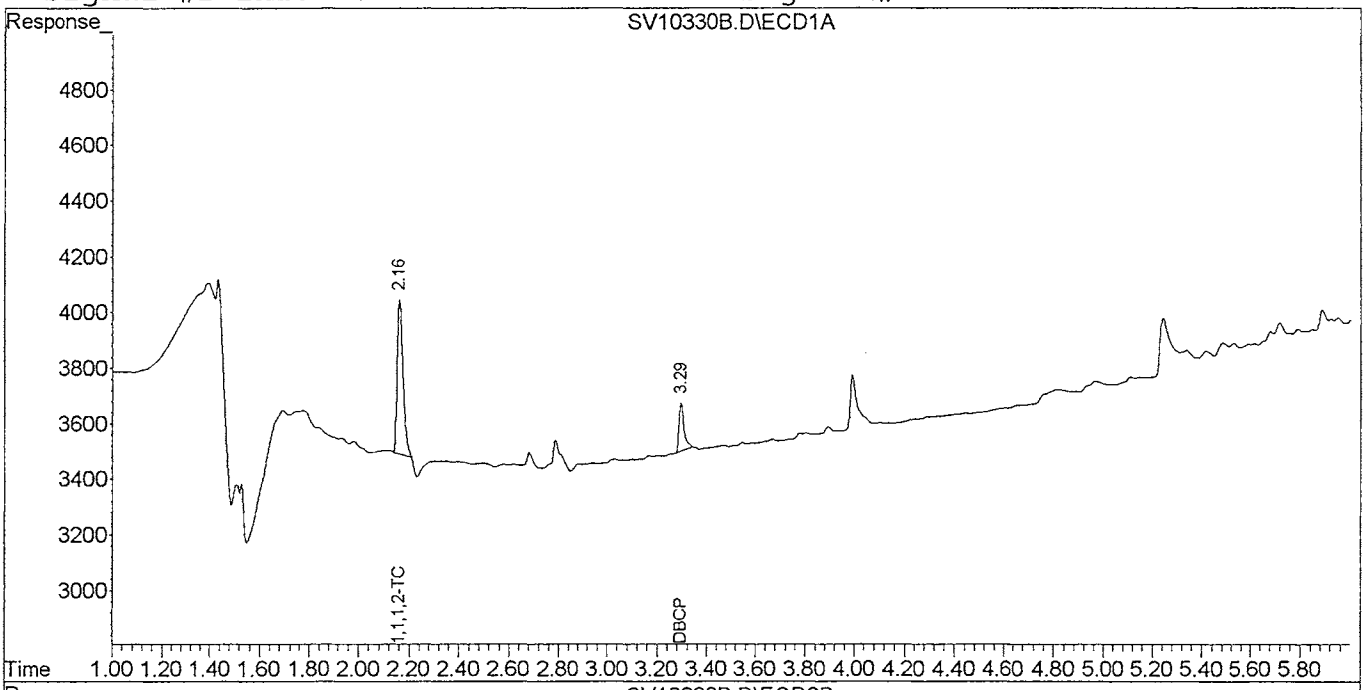
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

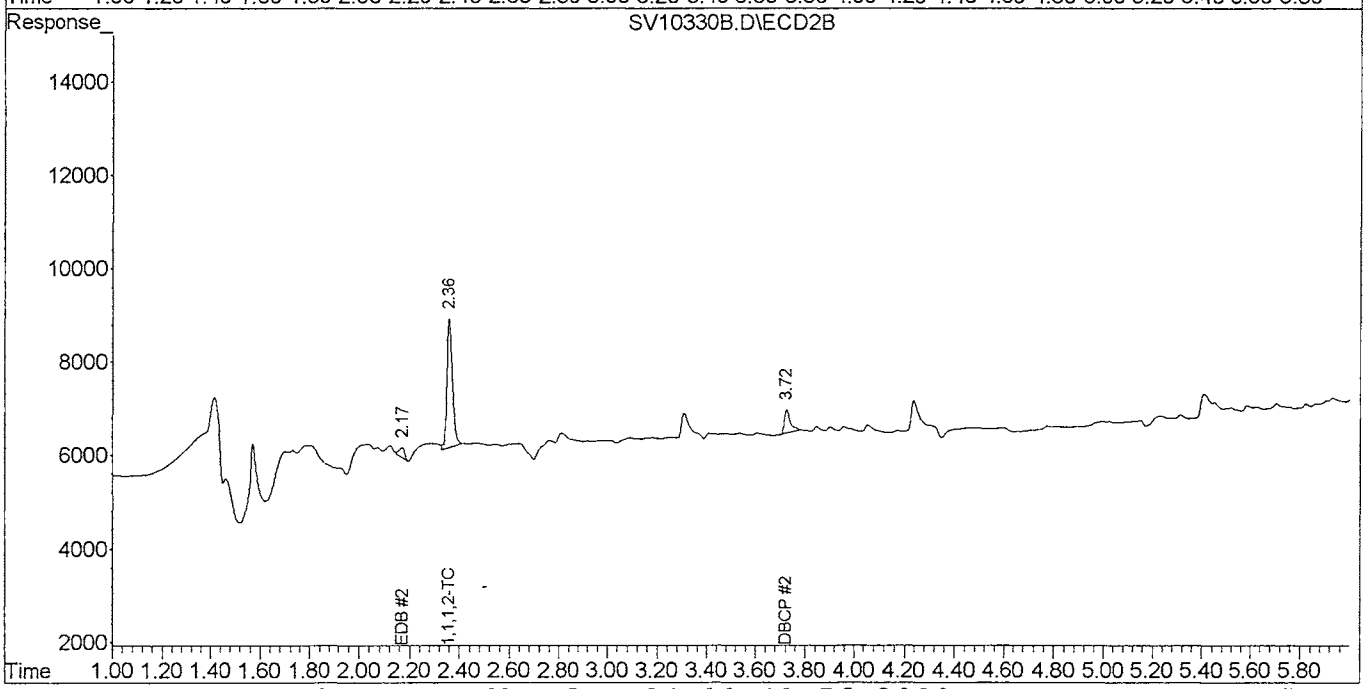
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10330B.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10330B.D\ECD2B.CH
Acq On : 24 Aug 2009 10:35 am Operator:
Sample : BLNKA082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 10:41 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Wed Aug 19 07:41:40 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Spike Recovery and RPD Summary Report - WATER

Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration

* PARENT = 82084.03

Non-Spiked Sample: SV10332.D

8/24/09

	Spike Sample	Spike Duplicate Sample
File ID :	SV10333S.D	SV10334S.D
Sample :	MSPKA082409EDB1	MSDUA082409EDB1
Acq Time:	24 Aug 2009 11:28 am	24 Aug 2009 11:43 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
EDB	0.0	0	0	0	110	112	2	20	70-130
DBCP	0.0	0	0	0	113	114	1	20	70-130
EDB #2	0.0	0	0	0	122	105	15	20	70-130
DBCP #2	0.0	0	0	0	121	121	0	20	70-130

- Fails Limit Check

EDB08179.M Mon Aug 24 12:30:03 2009

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10333S.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10333S.D\ECD2B.CH
Acq On : 24 Aug 2009 11:28 am Operator:
Sample : MSPKA082409EDB1 Inst : ECD
Misc : 82084.03 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 12:28 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	8556	39872	0.105	0.096
Spiked Amount 0.100	Range 65 - 135		Recovery =		105.00%	96.00%
Target Compounds						
1) TM EDB	1.97	2.21	4229	29177	0.110	0.122
3) TM DBCP	3.25	3.68	5797	23432	0.113	0.121

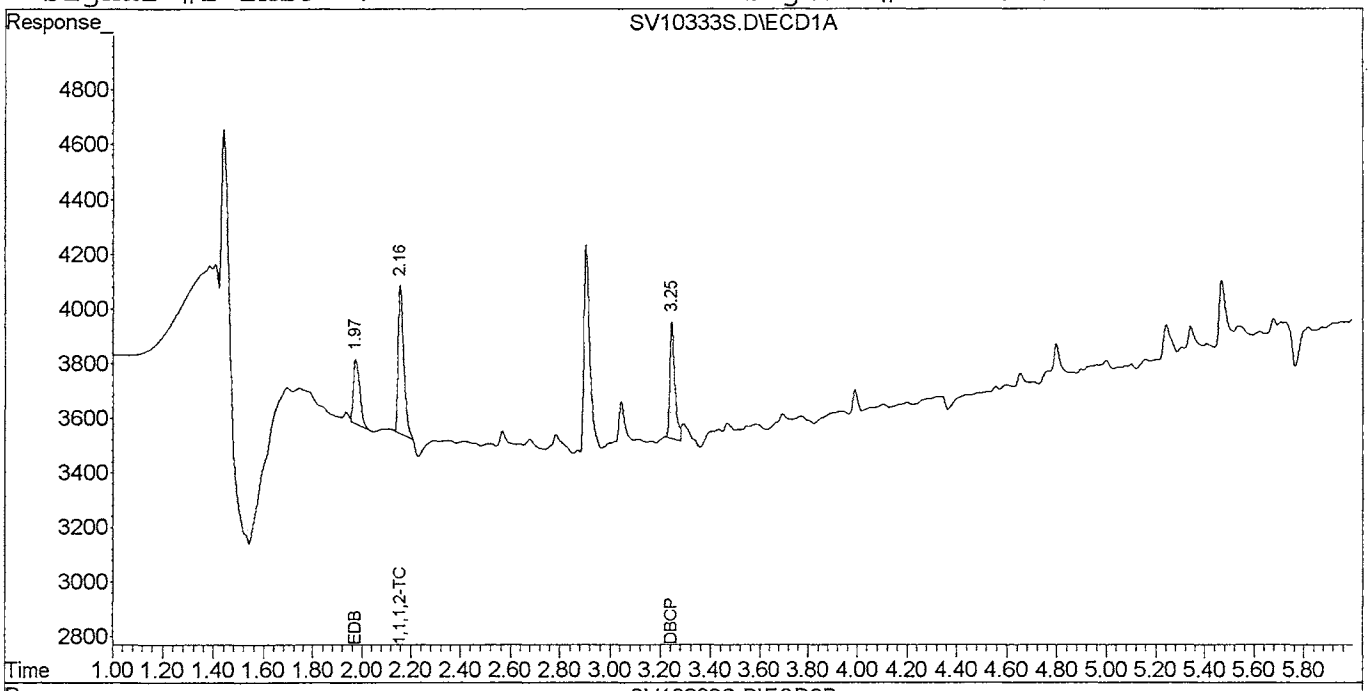
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

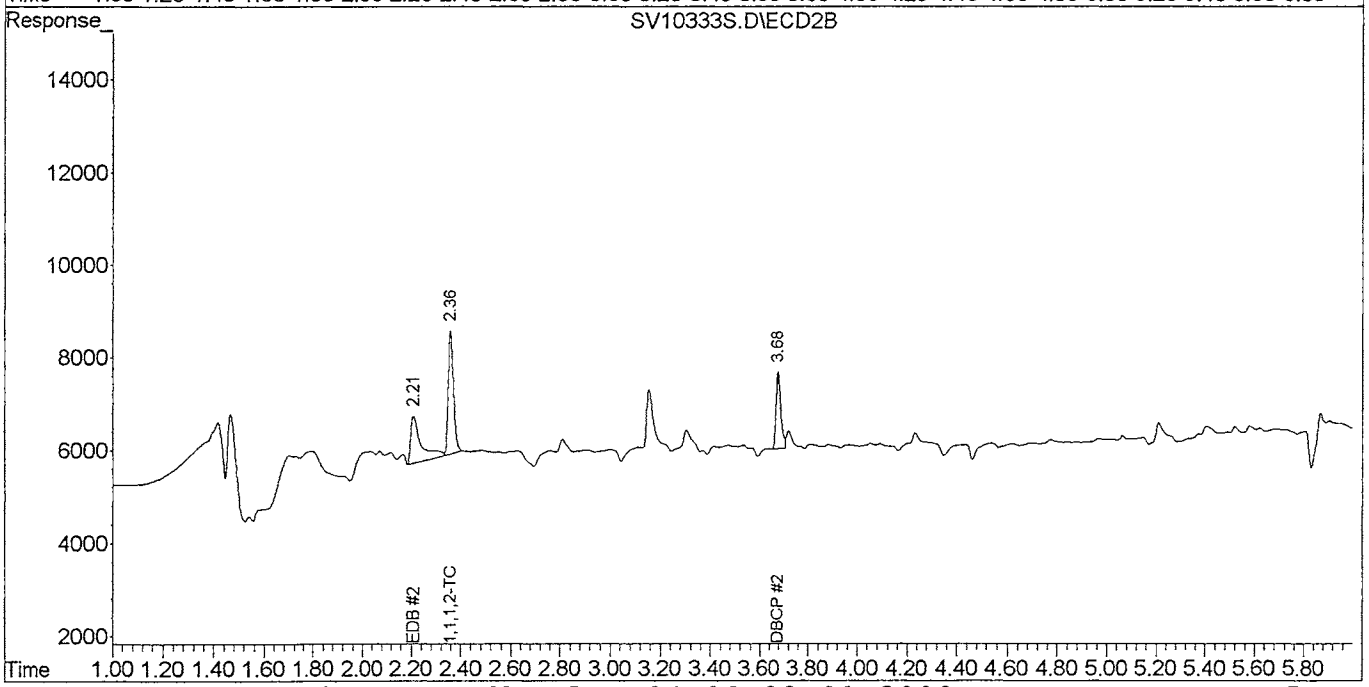
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10333S.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10333S.D\ECD2B.CH
Acq On : 24 Aug 2009 11:28 am Operator:
Sample : MSPKA082409EDB1 Inst : ECD
Misc : 82084.03 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 12:28 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10334S.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10334S.D\ECD2B.CH
Acq On : 24 Aug 2009 11:43 am Operator:
Sample : MSDUA082409EDB1 Inst : ECD
Misc : 82084.03 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 12:29 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

8/24/09

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	8777	40217	0.108	0.097
Spiked Amount 0.100	Range 65 - 135		Recovery =		108.00%	97.00%
Target Compounds						
1) TM EDB	1.97	2.21	4312	25192	0.112	0.105
3) TM DBCP	3.25	3.68	5852	23361	0.114	0.121m

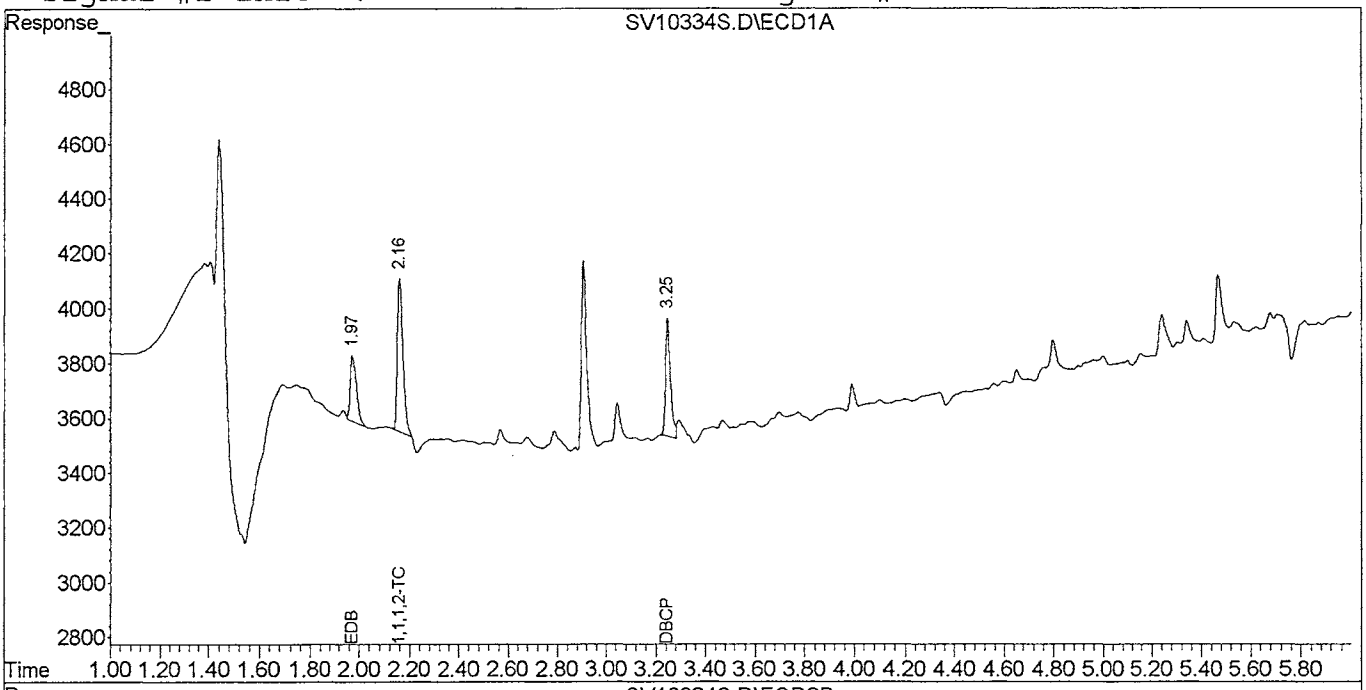
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

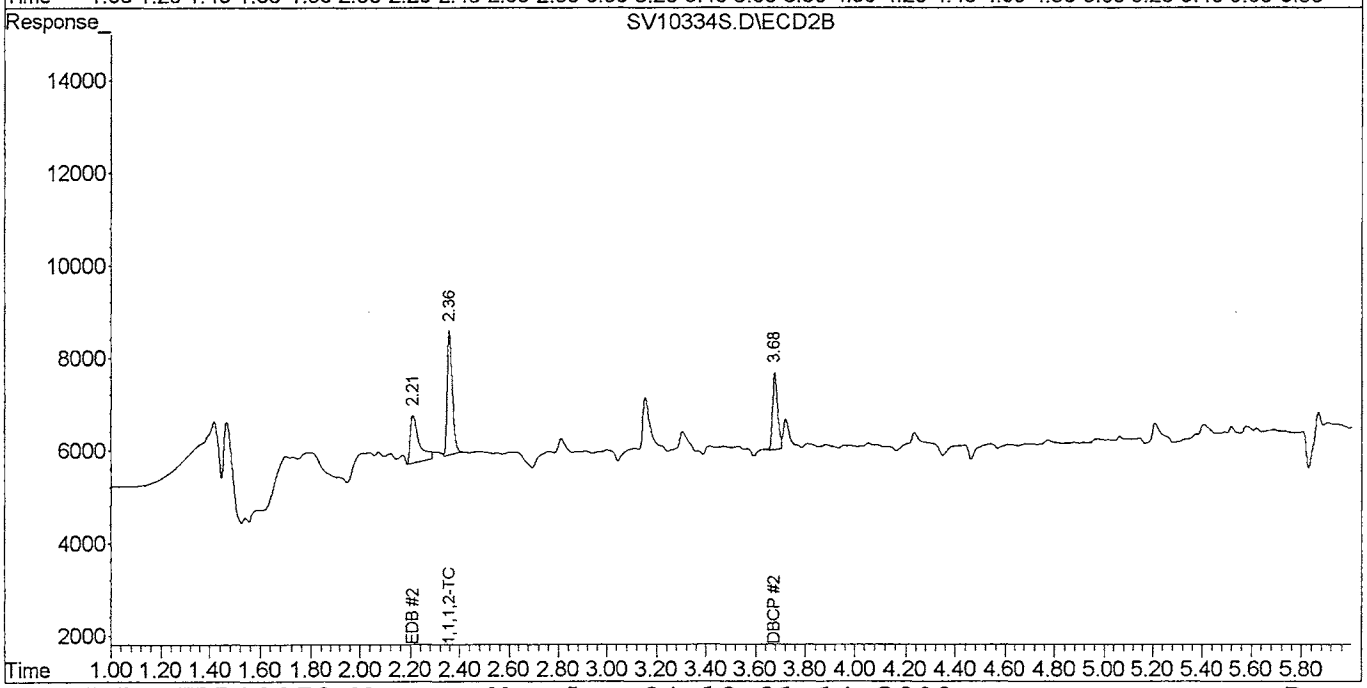
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10334S.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10334S.D\ECD2B.CH
Acq On : 24 Aug 2009 11:43 am Operator:
Sample : MSDUA082409EDB1 Inst : ECD
Misc : 82084.03 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 12:29 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP CV REPORT

8/24/09

Sample Name LCSa082409EDB1 CV Amount (ug/L) 0.100
Data File Name SV10341Q.D
Date Acquired 8/24/2009 1:45

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.112	112%	Pass
EDB	1.973	1.975	0.0200	Pass	0.112	112%	Pass
DBCP	3.245	3.247	0.0200	Pass	0.108	108%	Pass
1,1,1,2-TCA #2					0.105	105%	Pass
EDB #2	2.209	2.211	0.0100	Pass	0.104	104%	Pass
DBCP #2	3.676	3.677	0.0100	Pass	0.116	116%	Pass

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10341Q.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10341Q.D\ECD2B.CH
Acq On : 24 Aug 2009 1:45 pm Operator:
Sample : LCSa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 14:30 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9147	43323	0.112	0.105
Spiked Amount 0.100	Range 65 - 135		Recovery =		112.00%	105.00%
Target Compounds						
1) TM EDB	1.97	2.21	4294	24913	0.112	0.104m
3) TM DBCP	3.25	3.68	5510	22372	0.108	0.116

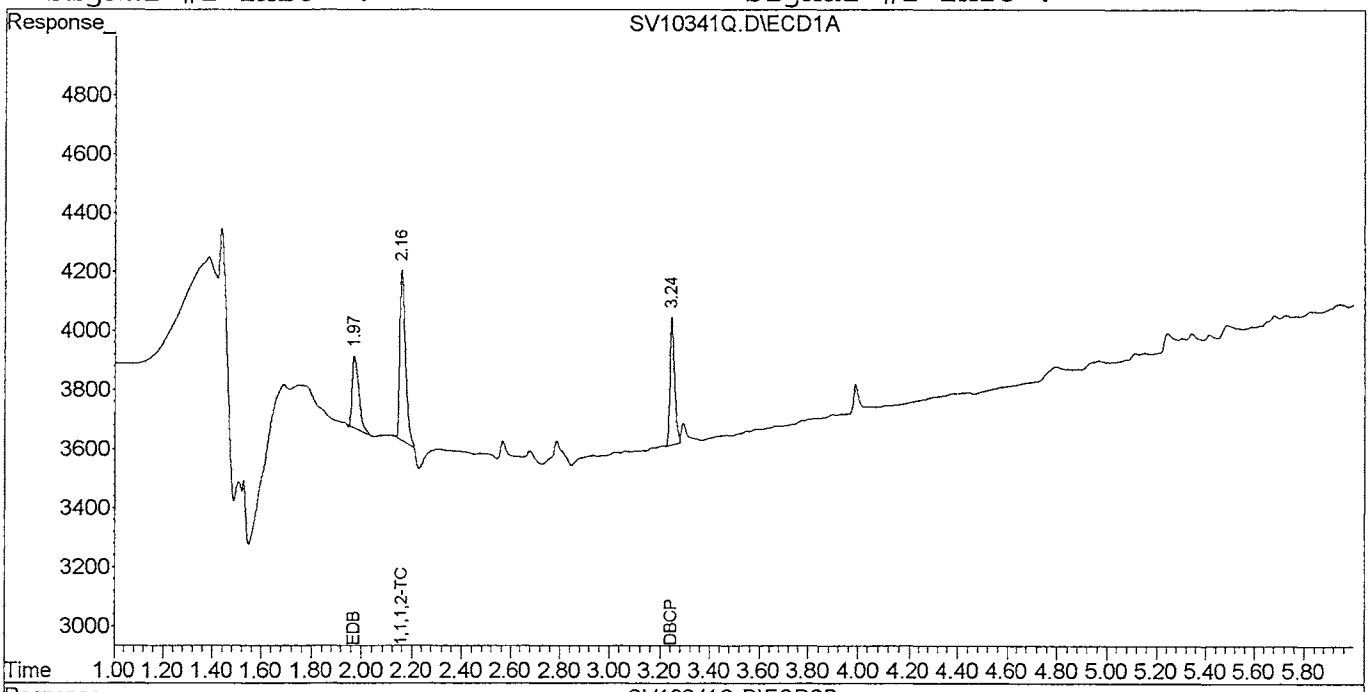
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

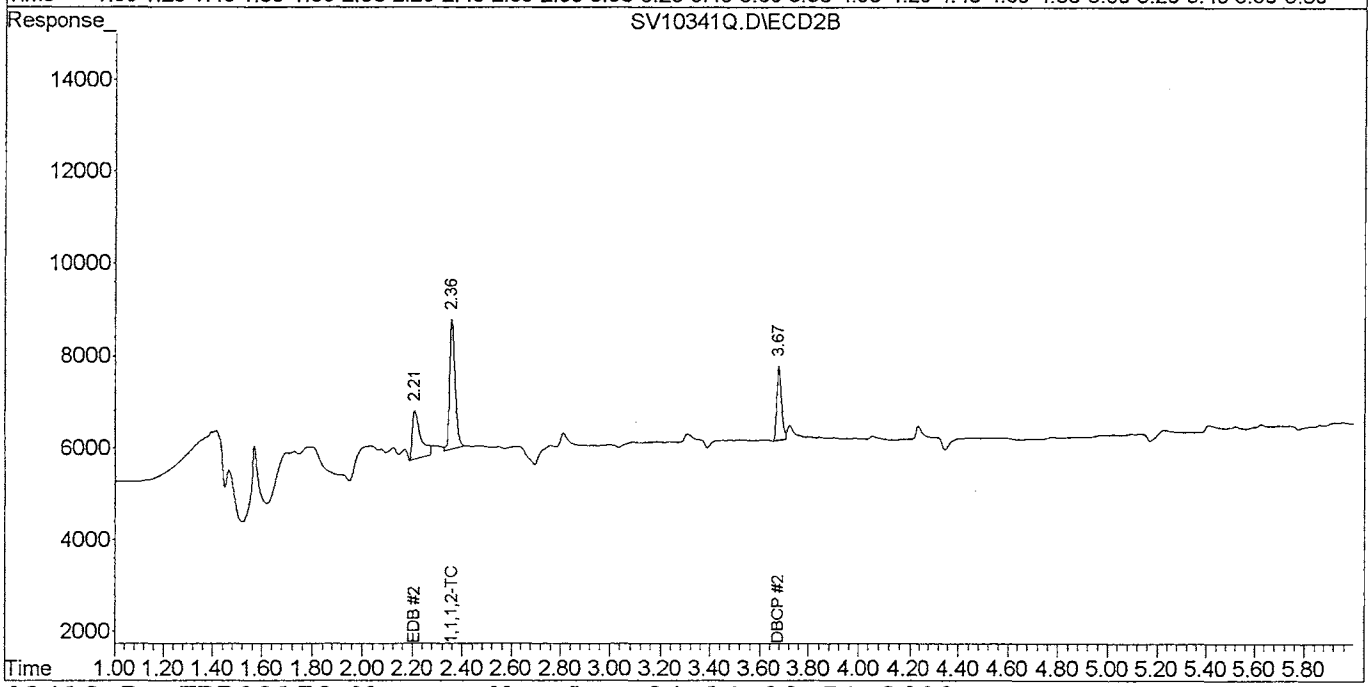
Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10341Q.D\ECD1A.CH Vial: 1
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10341Q.D\ECD2B.CH
Acq On : 24 Aug 2009 1:45 pm Operator:
Sample : LCSa082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 14:30 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP CV REPORT

8/24/09

Sample Name LCSD082409EDB1 CV Amount (ug/L) 0.100
Data File Name SV10342Q.D
Date Acquired 8/24/2009 2:15

Name	Ret Time	Expected Ret Time	R.T. Window	R.T. Pass/Fail	Amount (ug/L)	% Rec	Pass/Fail (70-130%)
1,1,1,2-TCA					0.115	115%	Pass
EDB	1.973	1.975	0.0200	Pass	0.114	114%	Pass
DBCP	3.245	3.247	0.0200	Pass	0.110	110%	Pass
1,1,1,2-TCA #2					0.101	101%	Pass
EDB #2	2.210	2.211	0.0100	Pass	0.097	97%	Pass
DBCP #2	3.677	3.677	0.0100	Pass	0.117	117%	Pass

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10342Q.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10342Q.D\ECD2B.CH
Acq On : 24 Aug 2009 2:15 pm Operator:
Sample : LCSD082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 14:31 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Initial Calibration
DataAcq Meth : EDB.M

8/24/09

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

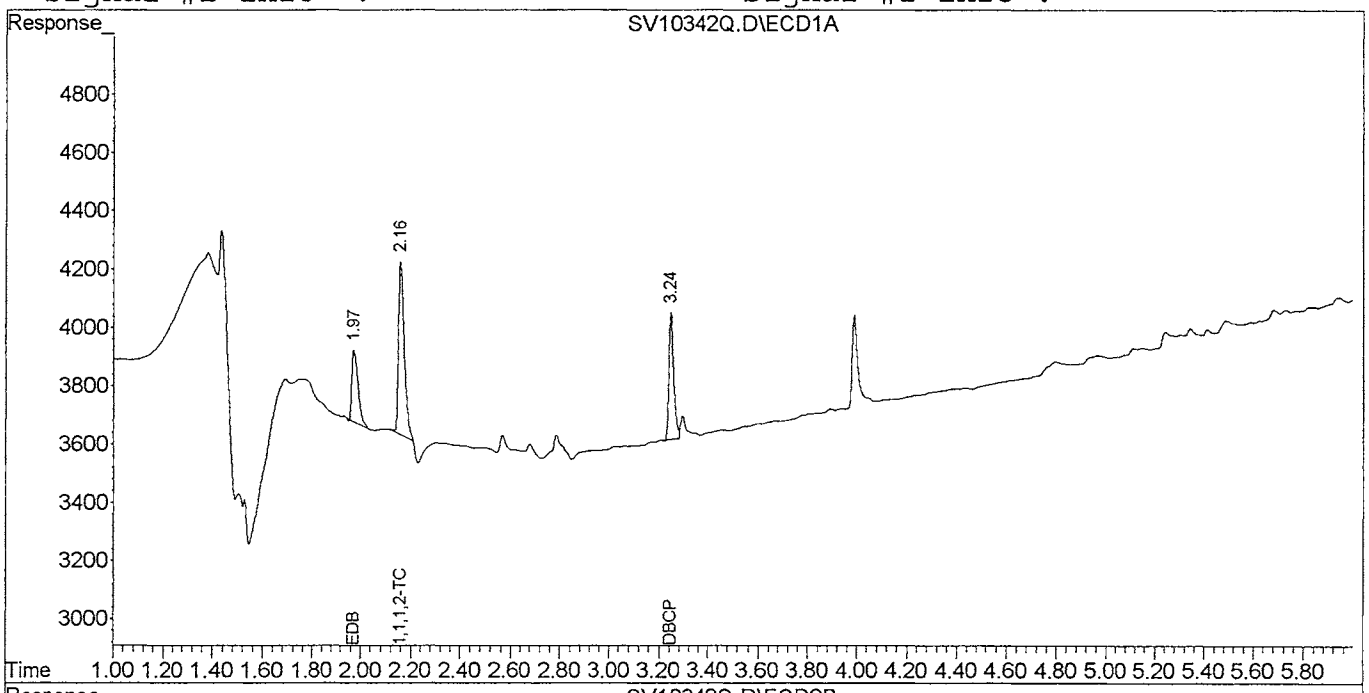
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
2) S 1,1,1,2-TCA	2.16	2.36	9380	41723	0.115	0.101
Spiked Amount 0.100	Range 65 - 135		Recovery =		115.00%	101.00%
Target Compounds						
1) TM EDB	1.97	2.21	4375	23243	0.114	0.097
3) TM DBCP	3.25	3.68	5623	22702	0.110	0.117

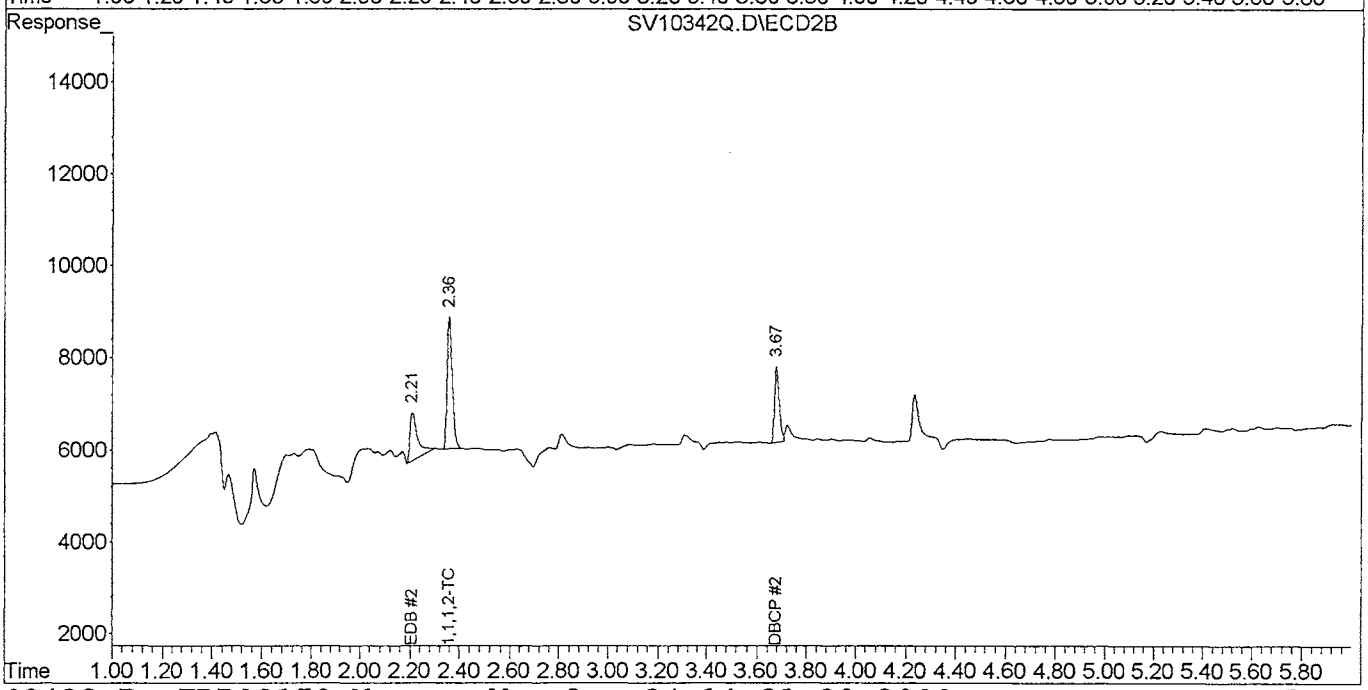
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Signal #1 : D:\HPCHEM\1\DATA\082409\SV10342Q.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\1\DATA\082409\SV10342Q.D\ECD2B.CH
Acq On : 24 Aug 2009 2:15 pm Operator:
Sample : LCSD082409EDB1 Inst : ECD
Misc : Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Aug 24 14:31 2009 Quant Results File: EDB08179.RES

Quant Method : D:\HPCHEM\1\METHODS\EDB08179.M (Chemstation Integrator)
Title :
Last Update : Mon Aug 24 10:59:47 2009
Response via : Multiple Level Calibration
DataAcq Meth : EDB.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





EDB/DBCP PrepLog (EPA 504/8011)

Batch ID: A081709EDB1 Start Time/Date: 8/17/09 1:30 Stop Time/Date: 8/18/09 1:30

Matrix: Aqueous Prep Type: Micro-extraction

#	Sample ID:	Sample Volume (mL)	Vol of Surrogate(A) (uL)	Vol of MDL Spike(B) (uL)	Vol of LFB Spike(C) (uL)	Vol of Calibration(D) (uL)	Hexane Final Volume (mL)	Sample Prep/Sample Extract Notes	LIMS (√)	Date	Analyst
1	EDB/DBCP 0.01	35	〃	—	—	35	2		✓	8/17/09	JMR
2	0.02	〃	—	—	〃	35	〃		✓	〃	〃
3	0.05	〃	—	—	—	35	〃		✓	〃	〃
4	0.075	〃	—	—	—	35	〃		✓	〃	〃
5	0.1	〃	—	—	〃	35	〃		✓	〃	〃
6	0.25	〃	〃	—	—	35	〃		✓	〃	〃
7	LCSA081709EDB1	〃	—	—	35	—	〃		✓	〃	〃
8	LCSDA081709EDB1	〃	〃	—	35	—	〃		✓	〃	〃
9	MDLa081709EDB1	〃	57	35	〃	—	〃		✓	〃	〃
10	BlankA081709EDB1	〃	57	35	〃	—	〃		✓	〃	〃
11	81403.81	〃	57	—	—	—	〃		✓	〃	〃
12		8/19/09			—						
13											
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8/19/09

A Surrogate Lot#: 5019 Expiration Date: 8-22-09 Hexane Lot#: 49142
B MDL Spike Lot#: 19184 Expiration Date: 2-15-10 Salt Lot#: 18393
C LFB Spike Lot#: 5020 Expiration Date: 8-22-09
D Calibration Lot#: 5021 Expiration Date: 8-22-09

EDB/DBCP PrepLog (EPA 504/8011)

Batch ID: A082409EDB1 Start Time/Date: 9:00 am 8/24/09 Stop Time/Date: 9:00 AM 8/25/09

Matrix: Aqueous Prep Type: Micro-extraction

#	Sample ID:	Sample Volume (mL)	Vol of Surrogate(A) (uL)	Vol of MDL Spike(B) (uL)	Vol of LFB Spike(C) (uL)	Vol of Calibration(D) (uL)	Hexane Final Volume (mL)	Sample Prep/Sample Extract Notes	LIMS (√)	Date	Analyst
1	LCSA A082409EDB1	35	—	—	35	—	2		✓	8/24/09	
2	LCSD		—	—	35	—			✓		
3	MBLa		5	35	—	—			✓		
4	BLNK		5	—	—	—			✓		
5	82084.03	35	5	—	—	—	2		✓		
6	MSPKA082409EDB1		—	—	35	—			✓		
7	MSDa		—	—	35	—			✓		
8	82084.04		5	—	—	—			✓		
9	.05		5	—	—	—			✓		
10	.06		5	—	—	—			✓		
11	.07		5	—	—	—			✓		
12	.08		5	—	—	—			✓		
13	.22		5	—	—	—			✓		
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8/24/09

A Surrogate Lot#: 5056 Expiration Date: 9-24-09 Hexane Lot#: 49142
B MDL Spike Lot#: 19184 Expiration Date: 2-15-10 Salt Lot#: 18393
C LFB Spike Lot#: 5055 Expiration Date: 9-24-09
D Calibration Lot#: — Expiration Date: —

EDB/DBCP (EPA 504/EPA 8011) Instrument Run Log

Date: 8/17/09 Analyst: [signature] Data Folder: 081709

Vial	Sample Name	Dilution	Quant Method	Comments	Data File
100	HEXANES				SV10291-308
1	EDB/DBCP 0.01 ug/L		EDB08179.M	✓	9
2	0.02			✓	10
3	0.05			✓	11
4	0.075			✓	12
5	0.1			✓	13
6	0.25			✓	14
7	BLNKA081709EDB1			✓	15
8	MDLA081709EDB1			✓	16
9	81403.81	—		ALL E-FLAGS	17
10	-81	10X		✓	18
11	.81	5X		REPORT 10X	19
12	LCSA081709EDB1			✓	20
13	LCSDA081709EDB1			✓	21

8/19/09

EDB/DBCP (EPA 504/EPA 8011) Instrument Run Log

Date: 8/24/09 Analyst: [signature] Data Folder: 082409

Vial	Sample Name	Dilution	Quant Method	Comments	Data File
100	HEXANE				8V0322-26
1	LCSa 082409EDB1		EDB08179.M	✓	27
2	LCSD			✓	28
3	MBLa			✓	29
4	BLNK			✓	30
5	82084.29			✓	31
6	.03			✓	32
7	.03 (MSpkA082409EDB1)			✓	33
8	.03 (MSDupA082409EDB1)			✓	34
9	.04			✓	35
10	.05			✓	36
11	.06			✓	37
12	.07			✓	38
13	.08			✓	39
14	.22			✓	40
1	LCSa 082409EDB1			✓	41
2	LCSD 082409EDB1			✓	42

8/24/09

eastern analytical, inc.
professional laboratory services

82084

Inorganic Analysis
NH3/COD
Support Data

AMMONIA PROBE NOTEBOOK

EPA Method 350.3/Std Meth 4500NH3D

Cal Std Lot#:	CS0513800.5097				Param # = 13800						**Date:**	9/1/2009			
LCS / Spike:	16753										**Analyst:**	SEL			
Reagent #:	R0113800.5263										**Time:**	1:00 PM			
		conc													
	CALIBRATION:	**mg/L**	**reading**	**units**	**% Rec.**		**Probe Calibration**								
	Cal std =	**1**	**86.9**	mV			**Temp:**	22.4							
	Cal std =	**10**	**27.9**	mV			**Eff:**	100.0000							
	Cal Check 1=	0.05	.0522	mg/L	104.4		**Slope:**	-59.000							
	Cal Check 2=	5	4.572	mg/L	91.4										
	Cal Check 4=	20	20.24	mg/L	101.2										
	Cal Check 3=	30	29.81	mg/L	99.4										

Matrix	BatNum	Sample ID	Notes	Vol(ml) analyzed	Wt (g)	Free Cl	Reading mg/L	Dil Fact /100mL	Final Conc mg/L	% Solid decimal	Conc mg/kg	QA/QC Values	% Rec.	% RPD
		blank		100			0.009	1	0.01		#DIV/0!			
		QC 2.0 mg/L		100			2.078	1	2.08		#DIV/0!	2	103.9	
	DUP	QC 2.0 mg/L		100			1.966	1	1.97		#DIV/0!	2	98.3	
		82128.02		100			0.2097	1	0.21		#DIV/0!			
		82198.01		10			8.529	10	85.29		#DIV/0!			
		82084.20		100			1.016	1	1.02		#DIV/0!			
		82084.21		100			8.705	1	8.71		#DIV/0!			
		82084.23		100			20.69	1	20.69		#DIV/0!			
		82084.29		100			0.027	1	0.03		#DIV/0!			
		82084.24		100			0.4763	1	0.48		#DIV/0!			
		82193.02		100			0.2648	1	0.26		#DIV/0!			
	Sam	82084.22		100			20.93	1	20.93		#DIV/0!			
	Dup	82084.22		100			21.24	1	21.24		#DIV/0!			1.5
	MS	82084.22		100			23	1	23.00		#DIV/0!	2	103.5	
	MSD	82084.22		100			22.65	1	22.65		#DIV/0!	2	86.0	18.5
		82125.01		100			0.2513	1	0.25		#DIV/0!			
		82125.02		100			0.2933	1	0.29		#DIV/0!			
		82125.03		100			0.287	1	0.29		#DIV/0!			
		82144.01		100			0.606	1	0.61		#DIV/0!			
		82144.02		100			3.848	1	3.85		#DIV/0!			
		82144.03		100			0.1198	1	0.12		#DIV/0!			
		82238.01		100			0.165	1	0.17		#DIV/0!			
								#DIV/0!	#DIV/0!		#DIV/0!			
								#DIV/0!	#DIV/0!		#DIV/0!			
	Sam							#DIV/0!	#DIV/0!		#DIV/0!			
	Dup							#DIV/0!	#DIV/0!		#DIV/0!			#DIV/0!
	MS							#DIV/0!	#DIV/0!		#DIV/0!	2	0.0	
	MSD							#DIV/0!	#DIV/0!		#DIV/0!	2	0.0	#DIV/0!

Comments:

QC:

Cal ck:

Dup:

MS/MSD:

QC check:

COD, LOW LEVEL NOTEBOOK
HACH 8000, EPA 410.4, SM 5220D

										Dig. Date:	8/25/2009
Stock Lot#:		CS0215400.5371			Param #1540					Spec. Date:	8/25/2009
QC Stock Lot#:		CS0215400.5372								Analyst:	KV
Date of Calib:		08/25/09								Time:	7:45am
Analyst:		KV									
	LINEAR REGRESSION, CORRELATION COEFFICIENT										
	PPM		0	10	50	100	200				
	Respons		0.724	0.694	0.566	0.4	0.102			← Enter calibration data here	
	Conc.		0	10	50	100	200				if new calib
	X * Y		0	6.94	28.3	40	20.4				
	X^2		0	100	2500	10000	40000				
	Y^2		0.52418	0.48164	0.32036	0.16	0.0104				
							Slope			-0.00312414	
N	5	Sum (Y)	2.486	Sum(X^2	52600		Y int.			0.722137931	
Sum (X)	360	Sum (X * Y)	95.64	Sum(Y^2	1.49657		Cor.			-0.99975114	

BatSamNum	x	Sample ID:	Vol Dist(ml)	Final Vol(ml)	Abs 420nm	Report mg/L	Dil Fac	Final Conc mg/L COD	QA/QC Values	% Rec.	% RPD
		Blank	2	2	0.724	-0.596	1	-0.596			
		QC 100 ppm	2	2	0.402	102.472	1	102.472	100	102.5	
		Ck Std 50 ppm	2	2	0.566	49.978	1	49.978	50	100.0	
		Ck Std 10 ppm	2	2	0.694	9.007	1	9.007	10	90.1	
		Ck Std 100 ppm	2	2	0.4	103.113	1	103.113	100	103.1	
81839.01		Filtrate	0.4	2	0.224	159.448	5	797.241			
81839.02		Plant Influent	1	2	0.277	142.483	2	284.967			
81839.03		Lagoon 1A	2	2	0.479	77.826	1	77.826			
81839.04		Lagoon 1B	2	2	0.515	66.302	1	66.302			
81839.05		Lagoon 2 Eff	2	2	0.575	47.097	1	47.097			
81839.06		Lagoon 3 Eff	2	2	0.6	39.095	1	39.095			
81839.07		Plant Effluent	2	2	0.597	40.055	1	40.055			
81972.01		Stage 3	0.1	2	0.424	95.430	20	1908.609			
						231.148	#DIV/0!	#DIV/0!			
82084.22		LC-L-1-0809	1.9	2	0.566	49.978	1.05263	52.608			
82084.22		MS	1.9	2	0.402	102.472	1.05263	107.866	50	105.0	
82084.22		MSD	1.9	2	0.416	97.991	1.05263	103.149	50	96.0	4.5
82084.23		LC-L-1-Dup-0809	2	2	0.556	53.179	1	53.179			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
						231.148	#DIV/0!	#DIV/0!			
		sample				231.148	#DIV/0!	#DIV/0!			
		MS				231.148	#DIV/0!	#DIV/0!	50	0.0	
		MSD				231.148	#DIV/0!	#DIV/0!	50	0.0	0.0

Comments:

QC:

Cal ck:

Dup/Spk:

QC Check:

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82084

Metals Analysis
Support Data Summaries
Dissolved Iron and Manganese
8/31/2009

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_August312009.sam
Report Date/Time: Wednesday, September 02, 2009 16:31:43

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Min100CS		Sample					
13		Min1000CS		Sample					
14		Min5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		BLK	8/19/09A	Sample					
29		Ag LCS	8/19/09A	Sample					
30		LCS	8/19/09A	Sample					
31		flush		Sample					
32		flush		Sample					
33		flush		Sample					
34		81984.04	1:100	Sample					
35		81984.05	1:100	Sample					
36		81984.11	1:1	Sample					
37		81984.12	1:1	Sample					
38		81984.16	1:1	Sample					
39		81984.18	1:1	Sample					
40		81984.09	Sb	Sample					
41		81984.04 MS	1:100 Na	Sample					
42		81984.04 MS	1:100 Na	Sample					
43		flush		Sample					
44		flush		Sample					
45		flush		Sample					
46		81984.04 MS	Ag	Sample					
47		81984.04 MS	Ag	Sample					
48		flush		Sample					
49		flush		Sample					

50	flush		Sample
51	BLK	8/24/09A	Sample
52	Ag LCS	8/24/09A	Sample
53	LCS	8/24/09A	Sample
54	flush		Sample
55	flush		Sample
56	flush		Sample
57	82084.01	34	Sample
58	82084.02	34	Sample
59	82084.03	34	Sample
60	82084.03 MS	34	Sample
61	82084.03 MSI	34	Sample
62	flush		Sample
63	flush		Sample
64	flush		Sample
65	82084.04	34	Sample
66	82084.05	34	Sample
67	82084.06	34	Sample
68	82084.07	34	Sample
69	82084.08	34	Sample
70	82084.09	34	Sample
71	82084.10	34	Sample
72	82084.11	34	Sample
73	82084.12	34	Sample
74	82084.13	34	Sample
75	82084.13 MS	34	Sample
76	82084.13 MSI	34	Sample
77	flush		Sample
78	flush		Sample
79	flush		Sample
80	82084.14	34	Sample
81	82084.15	34	Sample
82	82084.16	34	Sample
83	82084.17	34	Sample
84	82084.18	34	Sample
85	82084.19	34	Sample
86	82084.20	34	Sample
87	flush		Sample
88	BLK	8/24/09B	Sample
89	Ag LCS	8/24/09B	Sample
90	LCS	8/24/09B	Sample
91	flush		Sample
92	flush		Sample
93	flush		Sample
94	82084.21	34	Sample
95	82084.22	34	Sample
96	82084.24	34	Sample
97	82084.24 MS	34	Sample
98	82084.24 MSI	34	Sample
99	flush		Sample
100	flush		Sample
101	flush		Sample
102	82084.28	34	Sample
103	82084.29	34	Sample
104	flush		Sample
105	82084.02	30	Sample
106	82084.03	30	Sample
107	82084.03 MS	30	Sample
108	82084.03 MSI	30	Sample
109	flush		Sample

total metals - not reported

combined for (Mn)

110	flush		Sample
111	flush		Sample
112	82084.04	30	Sample
113	82084.06	30	Sample
114	82084.09	30	Sample
115	82084.10	30	Sample
116	82084.11	30	Sample
117	82084.12	30	Sample
118	82084.13	30	Sample
119	82084.14	30	Sample
120	82084.18	30	Sample
121	82084.19	30	Sample
122	82084.19 MS	30	Sample
123	82084.19 MSI	30	Sample
124	flush		Sample
125	flush		Sample
126	flush		Sample
127	82084.29	30	Sample
128	flush		Sample
129	Soil BLK	1:25	Sample
130	Soil LCS	1:25	Sample
131	Soil Ag LCS	1:10	Sample
132	flush		Sample
133	flush		Sample
134	82084.27	1:25	Sample
135	82084.25	1:25	Sample
136	82084.26	1:25	Sample
137	82084.26 MS	1:25	Sample
138	82084.26 MSI	1:25	Sample
139	flush		Sample
140	flush		Sample
141	flush		Sample
142			Sample
143			Sample
144			Sample
145			Sample
146			Sample
147			Sample
148			Sample
149			Sample
150			Sample
151			Sample
152			Sample
153			Sample
154			Sample
155			Sample
156			Sample
157			Sample
158			Sample
159			Sample
160			Sample

Acidified Fe/Mn

Soils - not reported

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, August 31, 2009 12:39:40
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.005
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	34768.6	34768.642	515.574	1.5
	Rh	102.9	264074.0	264073.997	2420.020	0.9
	In	114.9	341120.7	341120.661	2491.905	0.7
	Pb	208.0	198663.0	198662.962	2602.055	1.3
⌈>	Ba	137.9	316049.8	316049.784	2043.733	0.6
⌊	Ba++	69.0	2482.4	0.008	0.000	2.2
⌈>	Ce	139.9	372510.1	372510.141	1147.819	0.3
⌊	CeO	155.9	10854.2	0.029	0.000	0.9
	Bkgd	220.0	12.0	12.001	3.808	31.7

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
4.75	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	3.3	1919.2
Co	59	11	4.0	89140.9
In	115	11	4.8	349602.4

Instrument Tuning Report

Name: EPA.tun
ile Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.025	585	2087	0.640	
Mg	23.985	24.028	5741	2024	0.627	
Rh	102.905	102.878	25057	1900	0.653	
Ce	139.905	139.878	34043	1961	0.652	
Pb	207.977	207.975	50453	2247	0.596	

Instrument Tuning Report

EPA.tun

Mass DAC
585
5741
25057
34043
50453

Instrument Tuning Report

EPA.tun

Mass DAC
585
5741
25057
34043
50453

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron, Manganese, Sodium and Antimony

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 14:07:06
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		93.551
Ho			ug/L		90.406
In			ug/L		88.782
Mn	100	98.697188	ug/L	99.493	
Sc			ug/L		90.631
Sb	100	108.097902	ug/L	108.75	

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 15:47:40
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		99.762
Ho			ug/L		94.685
In			ug/L		95.39
Mn	100	98.347221	ug/L	99.14	
Sc			ug/L		95.251
Sb	100	102.227398	ug/L	102.844	

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 14:28:14
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	9916.96832	ug/L	99.170	
Ge			ug/L		93.206
Ho			ug/L		89.653
In			ug/L		89.699
Na	10000	10380.4067	ug/L	103.804	
Sc			ug/L		87.56

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 16:01:47
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	10086.4841	ug/L	100.865	
Ge			ug/L		93.911
Ho			ug/L		87.667
In			ug/L		86.345
Na	10000	10252.4653	ug/L	102.525	
Sc			ug/L		87.005

Iron, Manganese, Sodium and Antimony quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron, Manganese, Sodium and Antimony

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 17:26:50
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		79.428
Ho			ug/L		75.656
In			ug/L		74.217
Mn	100	99.596843	ug/L	100.4	
Sc			ug/L		75.898
Sb	100	110.269461	ug/L	110.935	

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 19:00:04
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		78.456
Ho			ug/L		73.542
In			ug/L		73.461
Mn	100	99.753824	ug/L	100.558	
Sc			ug/L		74.982
Sb	100	112.222398	ug/L	112.9	
Sb**	50	51.229462	ug/L	107.851	

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 17:40:57
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9859.0471	ug/L	98.590	
Ge			ug/L		81.297
Ho			ug/L		75.971
In			ug/L		74.865
Na	10000	11105.3683	ug/L	111.054	
Sc			ug/L		74.871

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 19:14:11
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9930.84553	ug/L	99.308	
Ge			ug/L		78.953
Ho			ug/L		74.965
In			ug/L		71.346
Na	10000	11399.9029	ug/L	113.999	
Sc			ug/L		73.533

Iron, Manganese, Sodium and Antimony quantitated.

** Antimony: QC Std 5 analyzed Monday, August 31, 2009 19:07:07

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 20:33:25
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		73.114
Ho			ug/L		71.765
In			ug/L		69.249
Mn	100	99.30787	ug/L	100.109	
Sc			ug/L		70.746
Sb	100	111.426211	ug/L	112.099	

Sample ID: QC Std 2 QC Std 2
Sample Date/ Monday, Augi Monday, August 31, 2009 22:07:15
Sample Desc CV - Trace Mi CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		69.719
Ho			ug/L		74.447
In			ug/L		72.137
Mn	100	95.794822	ug/L	96.567	
Sc			ug/L		70.019
Sb	100	108.934553	ug/L	109.592	

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 20:47:32
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	10088.5122	ug/L	100.885	
Ge			ug/L		73.756
Ho			ug/L		70.908
In			ug/L		68.594
Na	10000	12253.3174	ug/L	122.533	
Sc			ug/L		69.495

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 22:21:22
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9606.78082	ug/L	96.068	
Ge			ug/L		71.955
Ho			ug/L		73.996
In			ug/L		72.042
Na	10000	12818.0449	ug/L	128.18	
Sc			ug/L		70.867

Iron and Manganese quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Monday, August 31, 2009 23:41:12
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		67.668
Ho			ug/L		72.373
In			ug/L		69.16
Mn	100	95.121505	ug/L	95.889	
Sc			ug/L		66.907
Sb	100	110.81367	ug/L	111.483	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 01:15:19
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		64.748
Ho			ug/L		71.868
In			ug/L		68.527
Mn	100	94.04168	ug/L	94.8	
Sc			ug/L		64.982
Sb	100	109.100574	ug/L	109.759	

Sample ID: QC Std 6
Sample Date/Time: Monday, August 31, 2009 23:55:20
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	9705.7212	ug/L	97.057	
Ge			ug/L		69.194
Ho			ug/L		73.163
In			ug/L		68.774
Na	10000	12968.9738	ug/L	129.69	
Sc			ug/L		69.042

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 01:29:26
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	9438.65658	ug/L	94.387	
Ge			ug/L		66.758
Ho			ug/L		72.97
In			ug/L		68.471
Na	10000	13572.7459	ug/L	135.727	
Sc			ug/L		65.735

Iron and Manganese quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 02:48:53
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		66.138
Ho			ug/L		73.285
In			ug/L		68.917
Mn	100	92.201109	ug/L	92.945	
Sc			ug/L		67.879
Sb	100	109.042981	ug/L	109.701	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 04:22:42
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		67.385
Ho			ug/L		73.309
In			ug/L		71.255
Mn	100	94.177883	ug/L	94.937	
Sc			ug/L		67.809
Sb	100	105.793718	ug/L	106.432	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 03:03:00
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	9577.8291	ug/L	95.778	
Ge			ug/L		67.123
Ho			ug/L		72.173
In			ug/L		68.72
Na	10000	12984.9253	ug/L	129.849	
Sc			ug/L		67.538

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 04:36:49
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	9796.67291	ug/L	97.967	
Ge			ug/L		68.61
Ho			ug/L		72.698
In			ug/L		70.309
Na	10000	13097.4246	ug/L	130.974	
Sc			ug/L		66.992

Iron and Manganese quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 05:56:32
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		68.334
Ho			ug/L		75.557
In			ug/L		73.115
Mn	100	91.887557	ug/L	92.629	
Sc			ug/L		69.742
Sb	100	103.731811	ug/L	104.358	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 07:30:03
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		61.858
Ho			ug/L		72.843
In			ug/L		68.655
Mn	100	92.704771	ug/L	93.452	
Sc			ug/L		65.259
Sb	100	110.812018	ug/L	111.481	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 06:10:39
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9612.91213	ug/L	96.129	
Ge			ug/L		66.758
Ho			ug/L		73.663
In			ug/L		69.517
Na	10000	13506.5675	ug/L	135.066	
Sc			ug/L		66.143

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 07:44:11
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9537.60944	ug/L	95.376	
Ge			ug/L		64.389
Ho			ug/L		74.59
In			ug/L		70.487
Na	10000	13527.5571	ug/L	135.276	
Sc			ug/L		65.249

Iron and Manganese quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 09:03:48
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		66.188
Ho			ug/L		73.688
In			ug/L		73.085
Mn	100	94.991603	ug/L	95.758	
Sc			ug/L		67.183
Sb	100	104.148398	ug/L	104.777	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 10:11:15
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Ge			ug/L		72.904
Ho			ug/L		77.018
In			ug/L		79.149
Mn	100	100	ug/L	94.38	
Sc			ug/L		75.848
Sb	100	105.645569	ug/L	106.283	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 09:17:55
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	9793.71792	ug/L	97.937	
Ge			ug/L		67.666
Ho			ug/L		74.616
In			ug/L		72.009
Na	10000	13202.0201	ug/L	132.02	
Sc			ug/L		67.378

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 10:25:24
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc.	Units	QC Std % R	Int Std % R
Fe	10000	10038.7718	ug/L	100.388	
Ge			ug/L		74.494
Ho			ug/L		82.494
In			ug/L		83.149
Na	10000	13167.3622	ug/L	131.674	
Sc			ug/L		74.949

Iron and Manganese quantitated.

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Calibration Verification (CV) Summary
EAI SDG 82084
Dissolved Iron and Manganese

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 10:49:02
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ge			ug/L		77.185
Ho			ug/L		83.504
In			ug/L		86.577
Mn	100	96.613913	ug/L	97.393	
Sc			ug/L		80.863
Sb	100	103.504258	ug/L	104.129	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 11:03:11
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Fe	10000	10227.106	ug/L	102.271	
Ge			ug/L		80.598
Ho			ug/L		85.531
In			ug/L		86.057
Na	10000	12707.6192	ug/L	127.076	
Sc			ug/L		79.746

Iron and Manganese quantitated.

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Blank Summary
EAI SDG 82084
Dissolved Iron, Manganese and Total Sodium and Antimony

Sample ID:	QC Std 1	Sample ID:	QC Std 1
Sample Date/Time:	Monday, August 31, 2009 14:00:04	Sample Date/Time:	Monday, August 31, 2009 15:40:38
Sample Description:	CCB	Sample Description:	CCB

Concentration Results			Int Std
Analyte	Conc.	Unit	% R
Fe	< 50	ug/L	
Ge		ug/L	94.556
Ho		ug/L	92.498
In		ug/L	90.272
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	89.864

Concentration Results			Int Std
Analyte	Conc.	Unit	% R
Fe	< 50	ug/L	
Ge		ug/L	89.912
Ho		ug/L	85.194
In		ug/L	83.946
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	84.923

Sample ID:	QC Std 1		
Sample Date/Time:	Monday, August 31, 2009 17:19:48		
Sample Description:	CCB		

Concentration Results			Int Std
Analyte	Conc.	Unit	% R
Fe	< 50	ug/L	
Ge		ug/L	81.357
Ho		ug/L	77.117
In		ug/L	76.501
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	75.106

Iron, Manganese, Sodium and Antimony quantitated.

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Blank Summary
EAI SDG 82084
Dissolved Iron, Manganese and Total Sodium and Antimony

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Monday, August 31, 2009 18:53:02			Sample Date/Time:	Monday, August 31, 2009 20:26:23			Sample Date/Time:	Monday, August 31, 2009 22:00:12		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	80.854	Ge		ug/L	75.616	Ge		ug/L	63.986
Ho		ug/L	76.574	Ho		ug/L	73.756	Ho		ug/L	68.956
In		ug/L	76.474	In		ug/L	72.261	In		ug/L	65.677
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	75.771	Sc		ug/L	73.057	Sc		ug/L	65.554

Iron, Manganese, Sodium and Antimony quantitated.

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Blank Summary
EAI SDG 82084
Dissolved Iron, Manganese, Sodium and Antimony

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Monday, August 31, 2009 23:34:10			Sample Date/Time:	Tuesday, September 01, 2009 01:08:17			Sample Date/Time:	Tuesday, September 01, 2009 02:41:51		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	65.487	Ge		ug/L	63.832	Ge		ug/L	63.961
Ho		ug/L	72.701	Ho		ug/L	73.471	Ho		ug/L	71.124
In		ug/L	68.857	In		ug/L	69.343	In		ug/L	68.085
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Sb	1.97	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	66.344	Sc		ug/L	65.148	Sc		ug/L	65.766

Iron and Manganese quantitated.

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Blank Summary
EAI SDG 82084
Dissolved Iron, Manganese, Sodium and Antimony

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Tuesday, September 01, 2009 04:15:40			Sample Date/Time:	Tuesday, September 01, 2009 05:49:30			Sample Date/Time:	Tuesday, September 01, 2009 07:23:01		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	68.42	Ge		ug/L	66.624	Ge		ug/L	61.716
Ho		ug/L	74.015	Ho		ug/L	74.702	Ho		ug/L	75.166
In		ug/L	69.981	In		ug/L	72.188	In		ug/L	69.557
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	66.134	Sc		ug/L	67.684	Sc		ug/L	61.945

Iron and Manganese quantitated.

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Blank Summary
EAI SDG 82084
Dissolved Iron, Manganese, Sodium and Antimony

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Tuesday, September 01, 2009 08:56:45			Sample Date/Time:	Tuesday, September 01, 2009 10:04:13			Sample Date/Time:	Tuesday, September 01, 2009 10:42:00		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results			Int Std	Concentration Results			Int Std	Concentration Results			Int Std
Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R	Analyte	Conc.	Unit	% R
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	68.325	Ge		ug/L	74.379	Ge		ug/L	80.011
Ho		ug/L	76.95	Ho		ug/L	83.955	Ho		ug/L	87.229
In		ug/L	73.413	In		ug/L	83.15	In		ug/L	88.233
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	68.318	Sc		ug/L	76.46	Sc		ug/L	82.128

Iron and Manganese quantitated.

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R	
QC Std 1	Monday, August 31, 2009 14:00:04	90	95	90	92	
QC Std 2	Monday, August 31, 2009 14:07:06	91	94	89	90	
QC Std 3	Monday, August 31, 2009 14:14:08	94	98	93	97	
QC Std 5	Monday, August 31, 2009 14:21:10	91	94	93	94	
QC Std 6	Monday, August 31, 2009 14:28:14	88	93	90	90	
LLCS	Monday, August 31, 2009 14:54:57	89	94	90	92	
ICSA	Monday, August 31, 2009 15:01:30	87	95	86	88	
ICSAB	Monday, August 31, 2009 15:08:03	92	103	91	92	
5ppm LRC	Monday, August 31, 2009 15:14:36	91	96	91	91	
QC Std 1	Monday, August 31, 2009 15:40:38	85	90	84	85	
QC Std 2	Monday, August 31, 2009 15:47:40	95	100	95	95	
QC Std 5	Monday, August 31, 2009 15:54:43	86	90	87	87	
QC Std 6	Monday, August 31, 2009 16:01:47	87	94	86	88	
BLK	Monday, August 31, 2009 16:27:42	82	91	85	84	
Ag LCS	Monday, August 31, 2009 16:34:11	82	90	84	83	
LCS	Monday, August 31, 2009 16:40:41	79	87	80	81	
81984.04	Monday, August 31, 2009 17:06:44	81	88	83	85	previous SDG
81984.05	Monday, August 31, 2009 17:13:16	77	83	79	78	previous SDG
QC Std 1	Monday, August 31, 2009 17:19:48	75	81	77	77	previous SDG
QC Std 2	Monday, August 31, 2009 17:26:50	76	79	74	76	previous SDG
QC Std 5	Monday, August 31, 2009 17:33:53	75	82	76	76	previous SDG
QC Std 6	Monday, August 31, 2009 17:40:57	75	81	75	76	previous SDG
81984.11	Monday, August 31, 2009 17:48:01	79	82	76	76	previous SDG
81984.12	Monday, August 31, 2009 17:54:34	80	79	74	76	previous SDG
81984.16	Monday, August 31, 2009 18:01:08	80	81	73	76	previous SDG
81984.18	Monday, August 31, 2009 18:07:41	81	81	77	77	previous SDG
81984.09	Monday, August 31, 2009 18:14:12	90	86	82	84	previous SDG
81984.04 MS	Monday, August 31, 2009 18:20:39	78	82	78	78	previous SDG
81984.04 MSD	Monday, August 31, 2009 18:27:06	76	81	75	76	previous SDG
QC Std 1	Monday, August 31, 2009 18:53:02	76	81	76	77	
QC Std 2	Monday, August 31, 2009 19:00:04	75	78	73	74	
QC Std 5	Monday, August 31, 2009 19:07:07	77	79	75	75	
QC Std 6	Monday, August 31, 2009 19:14:11	74	79	71	75	
81984.04 MS	Monday, August 31, 2009 19:21:13	84	72	68	73	previous SDG
81984.04 MSD	Monday, August 31, 2009 19:27:43	84	72	71	76	previous SDG
BLK	Monday, August 31, 2009 19:53:47	72	74	73	74	
Ag LCS	Monday, August 31, 2009 20:00:19	74	75	75	77	
LCS	Monday, August 31, 2009 20:06:52	73	74	71	74	
QC Std 1	Monday, August 31, 2009 20:26:23	73	76	72	74	
QC Std 2	Monday, August 31, 2009 20:33:25	71	73	69	72	
QC Std 5	Monday, August 31, 2009 20:40:28	70	73	69	69	
QC Std 6	Monday, August 31, 2009 20:47:32	69	74	69	71	
82084.01	Monday, August 31, 2009 21:01:10	82	72	68	72	total metals - not reported
82084.02	Monday, August 31, 2009 21:07:42	91	76	74	77	total metals - not reported
82084.03	Monday, August 31, 2009 21:14:15	78	71	67	72	total metals - not reported
82084.03 MS	Monday, August 31, 2009 21:20:48	77	67	66	73	total metals - not reported
82084.03 MSD	Monday, August 31, 2009 21:27:22	76	66	65	73	total metals - not reported
82084.04	Monday, August 31, 2009 21:53:41	78	69	68	73	total metals - not reported
QC Std 1	Monday, August 31, 2009 22:00:12	66	64	66	69	
QC Std 2	Monday, August 31, 2009 22:07:15	70	70	72	74	
QC Std 5	Monday, August 31, 2009 22:14:18	70	71	71	74	
QC Std 6	Monday, August 31, 2009 22:21:22	71	72	72	74	
82084.05	Monday, August 31, 2009 22:28:30	76	67	68	73	total metals - not reported
82084.06	Monday, August 31, 2009 22:35:07	75	71	72	75	total metals - not reported

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R	
82084.07	Monday, August 31, 2009 22:41:44	72	63	65	75	total metals - not reported
82084.08	Monday, August 31, 2009 22:48:21	73	61	64	74	total metals - not reported
82084.09	Monday, August 31, 2009 22:54:59	80	67	67	73	total metals - not reported
82084.1	Monday, August 31, 2009 23:01:34	78	69	69	75	total metals - not reported
82084.11	Monday, August 31, 2009 23:08:05	75	69	72	75	total metals - not reported
82084.12	Monday, August 31, 2009 23:14:36	76	71	74	76	total metals - not reported
82084.13	Monday, August 31, 2009 23:21:08	79	67	66	71	total metals - not reported
82084.13 MS	Monday, August 31, 2009 23:27:41	75	66	67	74	total metals - not reported
QC Std 1	Monday, August 31, 2009 23:34:10	66	65	69	73	
QC Std 2	Monday, August 31, 2009 23:41:12	67	68	69	72	
QC Std 5	Monday, August 31, 2009 23:48:16	67	67	70	72	
QC Std 6	Monday, August 31, 2009 23:55:20	69	69	69	73	
82084.13 MSD	Tuesday, September 01, 2009 00:02:26	75	66	66	71	total metals - not reported
82084.14	Tuesday, September 01, 2009 00:28:43	75	64	65	70	total metals - not reported
82084.15	Tuesday, September 01, 2009 00:35:18	68	59	63	71	total metals - not reported
82084.16	Tuesday, September 01, 2009 00:41:54	73	61	65	72	total metals - not reported
82084.17	Tuesday, September 01, 2009 00:48:31	79	66	70	74	total metals - not reported
82084.18	Tuesday, September 01, 2009 00:55:08	69	65	66	71	total metals - not reported
82084.19	Tuesday, September 01, 2009 01:01:45	71	60	62	69	total metals - not reported
QC Std 1	Tuesday, September 01, 2009 01:08:17	65	64	69	73	
QC Std 2	Tuesday, September 01, 2009 01:15:19	65	65	69	72	
QC Std 5	Tuesday, September 01, 2009 01:22:22	66	64	69	72	
QC Std 6	Tuesday, September 01, 2009 01:29:26	66	67	68	73	
82084.2	Tuesday, September 01, 2009 01:36:31	70	67	68	71	total metals - not reported
BLK	Tuesday, September 01, 2009 01:49:32	66	66	69	72	
Ag LCS	Tuesday, September 01, 2009 01:56:03	65	66	67	69	
LCS	Tuesday, September 01, 2009 02:02:35	66	67	68	71	
82084.21	Tuesday, September 01, 2009 02:28:47	71	68	67	73	total metals - not reported
82084.22	Tuesday, September 01, 2009 02:35:21	73	65	66	72	total metals - not reported
QC Std 1	Tuesday, September 01, 2009 02:41:51	66	64	68	71	
QC Std 2	Tuesday, September 01, 2009 02:48:53	68	66	69	73	
QC Std 5	Tuesday, September 01, 2009 02:55:56	67	65	70	71	
QC Std 6	Tuesday, September 01, 2009 03:03:00	68	67	69	72	
82084.24	Tuesday, September 01, 2009 03:10:07	65	64	66	71	total metals - not reported
82084.24 MS	Tuesday, September 01, 2009 03:16:42	68	66	65	72	total metals - not reported
82084.24 MSD	Tuesday, September 01, 2009 03:23:18	67	65	65	71	total metals - not reported
82084.28	Tuesday, September 01, 2009 03:49:40	65	68	70	74	total metals - not reported
82084.29	Tuesday, September 01, 2009 03:56:10	64	65	69	69	total metals - not reported
82084.02	Tuesday, September 01, 2009 04:09:11	76	65	65	68	dissolved Fe/Mn
QC Std 1	Tuesday, September 01, 2009 04:15:40	66	68	70	74	
QC Std 2	Tuesday, September 01, 2009 04:22:42	68	67	71	73	
QC Std 5	Tuesday, September 01, 2009 04:29:45	68	68	72	73	
QC Std 6	Tuesday, September 01, 2009 04:36:49	67	69	70	73	
82084.03	Tuesday, September 01, 2009 04:43:55	70	62	65	67	dissolved Fe/Mn
82084.03 MS	Tuesday, September 01, 2009 04:50:27	65	60	62	66	dissolved Fe/Mn
82084.03 MSD	Tuesday, September 01, 2009 04:56:59	64	58	59	65	dissolved Fe/Mn
82084.04	Tuesday, September 01, 2009 05:23:13	69	60	65	69	dissolved Fe/Mn
82084.06	Tuesday, September 01, 2009 05:29:48	63	61	65	68	dissolved Fe/Mn
82084.09	Tuesday, September 01, 2009 05:36:23	77	65	65	70	dissolved Fe/Mn
82084.1	Tuesday, September 01, 2009 05:42:59	72	66	72	71	dissolved Fe/Mn
QC Std 1	Tuesday, September 01, 2009 05:49:30	68	67	72	75	
QC Std 2	Tuesday, September 01, 2009 05:56:32	70	68	73	76	
QC Std 5	Tuesday, September 01, 2009 06:03:35	67	66	70	72	
QC Std 6	Tuesday, September 01, 2009 06:10:39	66	67	70	74	

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R	
82084.11	Tuesday, September 01, 2009 06:17:47	62	63	63	66	dissolved Fe/Mn
82084.12	Tuesday, September 01, 2009 06:24:20	64	63	66	67	dissolved Fe/Mn
82084.13	Tuesday, September 01, 2009 06:30:50	69	60	62	66	dissolved Fe/Mn
82084.14	Tuesday, September 01, 2009 06:37:20	70	59	63	70	dissolved Fe/Mn
82084.18	Tuesday, September 01, 2009 06:43:51	63	60	65	67	dissolved Fe/Mn
82084.19	Tuesday, September 01, 2009 06:50:22	68	58	62	68	dissolved Fe/Mn
82084.19 MS	Tuesday, September 01, 2009 06:56:54	64	54	59	66	dissolved Fe/Mn
82084.19 MSD	Tuesday, September 01, 2009 07:03:26	66	57	62	71	dissolved Fe/Mn
QC Std 1	Tuesday, September 01, 2009 07:23:01	62	62	70	75	
QC Std 2	Tuesday, September 01, 2009 07:30:03	65	62	69	73	
QC Std 5	Tuesday, September 01, 2009 07:37:07	67	63	70	76	
QC Std 6	Tuesday, September 01, 2009 07:44:11	65	64	70	75	
82084.29	Tuesday, September 01, 2009 07:57:51	57	59	66	68	dissolved Fe/Mn
Soil BLK	Tuesday, September 01, 2009 08:11:01	61	61	66	71	
Soil LCS	Tuesday, September 01, 2009 08:17:36	62	62	69	71	
Soil Ag LCS	Tuesday, September 01, 2009 08:24:13	63	62	67	72	
82084.27	Tuesday, September 01, 2009 08:43:45	88	67	71	76	soil sample - not reported
82084.25	Tuesday, September 01, 2009 08:50:16	78	68	73	78	soil sample - not reported
QC Std 1	Tuesday, September 01, 2009 08:56:45	68	68	73	77	
QC Std 2	Tuesday, September 01, 2009 09:03:48	67	66	73	74	
QC Std 5	Tuesday, September 01, 2009 09:10:51	65	66	71	73	
QC Std 6	Tuesday, September 01, 2009 09:17:55	67	68	72	75	
82084.26	Tuesday, September 01, 2009 09:25:01	90	68	70	77	soil sample - not reported
82084.26 MS	Tuesday, September 01, 2009 09:31:32	90	68	71	76	soil sample - not reported
82084.26 MSD	Tuesday, September 01, 2009 09:38:04	90	68	67	74	soil sample - not reported
QC Std 1	Tuesday, September 01, 2009 10:04:13	76	74	83	84	
QC Std 2	Tuesday, September 01, 2009 10:11:15	76	73	79	77	
QC Std 5	Tuesday, September 01, 2009 10:18:20	70	71	75	76	
QC Std 6	Tuesday, September 01, 2009 10:25:24	75	74	83	82	
82084.29	Tuesday, September 01, 2009 10:35:30	66	70	74	76	dissolved Fe/Mn
QC Std 1	Tuesday, September 01, 2009 10:42:00	82	80	88	87	
QC Std 2	Tuesday, September 01, 2009 10:49:02	81	77	87	84	
QC Std 5	Tuesday, September 01, 2009 10:56:07	81	80	86	86	
QC Std 6	Tuesday, September 01, 2009 11:03:11	80	81	86	86	

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ICSA/ICSAB
EAI SDG 82084

Sample ID: ICSA
Sample Date/Time: Monday, August 31, 2009 15:01:30
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ag	< 1	0.050059	ug/L		
Al	50000	45677.3136	ug/L	91	
As	1.46	1.46286	ug/L		
Ba	< 1	0.213264	ug/L		
Be	< 1	0.022837	ug/L		
Ca	50000	45156.7379	ug/L	90	
Cd	< 1	0.00955	ug/L		
Co	< 1	0.252562	ug/L		
Cr	< 1	0.657738	ug/L		
Cu	< 1	0.539791	ug/L		
Fe	50000	48818.2668	ug/L	98	
Ge			ug/L		94.69
Hg	< 0.1	0.02708	ug/L		
Ho			ug/L		88.15
In			ug/L		85.55
K	50000	46112.5175	ug/L	92	
Mg	50000	48662.9819	ug/L	97	
Mn	< 5	0.532125	ug/L		
Na	50000	48715.1996	ug/L	97	
Ni	1.15	1.150852	ug/L		
P	50000	46246.4741	ug/L	92	
Pb	< 1	0.07635	ug/L		
Sb	< 1	0.019901	ug/L		
Sc			ug/L		86.55
Se	< 1	-0.117813	ug/L		
Tl	< 1	-0.001732	ug/L		
V	1.96	1.968785	ug/L		
Zn	< 5	2.303079	ug/L		

Sample ID: ICSAB
Sample Date/Time: Monday, August 31, 2009 15:08:03
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Units	% R	% R
Ag	10	6.370459	ug/L	64	
Al	50000	46480.5052	ug/L	93	
As	10	10.644968	ug/L	106	
Ba	10	9.56871	ug/L	96	
Be	10	9.694258	ug/L	97	
Ca	50000	46539.0564	ug/L	93	
Cd	10	9.238496	ug/L	92	
Co	10	9.533036	ug/L	95	
Cr	10	10.160187	ug/L	102	
Cu	10	9.687426	ug/L	97	
Fe	50000	49487.0723	ug/L	99	
Ge			ug/L		103.21
Hg	1	0.983699	ug/L	98	
Ho			ug/L		91.51
In			ug/L		91.45
K	50000 S		ug/L	#VALUE!	
Mg	50000	48586.8729	ug/L	97	
Mn	10	10.003436	ug/L	100	
Na	50000	48248.031	ug/L	96	
Ni	10	10.363248	ug/L	104	
P	50000	45774.5475	ug/L	92	
Pb	10	9.196529	ug/L	92	
Sb	10	10.059588	ug/L	101	
Sc			ug/L		92.31
Se	10	9.218053	ug/L	92	
Tl	10	9.029046	ug/L	90	
V	10	11.909188	ug/L	119	
Zn	10	10.955806	ug/L	110	

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82084

Metals Analysis
Support Data Summaries
Total Metals - Aqueous
9/1/2009

82084
Ag TOT metals

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_September012009.sam
Report Date/Time: Wednesday, September 02, 2009 16:20:44

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Min100CS		Sample					
13		Min1000CS		Sample					
14		Min5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		BLK	8/24/09A	Sample					
29		Ag LCS	8/24/09A	Sample					
30		LCS	8/24/09A	Sample					
31		flush		Sample					
32		flush		Sample					
33		flush		Sample					
34		82084.01	34	Sample					
35		82084.02	34	Sample					
36		82084.03	34	Sample					
37		82084.03 MS	34	Sample					
38		82084.03 MSI	34	Sample					
39		flush		Sample					
40		flush		Sample					
41		flush		Sample					
42		82084.04	34	Sample					
43		82084.05	34	Sample					
44		82084.06	34	Sample					
45		82084.07	34	Sample					
46		82084.08	34	Sample					
47		82084.09	34	Sample					
48		82084.10	34	Sample					
49		82084.11	34	Sample					

50	82084.12	34	Sample
51	82084.13	34	Sample
52	82084.13 MS	34	Sample
53	82084.13 MSI	34	Sample
54	flush		Sample
55	flush		Sample
56	flush		Sample
57	82084.14	34	Sample
58	82084.15	34	Sample
59	82084.16	34	Sample
60	82084.17	34	Sample
61	82084.18	34	Sample
62	82084.19	34	Sample
63	82084.20	34	Sample
64	flush		Sample
65	BLK	8/24/09B	Sample
66	Ag LCS	8/24/09B	Sample
67	LCS	8/24/09B	Sample
68	flush		Sample
69	flush		Sample
70	flush		Sample
71	82084.21	34	Sample
72	82084.22	34	Sample
73	82084.24	34	Sample
74	82084.24 MS	34	Sample
75	82084.24 MSI	34	Sample
76	flush		Sample
77	flush		Sample
78	flush		Sample
79	82084.28	34	Sample
80	82084.29	34	Sample
81	flush		Sample
82	TCLP BLK	1:100	Sample
83	TCLP LCS	1:100	Sample
84	TCLP Ag LCS	1:10	Sample
85	flush		Sample
86	flush		Sample
87	82284.01	1:100	Sample
88	82310.01	1:100	Sample
89	82311.01	1:100	Sample
90	82299.13	1:100	Sample
91	82299.14	1:100	Sample
92	82299.15	1:100	Sample
93	82299.16	1:100	Sample
94	82299.17	1:100	Sample
95	82299.17 MS	1:100	Sample
96	82299.17 MSI	1:100	Sample
97	flush		Sample
98	flush		Sample
99	flush		Sample
100	82245.02		Sample
101	82245.03		Sample
102	82271.01	1:1	Sample
103	82283.01		Sample
104	82307.04		Sample
105	flush		Sample
106	flush		Sample
107	flush		Sample
108	Soil BLK	1:25	Sample
109	Soil LCS	1:25	Sample

end of 82084 data

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, September 01, 2009 12:23:10
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.006
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	23820.7	23820.750	259.762	1.1
	Rh	102.9	228633.9	228633.915	2167.549	0.9
	In	114.9	302393.0	302393.008	3958.056	1.3
	Pb	208.0	161527.9	161527.927	2787.116	1.7
>	Ba	137.9	275025.6	275025.600	3611.404	1.3
	Ba++	69.0	1961.6	0.007	0.000	1.3
>	Ce	139.9	322335.1	322335.094	3358.559	1.0
	CeO	155.9	8482.6	0.026	0.001	2.3
	Bkgd	220.0	10.2	10.201	3.115	30.5

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
5.00	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	3.8	1363.1
Co	59	11	4.3	71916.8
In	115	11	5.0	314148.7

Instrument Tuning Report

File Name: EPA.tun
File Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.027	588	2087	0.623	
Mg	23.985	24.029	5737	2024	0.623	
Rh	102.905	102.878	25055	1900	0.644	
Ce	139.905	139.929	34053	1961	0.642	
Pb	207.977	207.977	50453	2247	0.597	

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 13:47:33
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	94.73561	ug/L	95.50	
As	100	98.654606	ug/L	99.15	
Ba	100	93.920256	ug/L	94.49	
Be	100	96.239807	ug/L	96.92	
Cd	100	95.361376	ug/L	95.65	
Co	100	98.601989	ug/L	99.30	
Cr	100	94.609135	ug/L	94.89	
Cu	100	96.972257	ug/L	97.66	
Ge			ug/L		96.334
Ho			ug/L		97.58
In			ug/L		97.95
Mn	100	95.4927	ug/L	96.26	
Ni	100	96.720571	ug/L	97.60	
Pb	100	100.081295	ug/L	100.08	
Sb	100	97.896139	ug/L	98.49	
Sc			ug/L		93.969
Tl	100	104.115898	ug/L	105.06	
V	100	96.95854	ug/L	97.35	
Zn	100	91.601456	ug/L	91.97	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 15:28:09
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	97.375389	ug/L	98.16	
As	100	101.687165	ug/L	102.20	
Ba	100	95.792368	ug/L	96.37	
Be	100	103.975752	ug/L	104.71	
Cd	100	99.006054	ug/L	99.30	
Co	100	107.55612	ug/L	108.31	
Cr	100	102.511863	ug/L	102.82	
Cu	100	106.609195	ug/L	107.36	
Ge			ug/L		94.147
Ho			ug/L		95.422
In			ug/L		95.061
Mn	100	102.853081	ug/L	103.68	
Ni	100	106.462914	ug/L	107.43	
Pb	100	105.167958	ug/L	105.17	
Sb	100	100.469591	ug/L	101.08	
Sc			ug/L		86.541
Tl	100	109.274856	ug/L	110.27	
V	100	103.454583	ug/L	103.87	
Zn	100	99.995631	ug/L	100.40	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 14:01:37
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		97.213
Hg	1	0.969448	ug/L	96.95	
Ho			ug/L		100.447
In			ug/L		101.1
Sc			ug/L		99.61
Se	74.7	76.886172	ug/L	102.93	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 15:35:12
Sample Description:

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		96.897
Hg	1	1.023283	ug/L	102.33	
Ho			ug/L		97.835
In			ug/L		97.716
Sc			ug/L		92.543
Se	74.7	77.171998	ug/L	103.31	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 14:08:41
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	9787.49216	ug/L	97.87	
Ca	10000	9440.98984	ug/L	94.41	
Fe	10000	9623.21265	ug/L	96.23	
Ge			ug/L		97.379
Ho			ug/L		100.172
In			ug/L		97.457
K	10000	9980.51863	ug/L	99.81	
Mg	10000	9300.11567	ug/L	93.00	
Na	10000	9768.06525	ug/L	97.68	
Sc			ug/L		98.864

Sample ID: QC Std 6 QC Std 6
Sample Dat Tuesday, S Tuesday, September 01, 2009 15:42:16
Sample De: CV - Miner: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	9781.15582	ug/L	97.81	
Ca	10000	9528.76208	ug/L	95.29	
Fe	10000	9847.12268	ug/L	98.47	
Ge			ug/L		92.828
Ho			ug/L		95.158
In			ug/L		94.735
K	10000	9953.848	ug/L	99.54	
Mg	10000	9215.40628	ug/L	92.15	
Na	10000	9408.50526	ug/L	94.09	
Sc			ug/L		87.925

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 17:07:24
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	95.537238	ug/L	96.31	
As	100	99.641092	ug/L	100.14	
Ba	100	94.930865	ug/L	95.50	
Be	100	101.318989	ug/L	102.03	
Cd	100	94.137327	ug/L	94.42	
Co	100	98.946861	ug/L	99.64	
Cr	100	97.741803	ug/L	98.04	
Cu	100	98.598685	ug/L	99.29	
Ge			ug/L		89.442
Ho			ug/L		87.872
In			ug/L		87.85
Mn	100	97.355508	ug/L	98.14	
Ni	100	96.769977	ug/L	97.65	
Pb	100	97.444179	ug/L	97.44	
Sb	100	103.089678	ug/L	103.71	
Sc			ug/L		85.521
Tl	100	96.019124	ug/L	96.89	
V	100	99.306429	ug/L	99.71	
Zn	100	92.895926	ug/L	93.27	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 18:40:38
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	97.613012	ug/L	98.40	
As	100	103.424224	ug/L	103.94	
Ba	100	102.204872	ug/L	102.82	
Be	100	96.468755	ug/L	97.15	
Cd	100	97.342609	ug/L	97.64	
Co	100	94.615271	ug/L	95.28	
Cr	100	97.592919	ug/L	97.89	
Cu	100	94.628848	ug/L	95.30	
Ge			ug/L		80.369
Ho			ug/L		81.425
In			ug/L		77.7
Mn	100	93.787473	ug/L	94.54	
Ni	100	91.48143	ug/L	92.31	
Pb	100	95.946664	ug/L	95.95	
Sb	100	108.139161	ug/L	108.79	
Sc			ug/L		81.857
Tl	100	95.443088	ug/L	96.31	
V	100	99.602001	ug/L	100.00	
Zn	100	90.494262	ug/L	90.86	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 17:14:27
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		90.187
Hg	1	1.052477	ug/L	105.25	
Ho			ug/L		87.898
In			ug/L		86.638
Sc			ug/L		83.013
Se	74.7	73.457016	ug/L	98.34	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 18:47:41
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		81.478
Hg	1	1.011271	ug/L	101.13	
Ho			ug/L		81.363
In			ug/L		79.532
Sc			ug/L		81.025
Se	74.7	68.306807	ug/L	91.44	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 17:21:31
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	10414.8307	ug/L	104.15	
Ca	10000	9579.60191	ug/L	95.80	
Fe	10000	9958.04089	ug/L	99.58	
Ge			ug/L		88.933
Ho			ug/L		89.86
In			ug/L		87.452
K	10000	10215.6848	ug/L	102.16	
Mg	10000	9959.42122	ug/L	99.59	
Na	10000	10229.302	ug/L	102.29	
Sc			ug/L		86.777

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 18:54:46
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	12063.7269	ug/L	120.64	
Ca	10000	9884.29582	ug/L	98.84	
Fe	10000	9686.04425	ug/L	96.86	
Ge			ug/L		86.137
Ho			ug/L		85.905
In			ug/L		82.238
K	10000	10990.0636	ug/L	109.90	
Mg	10000	11491.2784	ug/L	114.91	
Na	10000	12068.9775	ug/L	120.69	
Sc			ug/L		83.202

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 20:14:00
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	98.175504	ug/L	98.97	
As	100	103.854997	ug/L	104.38	
Ba	100	103.408206	ug/L	104.03	
Be	100	104.29792	ug/L	105.03	
Cd	100	97.56989	ug/L	97.86	
Co	100	97.181973	ug/L	97.87	
Cr	100	101.986177	ug/L	102.29	
Cu	100	98.562941	ug/L	99.26	
Ge			ug/L		79.766
Ho			ug/L		78.153
In			ug/L		75.239
Mn	100	97.990726	ug/L	98.78	
Ni	100	95.155127	ug/L	96.02	
Pb	100	98.648096	ug/L	98.65	
Sb	100	111.537572	ug/L	112.21	
Sc			ug/L		78.496
Tl	100	97.457242	ug/L	98.34	
V	100	103.105617	ug/L	103.52	
Zn	100	95.2895	ug/L	95.67	

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 21:47:50
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	94.150521	ug/L	94.91	
As	100	100.409782	ug/L	100.91	
Ba	100	99.462933	ug/L	100.06	
Be	100	99.479377	ug/L	100.18	
Cd	100	96.131269	ug/L	96.42	
Co	100	94.86039	ug/L	95.53	
Cr	100	97.451746	ug/L	97.75	
Cu	100	94.530309	ug/L	95.20	
Ge			ug/L		80.238
Ho			ug/L		80.098
In			ug/L		77.079
Mn	100	94.239676	ug/L	95.00	
Ni	100	92.304829	ug/L	93.14	
Pb	100	95.247015	ug/L	95.25	
Sb	100	105.638909	ug/L	106.28	
Sc			ug/L		80.071
Tl	100	94.366667	ug/L	95.22	
V	100	98.3494	ug/L	98.74	
Zn	100	90.30437	ug/L	90.67	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 20:21:04
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		78.051
Hg	1	1.043043	ug/L	104.30	
Ho			ug/L		75.835
In			ug/L		73.384
Sc			ug/L		74.601
Se	74.7	69.153827	ug/L	92.58	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 21:54:53
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		78.401
Hg	1	1.031001	ug/L	103.10	
Ho			ug/L		79.059
In			ug/L		77.925
Sc			ug/L		78.763
Se	74.7	68.769572	ug/L	92.06	

Sample ID: QC Std 6 QC Std 6
Sample Dat Tuesday, S Tuesday, September 01, 2009 20:28:07
Sample De: CV - Miner: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	12027.4688	ug/L	120.27	
Ca	10000	9784.37742	ug/L	97.84	
Fe	10000	9881.76809	ug/L	98.82	
Ge			ug/L		81.684
Ho			ug/L		80.733
In			ug/L		76.784
K	10000	10704.9319	ug/L	107.05	
Mg	10000	11711.8363	ug/L	117.12	
Na	10000	11828.5643	ug/L	118.29	
Sc			ug/L		78.855

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 22:01:57
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	11708.7956	ug/L	117.09	
Ca	10000	9575.43527	ug/L	95.75	
Fe	10000	9443.1739	ug/L	94.43	
Ge			ug/L		80.169
Ho			ug/L		78.646
In			ug/L		74.724
K	10000	10883.1385	ug/L	108.83	
Mg	10000	11491.9523	ug/L	114.92	
Na	10000	11965.2209	ug/L	119.65	
Sc			ug/L		78.712

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals

Sample ID: QC Std 2
Sample Date/Time: Tuesday, September 01, 2009 23:21:48
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	93.423434	ug/L	94.18	
As	100	101.867814	ug/L	102.38	
Ba	100	100.651503	ug/L	101.26	
Be	100	100.794333	ug/L	101.51	
Cd	100	94.440415	ug/L	94.73	
Co	100	97.671795	ug/L	98.36	
Cr	100	100.579564	ug/L	100.88	
Cu	100	98.549276	ug/L	99.24	
Ge			ug/L		79.989
Ho			ug/L		78.666
In			ug/L		78.712
Mn	100	97.272935	ug/L	98.06	
Ni	100	95.821373	ug/L	96.69	
Pb	100	97.331598	ug/L	97.33	
Sb	100	107.49706	ug/L	108.15	
Sc			ug/L		78.412
Tl	100	97.032937	ug/L	97.91	
V	100	102.04712	ug/L	102.46	
Zn	100	93.821116	ug/L	94.20	

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 02, 2009 00:55:54
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ag	100	90.616084	ug/L	91.35	
As	100	101.58383	ug/L	102.09	
Ba	100	98.19968	ug/L	98.79	
Be	100	103.981411	ug/L	104.71	
Cd	100	94.253854	ug/L	94.54	
Co	100	95.962983	ug/L	96.64	
Cr	100	96.59613	ug/L	96.89	
Cu	100	95.750821	ug/L	96.43	
Ge			ug/L		78.448
Ho			ug/L		78.923
In			ug/L		77.148
Mn	100	95.291921	ug/L	96.06	
Ni	100	94.28961	ug/L	95.15	
Pb	100	97.309546	ug/L	97.31	
Sb	100	105.767452	ug/L	106.41	
Sc			ug/L		78.241
Tl	100	95.966165	ug/L	96.84	
V	100	98.94067	ug/L	99.34	
Zn	100	92.23898	ug/L	92.61	

Sample ID: QC Std 5
Sample Dat Tuesday, September 01, 2009 23:28:51
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		78.56
Hg	1	1.052646	ug/L	105.27	
Ho			ug/L		77.613
In			ug/L		76.309
Sc			ug/L		76.526
Se	74.7	69.450573	ug/L	92.97	

Sample ID: QC Std 5
Sample Dat Wednesday, September 02, 2009 01:02:57
Sample Description: ERA QC

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Ge			ug/L		79.116
Hg	1	1.045703	ug/L	104.57	
Ho			ug/L		77.485
In			ug/L		74.347
Sc			ug/L		76.856
Se	74.7	68.491221	ug/L	91.69	

Sample ID: QC Std 6
Sample Date/Time: Tuesday, September 01, 2009 23:35:55
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	12068.2858	ug/L	120.68	
Ca	10000	9904.61029	ug/L	99.05	
Fe	10000	9882.74421	ug/L	98.83	
Ge			ug/L		79.29
Ho			ug/L		77.838
In			ug/L		74.705
K	10000	11157.9924	ug/L	111.58	
Mg	10000	11847.6376	ug/L	118.48	
Na	10000	12256.7173	ug/L	122.57	
Sc			ug/L		76.805

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 02, 2009 01:10:01
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Value	Conc.	Unit	% R	% R
Al	10000	11555.6197	ug/L	115.56	
Ca	10000	9532.29101	ug/L	95.32	
Fe	10000	9772.40991	ug/L	97.72	
Ge			ug/L		81.329
Ho			ug/L		80.046
In			ug/L		76.963
K	10000	10697.0148	ug/L	106.97	
Mg	10000	11521.7014	ug/L	115.22	
Na	10000	11592.5948	ug/L	115.93	
Sc			ug/L		77.567

Blank Summary
EAI SDG 82084
Total Metals

Sample ID:	QC Std 1	Sample ID:	QC Std 1
Sample Date/Time:	Tuesday, September 01, 2009 13:40:31	Sample Date/Time:	Tuesday, September 01, 2009 15:21:07
Sample Description:	CCB	Sample Description:	CCB

Concentration Results			Int Std	Concentration Results			Int Std
Analyte	True Value	Unit	% R	Analyte	True Value	Unit	% R
Ag	< 1	ug/L		Ag	< 1	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L	
As	< 1	ug/L		As	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L	
Be	< 1	ug/L		Be	< 1	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	103.01	Ge		ug/L	94.525
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Ho		ug/L	102.743	Ho		ug/L	97.036
In		ug/L	103.73	In		ug/L	92.972
K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	101.72	Sc		ug/L	88.92
Se	< 1	ug/L		Se	< 1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L	
V	< 1	ug/L		V	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L	

Sample ID:	QC Std 1		
Sample Date/Time:	Tuesday, September 01, 2009 17:00:22		
Sample Description:	CCB		

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	88.936
Hg	< 0.1	ug/L	
Ho		ug/L	87.057
In		ug/L	88.689
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	86.244
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

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EAI SDG 82084
Total Metals

Sample ID: QC Std 1
Sample Date/Time: Tuesday, September 01, 2009 18:33:36
Sample Description: CCB

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	82.169
Hg	< 0.1	ug/L	
Ho		ug/L	85.492
In		ug/L	79.75
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	83.665
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

Sample ID: QC Std 1
Sample Date/Time: Tuesday, September 01, 2009 20:06:58
Sample Description: CCB

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	80.124
Hg	< 0.1	ug/L	
Ho		ug/L	76.197
In		ug/L	74.221
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	75.986
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

Sample ID: QC Std 1
Sample Date/Time: Tuesday, September 01, 2009 21:40:48
Sample Description: CCB

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	78.982
Hg	< 0.1	ug/L	
Ho		ug/L	79.997
In		ug/L	76.576
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	78.467
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

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Blank Summary
EAI SDG 82084
Total Metals

Sample ID: QC Std 1
Sample Date/Time: Tuesday, September 01, 2009 23:14:46
Sample Description: CCB

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	10.27	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	80.139
Hg	< 0.1	ug/L	
Ho		ug/L	79.132
In		ug/L	76.015
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	2.26	ug/L	
Sc		ug/L	77.792
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

Sample ID: QC Std 1
Sample Date/Time: Wednesday, September 02, 2009 00:48:52
Sample Description: CCB

Concentration Results			Int Std
Analyte	True Value	Unit	% R
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	79.445
Hg	< 0.1	ug/L	
Ho		ug/L	79.437
In		ug/L	75.097
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	75.503
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

QC Std 1, Tuesday, September 01, 2009 23:14:46: High silver and antimony due to carryover from a matrix spike immediately preceding the blank.

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Tuesday, September 01, 2009 13:40:31	102	103	104	103
QC Std 2	Tuesday, September 01, 2009 13:47:33	94	96	98	98
QC Std 3	Tuesday, September 01, 2009 13:54:35	94	98	98	100
QC Std 5	Tuesday, September 01, 2009 14:01:37	100	97	101	100
QC Std 6	Tuesday, September 01, 2009 14:08:41	99	97	97	100
LLCS	Tuesday, September 01, 2009 14:35:24	83	89	87	88
ICSA	Tuesday, September 01, 2009 14:41:57	95	101	95	99
ICSAB	Tuesday, September 01, 2009 14:48:30	94	103	95	98
5ppm LRC	Tuesday, September 01, 2009 14:55:03	87	94	94	95
QC Std 1	Tuesday, September 01, 2009 15:21:07	89	95	93	97
QC Std 2	Tuesday, September 01, 2009 15:28:09	87	94	95	95
QC Std 5	Tuesday, September 01, 2009 15:35:12	93	97	98	98
QC Std 6	Tuesday, September 01, 2009 15:42:16	88	93	95	95
BLK	Tuesday, September 01, 2009 16:08:15	91	95	97	97
Ag LCS	Tuesday, September 01, 2009 16:14:45	89	93	97	95
LCS	Tuesday, September 01, 2009 16:21:15	91	97	94	99
82084.01	Tuesday, September 01, 2009 16:47:18	98	89	83	86
82084.02	Tuesday, September 01, 2009 16:53:50	109	93	91	91
QC Std 1	Tuesday, September 01, 2009 17:00:22	86	89	89	87
QC Std 2	Tuesday, September 01, 2009 17:07:24	86	89	88	88
QC Std 5	Tuesday, September 01, 2009 17:14:27	83	90	87	88
QC Std 6	Tuesday, September 01, 2009 17:21:31	87	89	87	90
82084.03	Tuesday, September 01, 2009 17:28:35	98	90	83	87
82084.03 MS	Tuesday, September 01, 2009 17:35:08	99	90	84	89
82084.03 MSD	Tuesday, September 01, 2009 17:41:42	97	89	84	88
82084.04	Tuesday, September 01, 2009 18:07:40	95	89	84	87
82084.05	Tuesday, September 01, 2009 18:14:08	99	86	81	86
82084.06	Tuesday, September 01, 2009 18:20:37	90	85	84	85
82084.07	Tuesday, September 01, 2009 18:27:06	94	82	79	86
QC Std 1	Tuesday, September 01, 2009 18:33:36	84	82	80	85
QC Std 2	Tuesday, September 01, 2009 18:40:38	82	80	78	81
QC Std 5	Tuesday, September 01, 2009 18:47:41	81	81	80	81
QC Std 6	Tuesday, September 01, 2009 18:54:46	83	86	82	86
82084.08	Tuesday, September 01, 2009 19:01:48	87	80	73	79
82084.09	Tuesday, September 01, 2009 19:08:18	94	83	76	80
82084.1	Tuesday, September 01, 2009 19:14:48	92	86	79	83
82084.11	Tuesday, September 01, 2009 19:21:19	85	83	80	81
82084.12	Tuesday, September 01, 2009 19:27:50	81	79	75	78
82084.13	Tuesday, September 01, 2009 19:34:22	89	82	75	80
82084.13 MS	Tuesday, September 01, 2009 19:40:54	92	83	79	83
82084.13 MSD	Tuesday, September 01, 2009 19:47:27	92	81	75	79
QC Std 1	Tuesday, September 01, 2009 20:06:58	76	80	74	76
QC Std 2	Tuesday, September 01, 2009 20:14:00	78	80	75	78
QC Std 5	Tuesday, September 01, 2009 20:21:04	75	78	73	76
QC Std 6	Tuesday, September 01, 2009 20:28:07	79	82	77	81
82084.14	Tuesday, September 01, 2009 20:41:45	90	81	74	80
82084.15	Tuesday, September 01, 2009 20:48:17	78	71	67	73
82084.16	Tuesday, September 01, 2009 20:54:50	88	76	72	80
82084.17	Tuesday, September 01, 2009 21:01:23	92	78	74	79
82084.18	Tuesday, September 01, 2009 21:07:57	83	82	78	83
82084.19	Tuesday, September 01, 2009 21:14:31	91	78	75	80
82084.2	Tuesday, September 01, 2009 21:21:06	87	80	76	80
BLK	Tuesday, September 01, 2009 21:34:17	75	76	73	80
QC Std 1	Tuesday, September 01, 2009 21:40:48	78	79	77	80

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 2	Tuesday, September 01, 2009 21:47:50	80	80	77	80
QC Std 5	Tuesday, September 01, 2009 21:54:53	79	78	78	79
QC Std 6	Tuesday, September 01, 2009 22:01:57	79	80	75	79
Ag LCS	Tuesday, September 01, 2009 22:09:06	77	80	74	80
LCS	Tuesday, September 01, 2009 22:15:42	78	82	77	81
82084.21	Tuesday, September 01, 2009 22:42:09	82	80	74	78
82084.22	Tuesday, September 01, 2009 22:48:40	85	78	70	75
82084.24	Tuesday, September 01, 2009 22:55:12	81	80	75	79
82084.24 MS	Tuesday, September 01, 2009 23:01:43	81	80	74	81
82084.24 MSD	Tuesday, September 01, 2009 23:08:16	77	78	72	77
QC Std 1	Tuesday, September 01, 2009 23:14:46	78	80	76	79
QC Std 2	Tuesday, September 01, 2009 23:21:48	78	80	79	79
QC Std 5	Tuesday, September 01, 2009 23:28:51	77	79	76	78
QC Std 6	Tuesday, September 01, 2009 23:35:55	77	79	75	78
82084.28	Wednesday, September 02, 2009 00:02:43	78	79	77	79
82084.29	Wednesday, September 02, 2009 00:09:18	76	81	76	80
QC Std 1	Wednesday, September 02, 2009 00:48:52	76	79	75	79
QC Std 2	Wednesday, September 02, 2009 00:55:54	78	78	77	79
QC Std 5	Wednesday, September 02, 2009 01:02:57	77	79	74	77
QC Std 6	Wednesday, September 02, 2009 01:10:01	78	81	77	80

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ICSA/ICSAB
EAI SDG 82084

Sample ID: ICSA
Sample Date/ Tuesday, September 01, 2009 14:41:57
Sample Description:

Concentration Results

Analyte	Mass		Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Ag	< 1		0.184242	ug/L		
Al		50000	43755.4216	ug/L	87.5108432	
As		1.34	1.347571	ug/L		
Ba	< 1		0.206251	ug/L		
Be	< 1		-0.003203	ug/L		
Ca		50000	50041.2602	ug/L	100.08252	
Cd	< 1		0.009872	ug/L		
Co	< 1		0.209843	ug/L		
Cr	< 1		0.696097	ug/L		
Cu	< 1		0.791203	ug/L		
Fe		50000	49842.9975	ug/L	99.685995	
Ge				ug/L		100.77
Hg	< 0.1		0.020403	ug/L		
Ho				ug/L		98.991
In				ug/L		94.579
K		50000	49157.2473	ug/L	98.3144947	
Mg		50000	44651.3551	ug/L	89.3027102	
Mn	< 5		0.478235	ug/L		
Na		50000	44360.4518	ug/L	88.7209036	
Ni	< 1		0.869182	ug/L		
P		50000	46626.692	ug/L	93.253384	
Pb	< 1		0.070569	ug/L		
Sb	< 1		0.020222	ug/L		
Sc				ug/L		95.112
Se	< 1		0.069219	ug/L		
Tl	< 1		-0.028982	ug/L		
V		1.96	1.961023	ug/L		
Zn	< 5		2.44108	ug/L		

Sample ID: ICSAB
Sample Date/ Tuesday, September 01, 2009 14:48:30
Sample Description:

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Ag	10	6.765863	ug/L	67.66	
Al	50000	45004.7929	ug/L	90.01	
As	10	10.381735	ug/L	103.82	
Ba	10	9.256365	ug/L	92.56	
Be	10	9.508089	ug/L	95.08	
Ca	50000	49371.5617	ug/L	98.74	
Cd	10	9.084459	ug/L	90.84	
Co	10	9.100326	ug/L	91.00	
Cr	10	9.524504	ug/L	95.25	
Cu	10	9.324164	ug/L	93.24	
Fe	50000	49945.0873	ug/L	99.89	
Ge			ug/L		102.9
Hg	1	0.964498	ug/L	96.45	
Ho			ug/L		97.733
In			ug/L		95.329
K	50000	48462.3333	ug/L	96.92	
Mg	50000	45923.1187	ug/L	91.85	
Mn	10	9.266272	ug/L	92.66	
Na	50000	45557.9177	ug/L	91.12	
Ni	10	9.704693	ug/L	97.05	
P	50000	47253.1847	ug/L	94.51	
Pb	10	9.056571	ug/L	90.57	
Sb	10	9.543599	ug/L	95.44	
Sc			ug/L		93.561
Se	10	9.44779	ug/L	94.48	
Tl	10	8.874849	ug/L	88.75	
V	10	11.082705	ug/L	110.83	
Zn	10	10.441799	ug/L	104.42	

Eastern Analytical Inc.
Aqueous Digestion Logbook

BatSamNum	Prep Date	Digestion Batch ID	Reagent/Chem Inv.	Temp. °C	Analyst	Notes
SW Blank	MA 8/24/04	A	35571.1 | 34007.4 | 34705.2 | 34007.4 | 34013.1 | 34016.1	68.5	SW	
LCS						
LCS Aq						
820841 SW 01						
.02						
.03						
.04						
.05						
.06						
.07						
.08						
.09						
.1						
.11						
.12						
.13						
.14						
.15						
.16						
.17						
.18						
.19						
.2						
.03 ms			34705.2 | 34007.4 | 34013.1			
.03 msd						

201

SW 8/24/04

Eastern Analytical Inc.
Aqueous Digestion Logbook

202

BatSamNum	Prep Date	Digestion Batch ID	Reagent/Chem Inv.	Temp. °C	Analyst	Notes
Blank	8/24/09	B	35771.1	83.5	SV	
LCS			34703.2 | 34007.4 | 34013.1			
LCS Aq			34016.1			
82084.21						
.22						
.24 ~~.25~~						
.28						
.29						
82088.01						
82097.01						
82106.01						
82108.01						
82109.04						
82101.01						
.02						
.03						
.04						
.05						
.06						
.07						
.08						
.09						
.1						
MS			34703.2 | 34007.4 | 34013.1			
MSD	↓	↓	↓ ↓ ↓ ↓	↓	↓	

SV 8/24/09

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82084

Metals Analysis
Support Data Summaries
Total Metals: Na, Mg, Al, K - Aqueous
9/2/2009

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_September022009.sam
Report Date/Time: Thursday, September 10, 2009 08:29:47

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Min100CS		Sample					
13		Min1000CS		Sample					
14		Min5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		Soil BLK	1:25	Sample					
29		Soil LCS	1:25	Sample					
30		Soil Ag LCS	1:10	Sample					
31		flush		Sample					
32		flush		Sample					
33		82084.25	1:25	Sample					
34		82084.27	1:25	Sample					
35		82084.26	1:25	Sample					
36		82084.26 MS	1:25	Sample					
37		82084.26 MSI	1:25	Sample					
38		flush		Sample					
39		flush		Sample					
40		flush		Sample					
41		BLK	8/24/09A	Sample					
42		Ag LCS	8/24/09A	Sample					
43		LCS	8/24/09A	Sample					
44		flush		Sample					
45		flush		Sample					
46		flush		Sample					
47		82084.01	1:10 total Na,M	Sample					
48		82084.02	1:10 total Na,M	Sample					
49		82084.03	1:10 total Na,M	Sample					

Solids not reported from this run

50	82084.03 MS	1:10 total Na,M	Sample
51	82084.03 MSI	1:10 total Na,M	Sample
52	flush		Sample
53	flush		Sample
54	flush		Sample
55	82084.04	1:10 total Na,M	Sample
56	82084.05	1:10 total Na,M	Sample
57	82084.06	1:10 total Na,M	Sample
58	82084.07	1:10 total Na,M	Sample
59	82084.08	1:10 total Na,M	Sample
60	82084.09	1:10 total Na,M	Sample
61	82084.10	1:10 total Na,M	Sample
62	82084.11	1:10 total Na,M	Sample
63	82084.12	1:10 total Na,M	Sample
64	82084.13	1:10 total Na,M	Sample
65	82084.13 MS	1:10 total Na,M	Sample
66	82084.13 MSI	1:10 total Na,M	Sample
67	flush		Sample
68	flush		Sample
69	flush		Sample
70	82084.14	1:10 total Na,M	Sample
71	82084.15	1:10 total Na,M	Sample
72	82084.16	1:10 total Na,M	Sample
73	82084.17	1:10 total Na,M	Sample
74	82084.18	1:10 total Na,M	Sample
75	82084.19	1:10 total Na,M	Sample
76	82084.20	1:10 total Na,M	Sample
77	flush		Sample
78	BLK	8/24/09B	Sample
79	Ag LCS	8/24/09B	Sample
80	LCS	8/24/09B	Sample
81	flush		Sample
82	flush		Sample
83	flush		Sample
84	82084.21	1:10 total Na,M	Sample
85	82084.22	1:10 total Na,M	Sample
86	82084.24	1:10 total Na,M	Sample
87	82084.24 MS	1:10 total Na,M	Sample
88	82084.24 MSI	1:10 total Na,M	Sample
89	flush		Sample
90	flush		Sample
91	flush		Sample
92	82084.28		Sample
93	82084.29		Sample
94			Sample
95			Sample
96			Sample
97			Sample
98			Sample
99			Sample
100			Sample
101			Sample
102			Sample
103			Sample
104			Sample
105			Sample
106			Sample
107			Sample
108			Sample
109			Sample

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, September 02, 2009 16:47:03
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.007
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	25313.3	25313.329	429.760	1.7
	Rh	102.9	248570.2	248570.232	4483.589	1.8
	In	114.9	325248.9	325248.906	8085.937	2.5
	Pb	208.0	174211.0	174211.011	3671.813	2.1
>	Ba	137.9	293158.2	293158.243	3781.730	1.3
	Ba++	69.0	2094.5	0.007	0.000	3.1
>	Ce	139.9	346039.6	346039.608	6136.270	1.8
	CeO	155.9	10038.7	0.029	0.000	0.6
	Bkgd	220.0	7.6	7.601	2.510	33.0

Current Optimization File Data

Current Value	Description
0.85	Nebulizer Gas Flow
5.00	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	3.8	1363.1
Co	59	11	4.3	71916.8
In	115	11	5.0	314148.7

Instrument Tuning Report

File Name: EPA.tun
File Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.027	590	2087	0.612	
Mg	23.985	23.979	5735	2024	0.622	
Rh	102.905	102.929	25060	1900	0.643	
Ce	139.905	139.878	34046	1961	0.641	
Pb	207.977	207.975	50452	2247	0.600	

Instrument Tuning Report

EPA.tun

Mass DAC
590
5735
25060
34046
50452

Instrument Tuning Report

EPA.tun

Mass DAC
590
5735
25060
34046
50452

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 02, 2009 18:13:39
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	95.973262	ug/L	96.747	
Ge			ug/L		96.213
Ho			ug/L		98.139
In			ug/L		95.26
Sc			ug/L		95.93

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 02, 2009 19:54:12
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	93.015504	ug/L	93.766	
Ge			ug/L		95.697
Ho			ug/L		95.197
In			ug/L		95.66
Sc			ug/L		93.344

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 02, 2009 18:34:46
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9935.89402	ug/L	99.36	
Ca	10000	9548.39968	ug/L	95.48	
Fe	10000	10005.5692	ug/L	100.06	
Ge			ug/L		91.936
Ho			ug/L		89.577
In			ug/L		85.998
K	10000	10009.0459	ug/L	100.09	
Mg	10000	10168.7961	ug/L	101.69	
Na	10000	9903.46463	ug/L	99.04	
Sc			ug/L		89.635

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 02, 2009 20:08:19
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	8960.53262	ug/L	89.61	
Ca	10000	9052.2256	ug/L	90.52	
Fe	10000	9865.45939	ug/L	98.65	
Ge			ug/L		94.563
Ho			ug/L		95.796
In			ug/L		94.006
K	10000	9189.20471	ug/L	91.89	
Mg	10000	9241.61352	ug/L	92.42	
Na	10000	9343.06107	ug/L	93.43	
Sc			ug/L		93.007

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 02, 2009 21:27:26
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	96.890002	ug/L	97.671	
Ge			ug/L		91.1
Ho			ug/L		89.517
In			ug/L		87.447
Sc			ug/L		86.614

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 02, 2009 23:00:39
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	93.947556	ug/L	94.705	
Ge			ug/L		91.174
Ho			ug/L		92.082
In			ug/L		87.137
Sc			ug/L		87.469

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 02, 2009 21:41:33
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9461.30624	ug/L	94.61	
Ca	10000	9076.79738	ug/L	90.77	
Fe	10000	9723.64594	ug/L	97.24	
Ge			ug/L		92.359
Ho			ug/L		90.408
In			ug/L		86.272
K	10000	9584.79775	ug/L	95.85	
Mg	10000	9802.10262	ug/L	98.02	
Na	10000	9693.18506	ug/L	96.93	
Sc			ug/L		85.693

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 02, 2009 23:14:46
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9670.96675	ug/L	96.71	
Ca	10000	9354.75927	ug/L	93.55	
Fe	10000	9832.61421	ug/L	98.33	
Ge			ug/L		91.269
Ho			ug/L		90.247
In			ug/L		86.953
K	10000	9799.14283	ug/L	97.99	
Mg	10000	9643.07729	ug/L	96.43	
Na	10000	9620.60847	ug/L	96.21	
Sc			ug/L		84.266

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 2
Sample Date/Time: Thursday, September 03, 2009 00:34:01
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	96.474416	ug/L	97.252	
Ge			ug/L		90.098
Ho			ug/L		91.694
In			ug/L		88.439
Sc			ug/L		87.848

Sample ID: QC Std 2
Sample Date/Time: Thursday, September 03, 2009 02:07:51
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	98.3177	ug/L	99.111	
Ge			ug/L		89.296
Ho			ug/L		90.693
In			ug/L		86.509
Sc			ug/L		84.703

Sample ID: QC Std 6
Sample Date/Time: Thursday, September 03, 2009 00:48:08
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9499.04175	ug/L	94.99	
Ca	10000	9245.02677	ug/L	92.45	
Fe	10000	9849.17736	ug/L	98.49	
Ge			ug/L		90.765
Ho			ug/L		89.499
In			ug/L		85.175
K	10000	9566.04785	ug/L	95.66	
Mg	10000	9879.72752	ug/L	98.80	
Na	10000	9628.87232	ug/L	96.29	
Sc			ug/L		86.018

Sample ID: QC Std 6
Sample Date/Time: Thursday, September 03, 2009 02:21:58
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9454.8279	ug/L	94.55	
Ca	10000	9510.98468	ug/L	95.11	
Fe	10000	9662.8541	ug/L	96.63	
Ge			ug/L		88.927
Ho			ug/L		89.01
In			ug/L		85.047
K	10000	9549.49327	ug/L	95.50	
Mg	10000	9820.15057	ug/L	98.20	
Na	10000	9827.21359	ug/L	98.27	
Sc			ug/L		84.74

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 2
Sample Date/Time: Thursday, September 03, 2009 03:41:48
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	98.393422	ug/L	99.187	
Ge			ug/L		88.907
Ho			ug/L		88.839
In			ug/L		86.13
Sc			ug/L		85.512

Sample ID: QC Std 2
Sample Date/Time: Thursday, September 03, 2009 05:15:54
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	97.894806	ug/L	98.684	
Ge			ug/L		90.861
Ho			ug/L		90.357
In			ug/L		88.365
Sc			ug/L		88.258

Sample ID: QC Std 6
Sample Date/Time: Thursday, September 03, 2009 03:55:56
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9672.14055	ug/L	96.72	
Ca	10000	9266.37504	ug/L	92.66	
Fe	10000	9893.32594	ug/L	98.93	
Ge			ug/L		89.321
Ho			ug/L		90.748
In			ug/L		86.562
K	10000	9545.45187	ug/L	95.46	
Mg	10000	9714.14142	ug/L	97.14	
Na	10000	9813.85692	ug/L	98.14	
Sc			ug/L		86.362

Sample ID: QC Std 6
Sample Date/Time: Thursday, September 03, 2009 05:30:02
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9245.59585	ug/L	92.46	
Ca	10000	8862.16477	ug/L	88.62	
Fe	10000	9347.66285	ug/L	93.48	
Ge			ug/L		94.285
Ho			ug/L		95.503
In			ug/L		92.018
K	10000	9364.90954	ug/L	93.65	
Mg	10000	9356.5302	ug/L	93.57	
Na	10000	9298.7459	ug/L	92.99	
Sc			ug/L		91.765

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 2
Sample Date/Time: Thursday, September 03, 2009 06:36:21
Sample Description: CV - Trace Metals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	100	93.771187	ug/L	94.527	
Ge			ug/L		91.186
Ho			ug/L		96.429
In			ug/L		91.994
Sc			ug/L		88.691

Sample ID: QC Std 6
Sample Date/Time: Thursday, September 03, 2009 06:50:29
Sample Description: CV - Minerals

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Al	10000	9691.95566	ug/L	96.92	
Ca	10000	9514.47811	ug/L	95.15	
Fe	10000	10162.6776	ug/L	101.63	
Ge			ug/L		91.532
Ho			ug/L		95.255
In			ug/L		90.656
K	10000	9614.20138	ug/L	96.14	
Mg	10000	9820.72681	ug/L	98.21	
Na	10000	9870.60735	ug/L	98.71	
Sc			ug/L		87

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Blank Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Wednesday, September 02, 2009 18:06:37			Sample Date/Time:	Wednesday, September 02, 2009 19:47:10			Sample Date/Time:	Wednesday, September 02, 2009 21:20:24		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results				Concentration Results				Concentration Results			
Analyte	True Value	Report Unit	Int Std % Recovery	Analyte	True Value	Report Unit	Int Std % Recovery	Analyte	True Value	Report Unit	Int Std % Recovery
Ag	< 1	ug/L		Ag	< 1	ug/L		Ag	< 1	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L		Al	< 50	ug/L	
As	< 1	ug/L		As	< 1	ug/L		As	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L		Ba	< 1	ug/L	
Be	< 1	ug/L		Be	< 1	ug/L		Be	< 1	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L		Ca	< 50	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L		Cd	< 1	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L		Co	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L		Cr	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L		Cu	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	92.941	Ge		ug/L	95.07	Ge		ug/L	91.234
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Ho		ug/L	92.262	Ho		ug/L	93.745	Ho		ug/L	88.536
In		ug/L	90.838	In		ug/L	93.635	In		ug/L	89.015
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L		Ni	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L		Pb	< 1	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	89.853	Sc		ug/L	90.312	Sc		ug/L	85.771
Se	< 1	ug/L		Se	< 1	ug/L		Se	< 1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L		Tl	< 1	ug/L	
V	< 1	ug/L		V	< 1	ug/L		V	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L		Zn	< 5	ug/L	

Blank Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID:	QC Std 1			Sample ID:	QC Std 1			Sample ID:	QC Std 1		
Sample Date/Time:	Wednesday, September 02, 2009 22:53:37			Sample Date/Time:	Thursday, September 03, 2009 00:26:59			Sample Date/Time:	Thursday, September 03, 2009 02:00:48		
Sample Description:	CCB			Sample Description:	CCB			Sample Description:	CCB		
Concentration Results				Concentration Results				Concentration Results			
Analyte	True Value	Report Unit	Int Std % Recovery	Analyte	True Value	Report Unit	Int Std % Recovery	Analyte	True Value	Report Unit	Int Std % Recovery
Ag	< 1	ug/L		Ag	< 1	ug/L		Ag	33.5	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L		Al	< 50	ug/L	
As	< 1	ug/L		As	< 1	ug/L		As	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L		Ba	< 1	ug/L	
Be	< 1	ug/L		Be	< 1	ug/L		Be	< 1	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L		Ca	< 50	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L		Cd	< 1	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L		Co	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L		Cr	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L		Cu	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	92.353	Ge		ug/L	89.733	Ge		ug/L	87.15
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Ho		ug/L	93.167	Ho		ug/L	88.357	Ho		ug/L	90.049
In		ug/L	90.215	In		ug/L	86.989	In		ug/L	84.754
K	< 50	ug/L		K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L		Na	< 5000	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L		Ni	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L		Pb	< 1	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L		Sb	1.82	ug/L	
Sc		ug/L	85.633	Sc		ug/L	83.292	Sc		ug/L	84.884
Se	< 1	ug/L		Se	< 1	ug/L		Se	< 1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L		Tl	< 1	ug/L	
V	< 1	ug/L		V	< 1	ug/L		V	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L		Zn	< 5	ug/L	

QC Std 1, Thursday, September 03, 2009 02:00:48: High Sivler and Antimony values due to carryover from matrix spike immediately preceding the blank.

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Blank Summary
EAI SDG 82084
Total Metals: Aluminium, Magnesium, Potassium and Sodium

Sample ID: QC Std 1
Sample Date/Time: Thursday, September 03, 2009 03:34:46
Sample Description: CCB

Concentration Results

Analyte	True Value	Report Unit	Int Std % Recovery
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	92.267
Hg	< 0.1	ug/L	
Ho		ug/L	90.179
In		ug/L	89.141
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	87.91
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

Sample ID: QC Std 1
Sample Date/Time: Thursday, September 03, 2009 05:08:52
Sample Description: CCB

Concentration Results

Analyte	True Value	Report Unit	Int Std % Recovery
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	89.358
Hg	< 0.1	ug/L	
Ho		ug/L	93.101
In		ug/L	90.197
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	87.417
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

Sample ID: QC Std 1
Sample Date/Time: Thursday, September 03, 2009 06:29:19
Sample Description: CCB

Concentration Results

Analyte	True Value	Report Unit	Int Std % Recovery
Ag	< 1	ug/L	
Al	< 50	ug/L	
As	< 1	ug/L	
Ba	< 1	ug/L	
Be	< 1	ug/L	
Ca	< 50	ug/L	
Cd	< 1	ug/L	
Co	< 1	ug/L	
Cr	< 1	ug/L	
Cu	< 1	ug/L	
Fe	< 50	ug/L	
Ge		ug/L	91.435
Hg	< 0.1	ug/L	
Ho		ug/L	94.366
In		ug/L	90.688
K	< 50	ug/L	
Mg	< 50	ug/L	
Mn	< 5	ug/L	
Na	< 5000	ug/L	
Ni	< 1	ug/L	
Pb	< 1	ug/L	
Sb	< 1	ug/L	
Sc		ug/L	87.962
Se	< 1	ug/L	
Tl	< 1	ug/L	
V	< 1	ug/L	
Zn	< 5	ug/L	

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Wednesday, September 02, 2009 18:06:37	90	93	91	92
QC Std 2	Wednesday, September 02, 2009 18:13:39	96	96	95	98
QC Std 3	Wednesday, September 02, 2009 18:20:40	90	94	90	92
QC Std 5	Wednesday, September 02, 2009 18:27:42	93	94	92	93
QC Std 6	Wednesday, September 02, 2009 18:34:46	90	92	86	90
LLCS	Wednesday, September 02, 2009 19:01:29	91	94	92	94
ICSA	Wednesday, September 02, 2009 19:08:02	91	98	90	93
ICSAB	Wednesday, September 02, 2009 19:14:35	92	100	91	94
5ppm LRC	Wednesday, September 02, 2009 19:21:09	92	95	95	97
QC Std 1	Wednesday, September 02, 2009 19:47:10	90	95	94	94
QC Std 2	Wednesday, September 02, 2009 19:54:12	93	96	96	95
QC Std 5	Wednesday, September 02, 2009 20:01:15	92	95	92	96
QC Std 6	Wednesday, September 02, 2009 20:08:19	93	95	94	96
BLK	Wednesday, September 02, 2009 22:21:15	89	94	92	92
Ag LCS	Wednesday, September 02, 2009 22:27:42	89	93	92	93
LCS	Wednesday, September 02, 2009 22:34:10	84	88	85	89
QC Std 1	Wednesday, September 02, 2009 22:53:37	86	92	90	93
QC Std 2	Wednesday, September 02, 2009 23:00:39	87	91	87	92
QC Std 5	Wednesday, September 02, 2009 23:07:42	89	91	91	94
QC Std 6	Wednesday, September 02, 2009 23:14:46	84	91	87	90
82084.01	Wednesday, September 02, 2009 23:28:18	85	90	88	90
82084.02	Wednesday, September 02, 2009 23:34:49	87	90	86	91
82084.03	Wednesday, September 02, 2009 23:41:19	87	92	90	92
82084.03 MS	Wednesday, September 02, 2009 23:47:51	84	87	83	89
82084.03 MSD	Wednesday, September 02, 2009 23:54:22	83	88	83	90
82084.04	Thursday, September 03, 2009 00:20:30	87	88	87	90
QC Std 1	Thursday, September 03, 2009 00:26:59	83	90	87	88
QC Std 2	Thursday, September 03, 2009 00:34:01	88	90	88	92
QC Std 5	Thursday, September 03, 2009 00:41:04	83	87	84	87
QC Std 6	Thursday, September 03, 2009 00:48:08	86	91	85	89
82084.05	Thursday, September 03, 2009 00:55:14	85	89	85	90
82084.06	Thursday, September 03, 2009 01:01:46	84	90	87	87
82084.07	Thursday, September 03, 2009 01:08:18	84	87	84	87
82084.08	Thursday, September 03, 2009 01:14:51	86	89	85	88
82084.09	Thursday, September 03, 2009 01:21:24	87	90	87	90
82084.1	Thursday, September 03, 2009 01:27:57	85	91	88	91
82084.11	Thursday, September 03, 2009 01:34:32	84	90	86	88
82084.12	Thursday, September 03, 2009 01:41:07	84	90	85	87
82084.13	Thursday, September 03, 2009 01:47:42	81	87	83	85
82084.13 MS	Thursday, September 03, 2009 01:54:17	81	86	82	86
QC Std 1	Thursday, September 03, 2009 02:00:48	85	87	85	90
QC Std 2	Thursday, September 03, 2009 02:07:51	85	89	87	91
QC Std 5	Thursday, September 03, 2009 02:14:54	82	86	83	87
QC Std 6	Thursday, September 03, 2009 02:21:58	85	89	85	89
82084.13 MSD	Thursday, September 03, 2009 02:29:06	84	88	85	90
82084.14	Thursday, September 03, 2009 02:55:35	85	89	86	91
82084.15	Thursday, September 03, 2009 03:02:09	88	93	89	94
82084.16	Thursday, September 03, 2009 03:08:40	90	93	91	95
82084.17	Thursday, September 03, 2009 03:15:12	89	92	90	93
82084.18	Thursday, September 03, 2009 03:21:44	88	92	92	92
82084.19	Thursday, September 03, 2009 03:28:16	92	93	89	94
QC Std 1	Thursday, September 03, 2009 03:34:46	88	92	89	90
QC Std 2	Thursday, September 03, 2009 03:41:48	86	89	86	89
QC Std 5	Thursday, September 03, 2009 03:48:51	85	89	88	88

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 6	Thursday, September 03, 2009 03:55:56	86	89	87	91
82084.2	Thursday, September 03, 2009 04:03:02	83	91	86	91
BLK	Thursday, September 03, 2009 04:16:09	87	89	90	89
Ag LCS	Thursday, September 03, 2009 04:22:44	86	89	89	92
LCS	Thursday, September 03, 2009 04:29:18	84	88	85	90
82084.21	Thursday, September 03, 2009 04:55:43	86	90	89	92
82084.22	Thursday, September 03, 2009 05:02:20	89	91	89	94
QC Std 1	Thursday, September 03, 2009 05:08:52	87	89	90	93
QC Std 2	Thursday, September 03, 2009 05:15:54	88	91	88	90
QC Std 5	Thursday, September 03, 2009 05:22:57	89	90	91	94
QC Std 6	Thursday, September 03, 2009 05:30:02	92	94	92	96
82084.24	Thursday, September 03, 2009 05:37:06	88	91	94	93
82084.24 MS	Thursday, September 03, 2009 05:43:37	87	89	90	94
82084.24 MSD	Thursday, September 03, 2009 05:50:08	83	87	87	93
82084.28	Thursday, September 03, 2009 06:16:16	87	92	89	94
82084.29	Thursday, September 03, 2009 06:22:49	88	92	91	96
QC Std 1	Thursday, September 03, 2009 06:29:19	88	91	91	94
QC Std 2	Thursday, September 03, 2009 06:36:21	89	91	92	96
QC Std 5	Thursday, September 03, 2009 06:43:24	89	91	91	94
QC Std 6	Thursday, September 03, 2009 06:50:29	87	92	91	95

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ICSA/ICSAB
EAI SDG 82084

Sample ID: ICSA
Sample Date/Time: Wednesday, September 02, 2009 19:08:02
Sample Description:

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Ag	< 1	0.008499	ug/L		
Al	50000	43971.1541	ug/L	87.94	
As	1.34	1.347043	ug/L		
Ba	< 1	0.211933	ug/L		
Be	< 1	0.021152	ug/L		
Ca	50000	49209.4284	ug/L	98.42	
Cd	< 1	0.019488	ug/L		
Co	< 1	0.223652	ug/L		
Cr	< 1	0.500558	ug/L		
Cu	< 1	0.78018	ug/L		
Fe	50000	47558.4514	ug/L	95.12	
Ge			ug/L		97.84
Hg	< 0.1	0.023723	ug/L		
Ho			ug/L		93.186
In			ug/L		90.4
K	50000	46849.8981	ug/L	93.70	
Mg	50000	47050.3635	ug/L	94.10	
Mn	< 5	0.444811	ug/L		
Na	50000	46004.7449	ug/L	92.01	
Ni	< 1	0.861712	ug/L		
P	50000	49251.6549	ug/L	98.50	
Pb	< 1	0.078064	ug/L		
Sb	< 1	0.01765	ug/L		
Sc			ug/L		90.665
Se	< 1	0.276119	ug/L		
Tl	< 1	-0.011758	ug/L		
V	1.68	1.683432	ug/L		
Zn	< 5	3.277284	ug/L		

Sample ID: ICSAB
Sample Date/Time: Wednesday, September 02, 2009 19:14:35
Sample Description:

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Ag	10	4.784167	ug/L	47.84	
Al	50000	45116.1767	ug/L	90.23	
As	10	10.820362	ug/L	108.20	
Ba	10	9.687901	ug/L	96.88	
Be	10	9.489991	ug/L	94.90	
Ca	50000	47873.5179	ug/L	95.75	
Cd	10	9.503759	ug/L	95.04	
Co	10	9.557143	ug/L	95.57	
Cr	10	9.793942	ug/L	97.94	
Cu	10	9.751767	ug/L	97.52	
Fe	50000	47555.0175	ug/L	95.11	
Ge			ug/L		100.106
Hg	1	1.006431	ug/L	100.64	
Ho			ug/L		94.411
In			ug/L		90.614
K	50000	46772.9142	ug/L	93.55	
Mg	50000	47431.7405	ug/L	94.86	
Mn	10	9.542084	ug/L	95.42	
Na	50000	45642.1879	ug/L	91.28	
Ni	10	9.454029	ug/L	94.54	
P	50000	48814.64	ug/L	97.63	
Pb	10	8.900868	ug/L	89.01	
Sb	10	10.244008	ug/L	102.44	
Sc			ug/L		91.658
Se	10	8.746759	ug/L	87.47	
Tl	10	8.873069	ug/L	88.73	
V	10	11.339324	ug/L	113.39	
Zn	10	11.125606	ug/L	111.26	

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82084

Metals Analysis
Support Data Summaries
Total Metals – Solids
9/9/2009

Sample/Batch Report

User Name: icpms1
Computer Name: ICPMS1
Sample File: C:\elandata\Sample\AQUIRE_September092009.sam
Report Date/Time: Thursday, September 10, 2009 08:29:39

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
1		Calibration Blank		Sample					
2		Hg0.1ppbCS		Sample					
3		Hg1.0ppbCS		Sample					
4		Hg5.0ppbCS		Sample					
9		TM.5ppbCS		Sample					
10		TM5ppbCS		Sample					
11		TM20ppbCS		Sample					
12		Min100CS		Sample					
13		Min1000CS		Sample					
14		Min5000CS		Sample					
5		Reagent Blank		Sample					
6		SCP_ICV		Sample					
15		ICV12156_ICV		Sample					
7		99104_ICV		Sample					
8		MIN_ICV		Sample					
16		flush		Sample					
17		flush		Sample					
18		flush		Sample					
19		LLCS		Sample					
20		ICSA		Sample					
21		ICSAB		Sample					
22		5ppm LRC		Sample					
23		flush		Sample					
24		flush		Sample					
25		flush		Sample					
26		flush		Sample					
27		flush		Sample					
28		Soil BLK	1:25 8/21/2009	Sample					
29		Soil LCS	1:25 8/21/2009	Sample					
30		Soil Ag LCS	1:25 8/21/2009	Sample					
31		flush		Sample					
32		flush		Sample					
33		82084.25	1:25	Sample					
34		82084.27	1:25	Sample					
35		82084.26	1:25	Sample					
36		82084.26 MS	1:25	Sample					
37		82084.26 MSI	1:25	Sample					
38		flush		Sample					
39		flush		Sample					
40		82084.27	1:50	Sample					
41		82084.26	1:50	Sample					
42		82084.26 MS	1:50	Sample					
43		82084.26 MSI	1:50	Sample					
44		flush		Sample					
45		flush		Sample					
46		flush		Sample					
47		Soil BLK	1:25 9/1/09	Sample					
48		Soil LCS	1:25 9/1/09	Sample					
49		Soil Ag LCS	1:10 9/1/09	Sample					

Sample not analyzed

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, September 09, 2009 09:43:10
Sample Description:
Method File: C:\Elandata\Method\EPA200 DAILY.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.008
Tuning File: C:\Elandata\Tuning\EPA.tun
Optimization File: C:\Elandata\Optimize\epa.dac
Dual Detector Mode: Dual
Acq. Dead Time(ns): 55
Current Dead Time (ns): 55

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	34409.0	34409.041	501.718	1.5
	Rh	102.9	271337.8	271337.767	1023.227	0.4
	In	114.9	356728.3	356728.282	1874.335	0.5
	Pb	208.0	207076.5	207076.499	1851.634	0.9
⌈>	Ba	137.9	311680.4	311680.369	2283.760	0.7
⌊	Ba++	69.0	2235.1	0.007	0.000	3.6
⌈>	Ce	139.9	365624.0	365623.962	499.006	0.1
⌊	CeO	155.9	10801.9	0.030	0.001	2.1
	Bkgd	220.0	7.4	7.401	1.817	24.5

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
4.75	Lens Voltage
1200.00	ICP RF Power
-2397.00	Analog Stage Voltage
1795.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-5.50	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	11	3.5	1840.7
Co	59	11	4.3	79765.9
In	115	11	5.0	350508.8

Instrument Tuning Report

File Name: EPA.tun
File Path: C:\elandata\Tuning\EPA.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.975	581	2087	0.608	
Mg	23.985	23.979	5733	2024	0.600	
Rh	102.905	102.928	25065	1900	0.629	
Ce	139.905	139.929	34051	1961	0.626	
Pb	207.977	207.977	50452	2247	0.584	

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Solids

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 09, 2009 11:11:10
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Ag	100	103.979	ug/L	104.817	
Al	100	92.3281	ug/L	93.073	
As	100	102.073	ug/L	102.586	
Ba	100	97.2039	ug/L	97.791	
Be	100	97.1324	ug/L	97.817	
Cd	100	99.8185	ug/L	100.119	
Co	100	101.843	ug/L	102.561	
Cr	100	96.8837	ug/L	97.175	
Cu	100	102.314	ug/L	103.035	
Ge			ug/L		100.106
Hg	1	0.99424	ug/L	99.4235	
Ho			ug/L		100.281
In			ug/L		99.213
Mg	100	96.2046	ug/L	96.013	
Mn	100	97.498	ug/L	98.284	
Na	100	101.098	ug/L	101.606	
Ni	100	98.1861	ug/L	99.078	
Pb	100	107.466	ug/L	107.466	
Sb	100	100.555	ug/L	101.162	
Sc			ug/L		98.331
Se	100	102.943	ug/L	103.669	
Tl	100	111.945	ug/L	112.961	
V	100	98.9397	ug/L	99.337	
Zn	100	92.8881	ug/L	93.261	

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 09, 2009 12:51:42
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Ag	100	105.409	ug/L	106.259	
Al	100	93.4602	ug/L	94.214	
As	100	102.983	ug/L	103.5	
Ba	100	99.2794	ug/L	99.879	
Be	100	99.1542	ug/L	99.853	
Cd	100	101.586	ug/L	101.891	
Co	100	101.676	ug/L	102.393	
Cr	100	99.5251	ug/L	99.825	
Cu	100	100.99	ug/L	101.702	
Ge			ug/L		101.415
Hg	1	0.99762	ug/L	99.7615	
Ho			ug/L		100.742
In			ug/L		97.767
Mg	100	92.3103	ug/L	92.126	
Mn	100	97.8263	ug/L	98.615	
Na	100	95.4736	ug/L	95.953	
Ni	100	99.6322	ug/L	100.537	
Pb	100	109.635	ug/L	109.635	
Sb	100	101.275	ug/L	101.886	
Sc			ug/L		98.194
Se	100	99.7958	ug/L	100.499	
Tl	100	113.841	ug/L	114.875	
V	100	99.3577	ug/L	99.757	
Zn	100	94.8699	ug/L	95.251	

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 09, 2009 11:32:17
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Al	10000	9657.29	ug/L		
Ca	10000	9175.17	ug/L	91.752	
Fe	10000	9779.19	ug/L	97.79	
Fe	10000	9581.92	ug/L	95.82	
Fe	10000	10348.4	ug/L	103.48	
Ge			ug/L		102.233
Ho			ug/L		99.879
In			ug/L		95.936
K	10000	9474.5	ug/L	94.745	
Li			ug/L		
Mg	10000	9855.61	ug/L	98.556	
Mg	10000	9822.5	ug/L	98.225	
Na	10000	9866.47	ug/L	98.665	
Sc			ug/L		97.311

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 09, 2009 13:05:53
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Al	10000	9742.53	ug/L	97.43	
Ca	10000	10408.9	ug/L	104.089	
Fe	10000	10379.7	ug/L	103.80	
Fe	10000	10721.7	ug/L	107.22	
Fe	10000	10981.2	ug/L	109.81	
Ge			ug/L		101.528
Ho			ug/L		100.146
In			ug/L		96.809
K	10000	10293.4	ug/L	102.934	
Li			ug/L		
Mg	10000	9800.82	ug/L	98.008	
Mg	10000	9869.13	ug/L	98.691	
Na	10000	10041.1	ug/L	100.411	
Sc			ug/L		93.792

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Calibration Verification (CV) Summary
EAI SDG 82084
Total Metals: Solids

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 09, 2009 14:24:59
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Ag	100	101.261	ug/L	102.078	
Al	100	96.7874	ug/L	97.568	
As	100	99.9951	ug/L	100.498	
Ba	100	94.154	ug/L	94.722	
Be	100	96.3384	ug/L	97.018	
Cd	100	96.519	ug/L	96.809	
Co	100	102.11	ug/L	102.83	
Cr	100	97.4602	ug/L	97.753	
Cu	100	101.913	ug/L	102.632	
Ge			ug/L		102.833
Hg	1	0.93628	ug/L	93.6275	
Ho			ug/L		102.95
In			ug/L		101.4
Mg	100	92.3617	ug/L	92.177	
Mn	100	98.2362	ug/L	99.028	
Na	100	94.0851	ug/L	94.558	
Ni	100	99.609	ug/L	100.514	
Pb	100	108.237	ug/L	108.237	
Sb	100	96.036	ug/L	96.616	
Sc			ug/L		98.105
Se	100	100.588	ug/L	101.297	
Tl	100	109.82	ug/L	110.817	
V	100	99.4305	ug/L	99.83	
Zn	100	93.4907	ug/L	93.866	

Sample ID: QC Std 2
Sample Date/Time: Wednesday, September 09, 2009 16:02:51
Sample Description: CV - Trace Metals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Ag	100	100.257	ug/L	101.066	
Al	100	97.3595	ug/L	98.145	
As	100	99.6644	ug/L	100.165	
Ba	100	97.9244	ug/L	98.515	
Be	100	97.839	ug/L	98.529	
Cd	100	99.8488	ug/L	100.149	
Co	100	101.449	ug/L	102.164	
Cr	100	97.5891	ug/L	97.883	
Cu	100	101.183	ug/L	101.896	
Ge			ug/L		96.151
Hg	1	0.97543	ug/L	97.543	
Ho			ug/L		95.738
In			ug/L		93.228
Mg	100	97.0435	ug/L	96.85	
Mn	100	98.8886	ug/L	99.686	
Na	100	103.824	ug/L	104.346	
Ni	100	98.3796	ug/L	99.273	
Pb	100	101.859	ug/L	101.859	
Sb	100	102.02	ug/L	102.636	
Sc			ug/L		90.657
Se	100	95.4547	ug/L	96.128	
Tl	100	107.811	ug/L	108.79	
V	100	100.279	ug/L	100.682	
Zn	100	93.8281	ug/L	94.205	

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 09, 2009 14:39:06
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Al	10000	10005.5	ug/L	100.06	
Ca	10000	9399.04	ug/L	93.99	
Fe	10000	10237.5	ug/L	102.37	
Fe	10000	10248.8	ug/L	102.49	
Fe	10000	9891.02	ug/L	98.91	
Ge			ug/L		98.406
Ho			ug/L		94.216
In			ug/L		91.478
K	10000	10153	ug/L	101.53	
Li			ug/L		
Mg	10000	9710.76	ug/L	97.108	
Mg	10000	10092.2	ug/L	100.922	
Na	10000	9876.85	ug/L	98.768	
Sc			ug/L		88.212

Sample ID: QC Std 6
Sample Date/Time: Wednesday, September 09, 2009 16:16:58
Sample Description: CV - Minerals

Concentration Results				QC Std	Int Std
Analyte	True Valu	Conc.	Unit	% R	% R
Al	10000	9868.96	ug/L	98.69	
Ca	10000	10016.7	ug/L	100.167	
Fe	10000	10218.2	ug/L	102.18	
Fe	10000	10069.4	ug/L	100.69	
Fe	10000	10414.7	ug/L	104.15	
Ge			ug/L		99.762
Ho			ug/L		98.049
In			ug/L		95.157
K	10000	10285.7	ug/L	102.857	
Li			ug/L		
Mg	10000	9834.17	ug/L	98.342	
Mg	10000	10181.2	ug/L	101.812	
Na	10000	10167	ug/L	101.67	
Sc			ug/L		94.456

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Blank Summary
EAI SDG 82084
Total Metals: Solids

Sample ID:	QC Std 1	Sample ID:	QC Std 1
Sample Date/Time:	Wednesday, September 09, 2009 11:04:08	Sample Date/Time:	Wednesday, September 09, 2009 12:44:40
Sample Description:	CCB	Sample Description:	CCB

Concentration Results			Int Std	Concentration Results			Int Std
Analyte	True Value	Unit	% R	Analyte	True Value	Unit	% R
Ag	< 1	ug/L		Ag	< 1	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L	
As	< 1	ug/L		As	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L	
Be	< 1	ug/L		Be	< 1	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	96.638	Ge		ug/L	97.536
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Ho		ug/L	95.467	Ho		ug/L	95.289
In		ug/L	93.752	In		ug/L	95.409
K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	90.886	Sc		ug/L	90.224
Se	< 1	ug/L		Se	< 1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L	
V	< 1	ug/L		V	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L	

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Blank Summary
EAI SDG 82084
Total Metals: Solids

Sample ID:	QC Std 1	Sample ID:	QC Std 1
Sample Date/Time:	Wednesday, September 09, 2009 14:17:57	Sample Date/Time:	Wednesday, September 09, 2009 15:55:49
Sample Description:	CCB	Sample Description:	CCB

Concentration Results			Int Std	Concentration Results			Int Std
Analyte	True Value	Unit	% R	Analyte	True Value	Unit	% R
Ag	< 1	ug/L		Ag	< 1	ug/L	
Al	< 50	ug/L		Al	< 50	ug/L	
As	< 1	ug/L		As	< 1	ug/L	
Ba	< 1	ug/L		Ba	< 1	ug/L	
Be	< 1	ug/L		Be	< 1	ug/L	
Ca	< 50	ug/L		Ca	< 50	ug/L	
Cd	< 1	ug/L		Cd	< 1	ug/L	
Co	< 1	ug/L		Co	< 1	ug/L	
Cr	< 1	ug/L		Cr	< 1	ug/L	
Cu	< 1	ug/L		Cu	< 1	ug/L	
Fe	< 50	ug/L		Fe	< 50	ug/L	
Ge		ug/L	95.178	Ge		ug/L	98.561
Hg	< 0.1	ug/L		Hg	< 0.1	ug/L	
Ho		ug/L	95.216	Ho		ug/L	97.237
In		ug/L	94.438	In		ug/L	96.62
K	< 50	ug/L		K	< 50	ug/L	
Mg	< 50	ug/L		Mg	< 50	ug/L	
Mn	< 5	ug/L		Mn	< 5	ug/L	
Na	< 5000	ug/L		Na	< 5000	ug/L	
Ni	< 1	ug/L		Ni	< 1	ug/L	
Pb	< 1	ug/L		Pb	< 1	ug/L	
Sb	< 1	ug/L		Sb	< 1	ug/L	
Sc		ug/L	89.077	Sc		ug/L	94.233
Se	< 1	ug/L		Se	< 1	ug/L	
Tl	< 1	ug/L		Tl	< 1	ug/L	
V	< 1	ug/L		V	< 1	ug/L	
Zn	< 5	ug/L		Zn	< 5	ug/L	

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ICSA/ICSAB
EAI SDG 82084

Sample ID: ICSA
Sample Date/ Wednesday, September 09, 2009 12:05:32
Sample Description:

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Re	Int Std % Recovery
Ag	< 1	0.053496	ug/L		
Al	50000	45461.2811	ug/L	90.92	
As	1.41	1.418277	ug/L		
Ba	< 1	0.210815	ug/L		
Be	< 1	0.010879	ug/L		
Ca	50000	49488.8775	ug/L	98.98	
Cd	< 1	0.007155	ug/L		
Co	< 1	0.218134	ug/L		
Cr	< 1	0.740617	ug/L		
Cu	< 1	0.569825	ug/L		
Fe	50000	47134.206	ug/L	94.27	
Ge			ug/L		103.951
Hg	< 0.1	0.017758	ug/L		
Ho			ug/L		100.181
In			ug/L		95.948
K	50000	47475.1879	ug/L	94.95	
Mg	50000	46422.1123	ug/L	92.84	
Mn	< 5	0.433587	ug/L		
Na	50000	46409.7344	ug/L	92.82	
Ni	< 1	0.928765	ug/L		
P	50000	50030.1179	ug/L	100.06	
Pb	< 1	0.071594	ug/L		
Sb	< 1	0.022019	ug/L		
Sc			ug/L		95.941
Se	< 1	0.465084	ug/L		
Tl	< 1	-0.011877	ug/L		
V	2.25	2.257274	ug/L		
Zn	< 5	2.678082	ug/L		

Sample ID: ICSAB
Sample Date/ Wednesday, September 09, 2009 12:12:05
Sample Description:

Concentration Results

Analyte	True Value	Conc. Mean	Report Unit	QC Std % Rec	Int Std % Recovery
Ag	10	4.625025	ug/L	46.25	
Al	50000	45448.2136	ug/L	90.90	
As	1.41	10.688013	ug/L	106.88	
Ba	10	9.289746	ug/L	92.90	
Be	10	8.672382	ug/L	86.72	
Ca	50000	49874.4386	ug/L	99.75	
Cd	10	9.377315	ug/L	93.77	
Co	10	9.057534	ug/L	90.58	
Cr	10	9.538021	ug/L	95.38	
Cu	10	9.033275	ug/L	90.33	
Fe	50000	46355.0458	ug/L	92.71	
Ge			ug/L		110.643
Hg	1	0.95798	ug/L	95.80	
Ho			ug/L		102.636
In			ug/L		99.822
K	50000 S		ug/L	#VALUE!	
Mg	50000	46571.8023	ug/L	93.14	
Mn	10	9.171645	ug/L	91.72	
Na	50000	44731.5297	ug/L	89.46	
Ni	10	9.555494	ug/L	95.55	
P	50000	48618.8169	ug/L	97.24	
Pb	10	9.23132	ug/L	92.31	
Sb	10	9.417047	ug/L	94.17	
Sc			ug/L		107.602
Se	10	10.236842	ug/L	102.37	
Tl	10	9.023272	ug/L	90.23	
V	10	11.56004	ug/L	115.60	
Zn	10	10.266286	ug/L	102.66	

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Internal Standard Summary
EAI SDG 82084

Sample ID	Date/Time of Analysis	Scandium %R	Germanium %R	Indium %R	Holmium %R
QC Std 1	Wednesday, September 09, 2009 11:04:08	91	97	94	95
QC Std 2	Wednesday, September 09, 2009 11:11:10	98	100	99	100
QC Std 3	Wednesday, September 09, 2009 11:18:12	92	96	94	96
QC Std 5	Wednesday, September 09, 2009 11:25:13	93	99	95	97
QC Std 6	Wednesday, September 09, 2009 11:32:17	97	102	96	100
LLCS	Wednesday, September 09, 2009 11:59:00	94	101	98	103
ICSA	Wednesday, September 09, 2009 12:05:32	96	104	96	100
ICSAB	Wednesday, September 09, 2009 12:12:05	108	111	100	103
5ppm LRC	Wednesday, September 09, 2009 12:18:39	98	105	100	100
QC Std 1	Wednesday, September 09, 2009 12:44:40	90	98	95	95
QC Std 2	Wednesday, September 09, 2009 12:51:42	98	101	98	101
QC Std 5	Wednesday, September 09, 2009 12:58:46	95	98	96	101
QC Std 6	Wednesday, September 09, 2009 13:05:53	94	102	97	100
Soil BLK	Wednesday, September 09, 2009 13:25:52	93	99	97	100
Soil LCS	Wednesday, September 09, 2009 13:32:21	94	101	99	102
Soil Ag LCS	Wednesday, September 09, 2009 13:38:51	88	98	96	99
82084.25	Wednesday, September 09, 2009 13:58:22	102	100	97	102
82084.27	Wednesday, September 09, 2009 14:04:54	120	101	93	101
82084.26	Wednesday, September 09, 2009 14:11:26	130	105	97	102
QC Std 1	Wednesday, September 09, 2009 14:17:57	89	95	94	95
QC Std 2	Wednesday, September 09, 2009 14:24:59	98	103	101	103
QC Std 5	Wednesday, September 09, 2009 14:32:02	91	95	95	95
QC Std 6	Wednesday, September 09, 2009 14:39:06	88	98	91	94
82084.26 MS	Wednesday, September 09, 2009 14:46:10	125	99	96	100
82084.26 MSD	Wednesday, September 09, 2009 14:52:43	131	103	95	101
82084.27	Wednesday, September 09, 2009 15:16:15	111	101	95	98
82084.26	Wednesday, September 09, 2009 15:22:42	110	101	95	97
82084.26 MS	Wednesday, September 09, 2009 15:29:09	110	99	92	98
82084.26 MSD	Wednesday, September 09, 2009 15:35:37	105	98	90	95
QC Std 1	Wednesday, September 09, 2009 15:55:49	94	99	97	97
QC Std 2	Wednesday, September 09, 2009 16:02:51	91	96	93	96
QC Std 5	Wednesday, September 09, 2009 16:09:54	90	96	95	96
QC Std 6	Wednesday, September 09, 2009 16:16:58	94	100	95	98

Metals Solids Dry Weight and Digestion Weight Log

BatSamNum	Dish Wt (g)	Sample Wet wt(g)	Dsh+Sam1 Dry Wt(g)	Target Wt(g)	Used Wt(g)	Date
81953.01	1.9704	19.9217	17.8426	1.414	1.4201	8/19
.02	1.9695	25.3808	23.2261	1.377	1.3864	8/19
.03	1.9547	15.1674	13.9605	1.375	1.3796	8/19
.04	1.9446	18.7047	16.4596	1.443	1.4423	8/19
.05	1.9542	28.3438	24.9347	1.435	1.4314	8/19
.06	1.9834	24.1086	23.6282	1.278	1.2745	8/19
.07	1.9813	19.1536	17.9231	1.347	1.3445	8/19
.08	1.9935	29.6478	26.7670	1.395	1.3883	8/19
.09	1.9903	21.4673	19.5667	1.386	1.3896	8/19
.10	1.9439	16.9307	15.6537	1.366	1.3634	8/19
.11	1.9847	29.7194	~~16~~ 25.8237	1.453	1.4640	8/19
.12	1.9817	18.6482	16.7394	1.412	1.4065	8/19
82082.01	1.9477	14.7700	13.7310	1.360		
82084.25	1.9671	17.0612	3.6900	10.965	10.9577	8/24
.26	1.9928	35.9819	22.4122	2.080	2.0923	8/24
.27	1.9802	34.2733	21.3582	2.083	2.0995	8/24

BatSamNum:	Date:	DigLot# *	Reagent/Chem. Inv.#:	Initials:	Vessel Mass:	In. Total Mass:	F. Total Mass:	Notes:
Blank	8/21/09	A	35571.1	SW	654.5	666.3	~~666.1~~	5 666.1
LCS			34705.2 | 34007.4 | 34016.1		654.4	668.2	~~664.0~~	6 ~~rectest~~
LCSAg					658.1	670.3	~~663.4~~	7 ~~rectest~~
82037.03					754.2	766.3	~~669.5~~	1 766.1
.04					652.3	664.3	664.0	2
.05					651.7	663.5	663.4	3
.06					657.7	669.6	669.5	4
82092.01	8/24/09	A	35571.1	SW	751.6	764.6	764.4	1
.02					652.2	665.3	665.1	2
.03					651.6	664.5	664.3	3
.04					654.0	666.9	666.6	4
.05					653.7	666.4	665.9	5
.06					652.7	665.7	665.5	6
.07					660.3	673.2	672.9	7
82102.01	8/24/09	B	35571.1	SW	751.3	765.3	764.3	1
82084.25	8/24/09	C	35571.1	SW	754.2	776.8	774.7	1
.26					654.3	668.1	668.0	2
.27					653.1	666.9	666.9	3

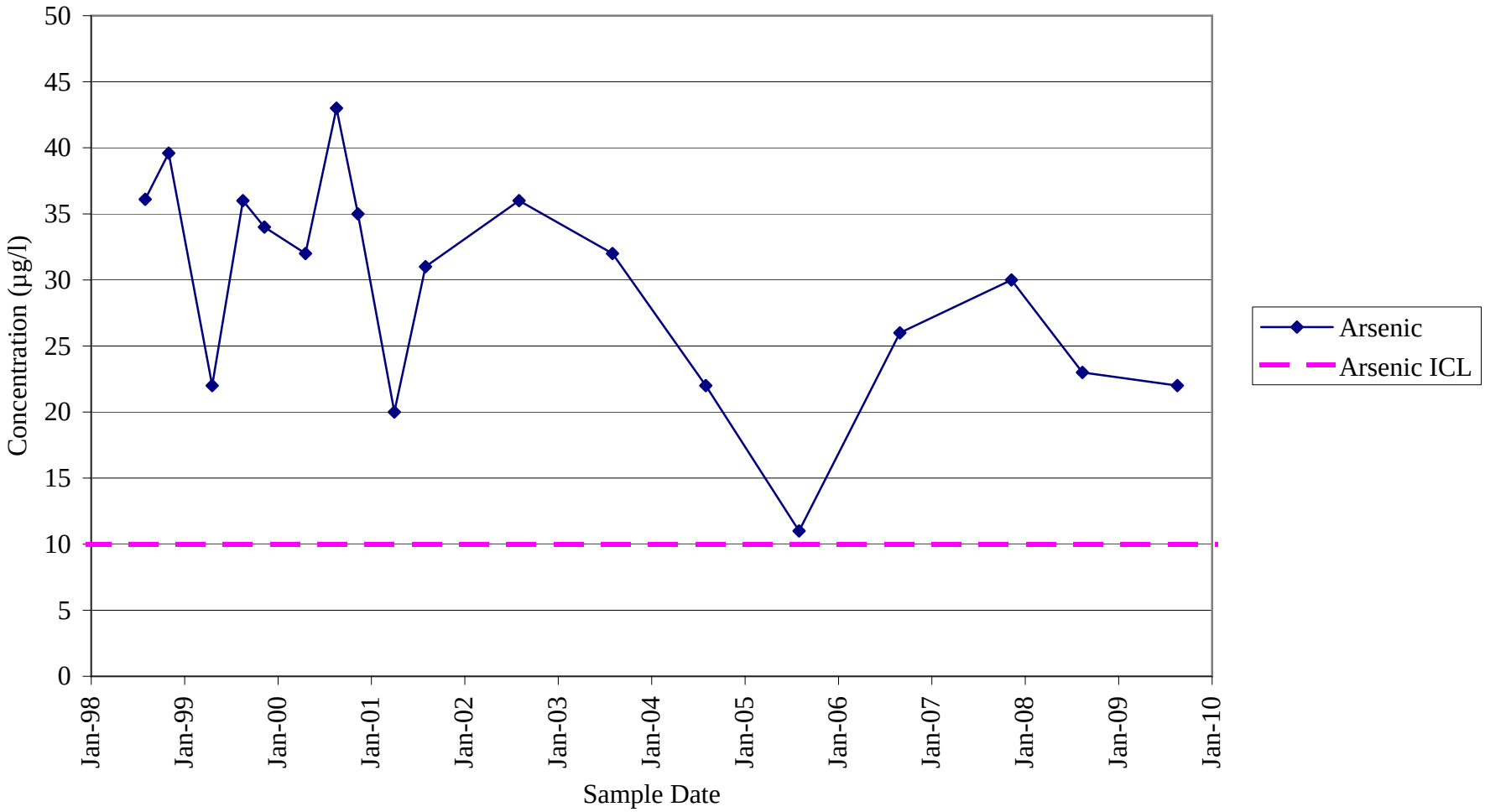
667.8 SW 670.2

*Digestion Lot #

SECTION 3

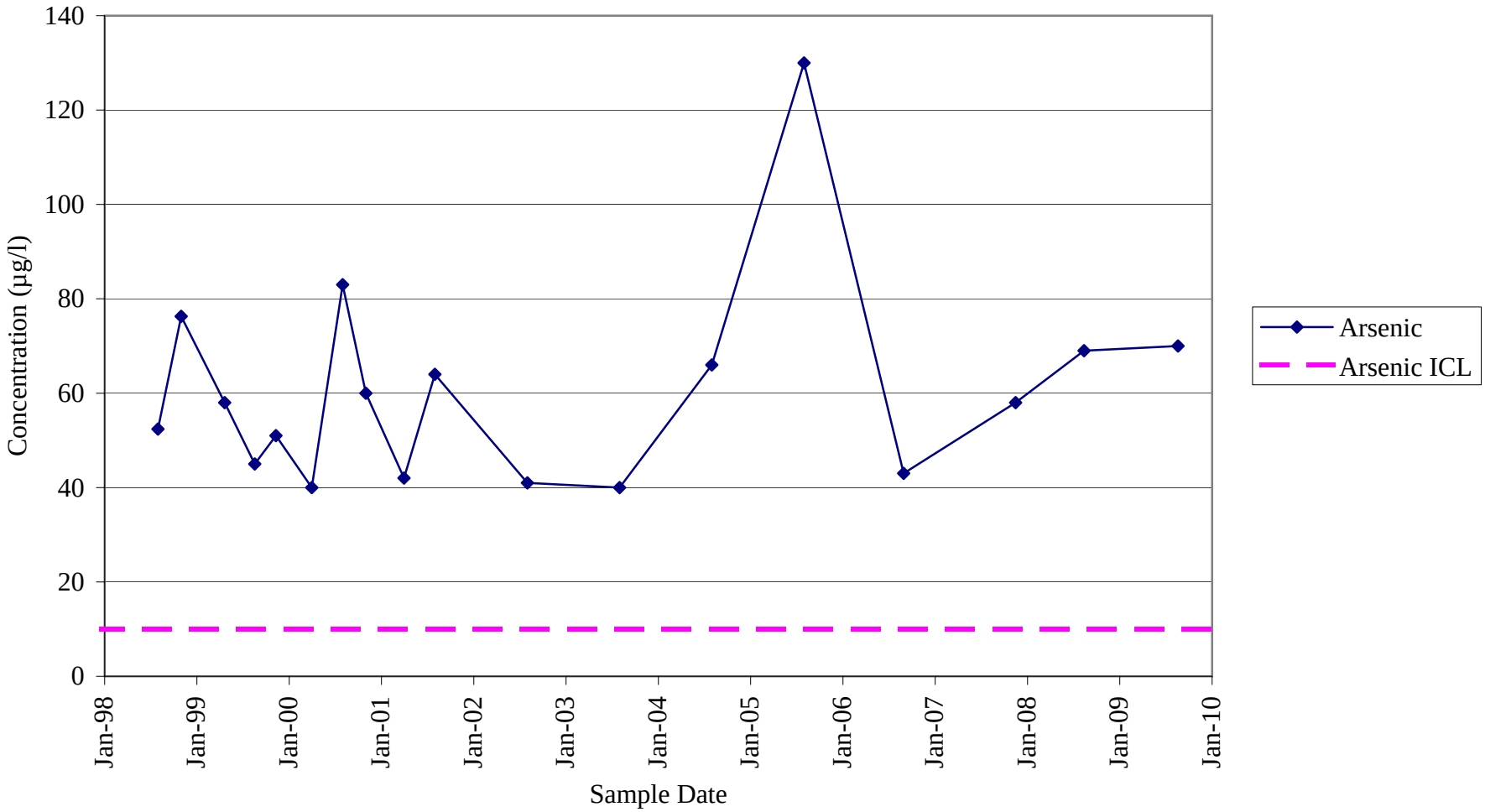
BP-4

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-4

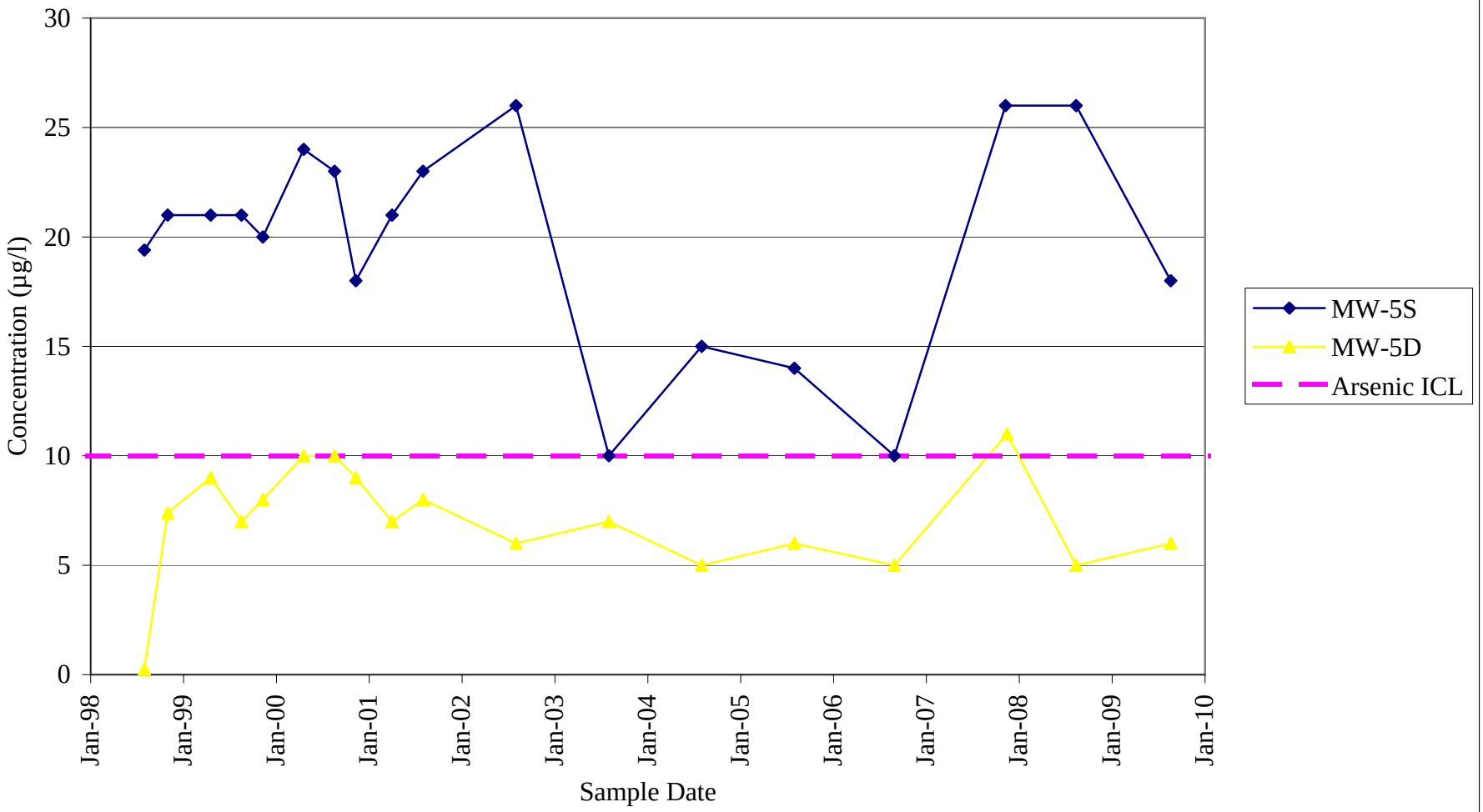
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-5S & MW-5D

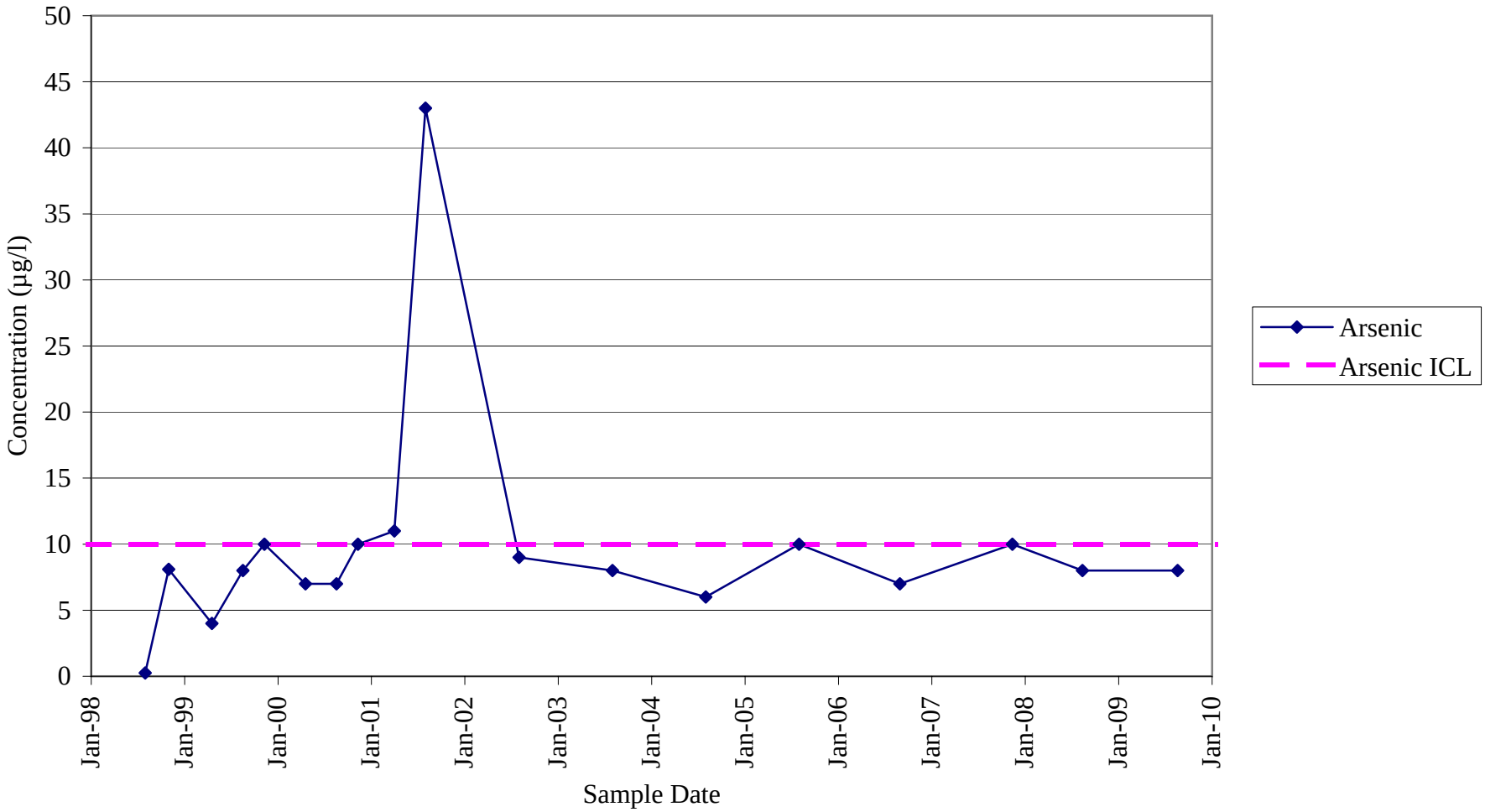
Arsenic Concentrations vs. Time

Coakley Landfill, North Hampton, NH



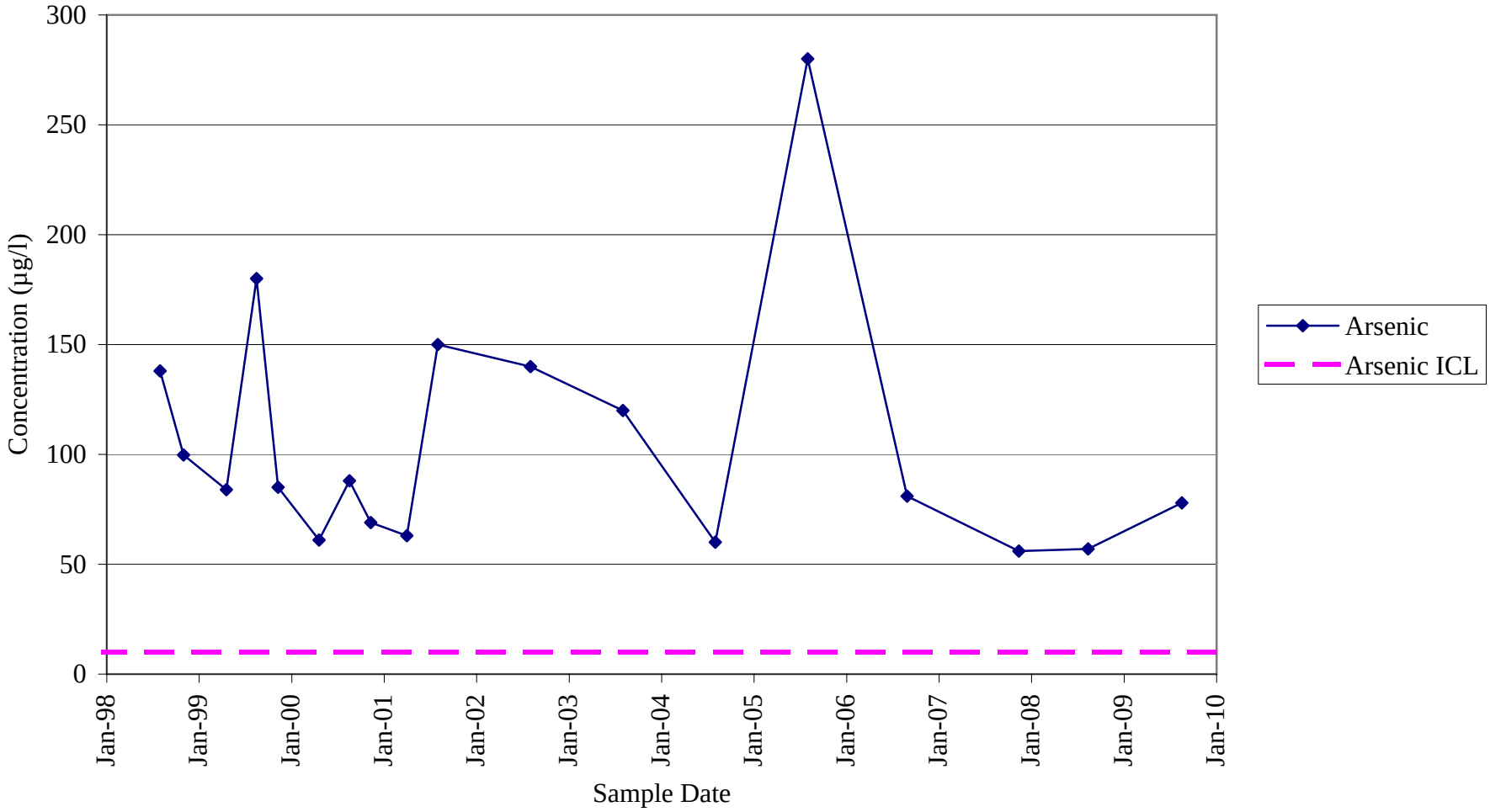
MW-8

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



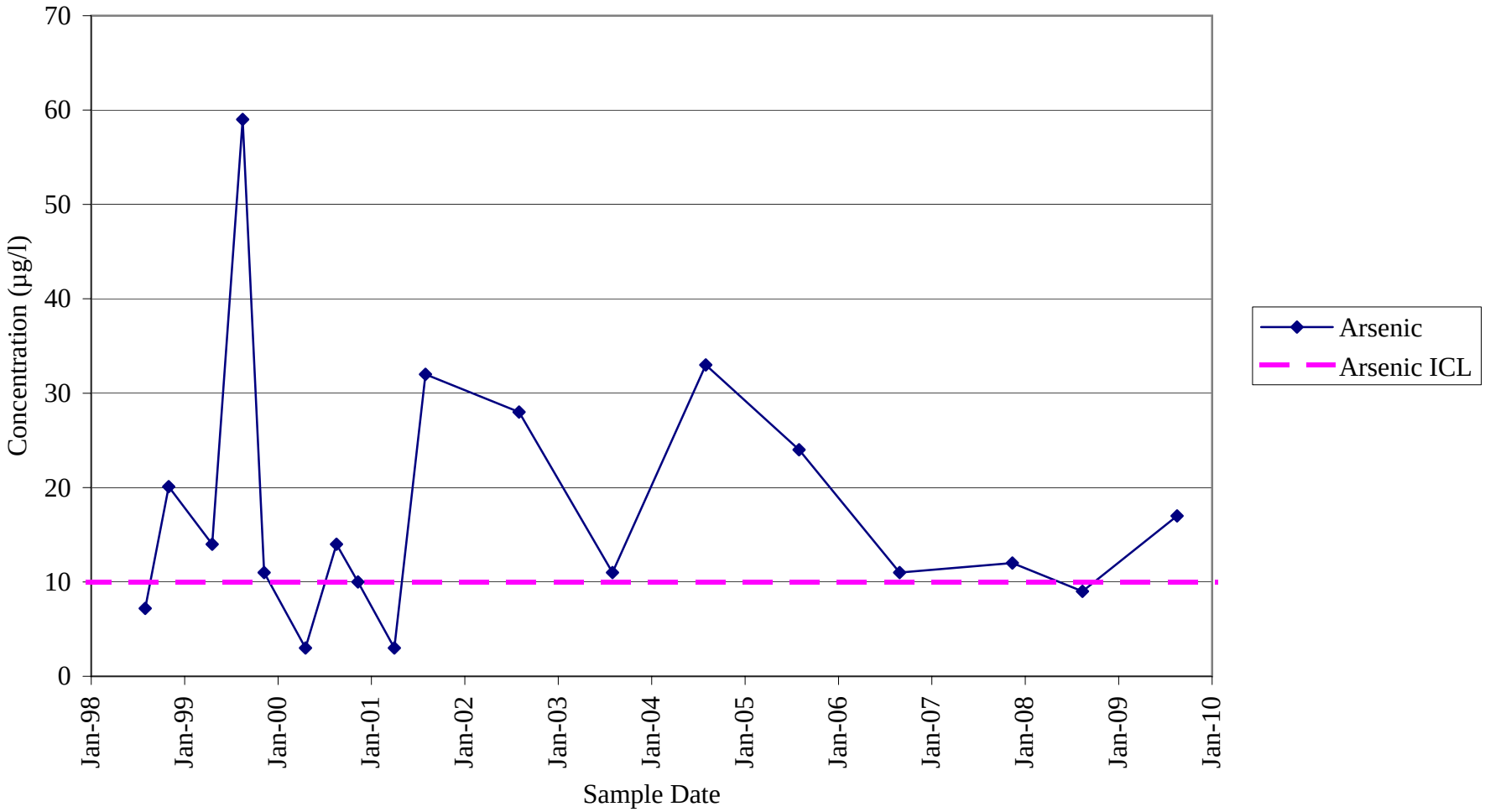
MW-9

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



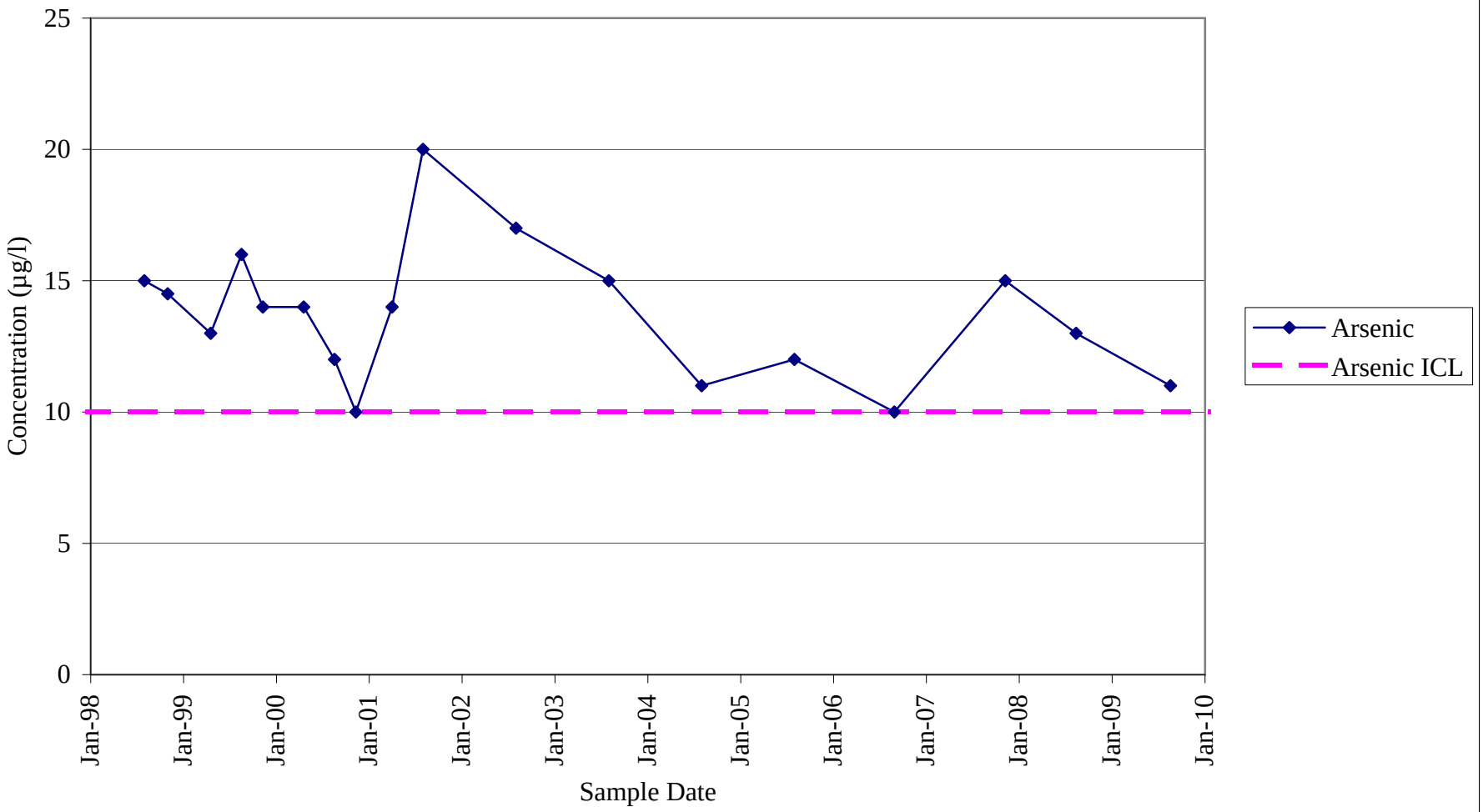
MW-10

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



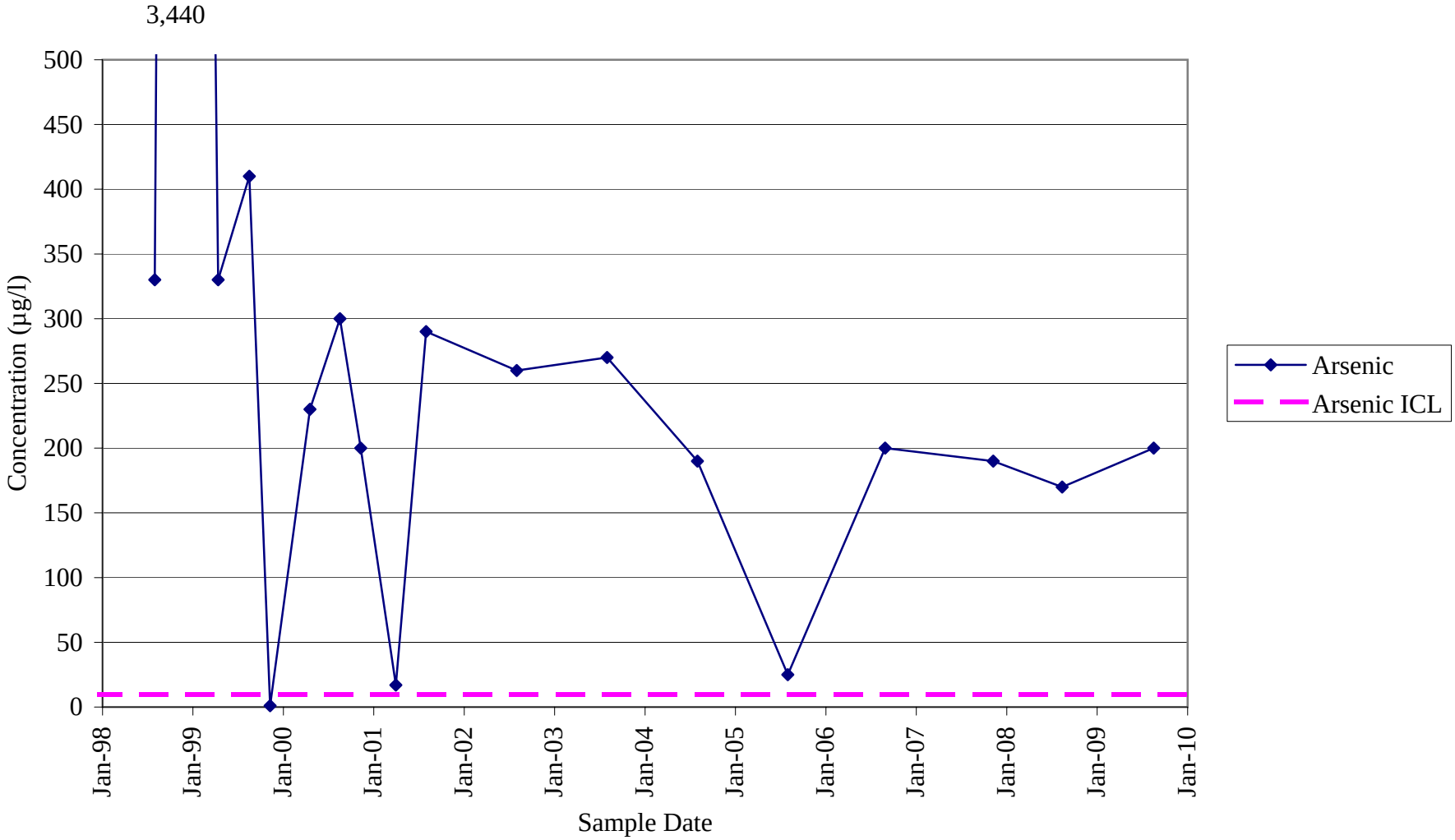
MW-11

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



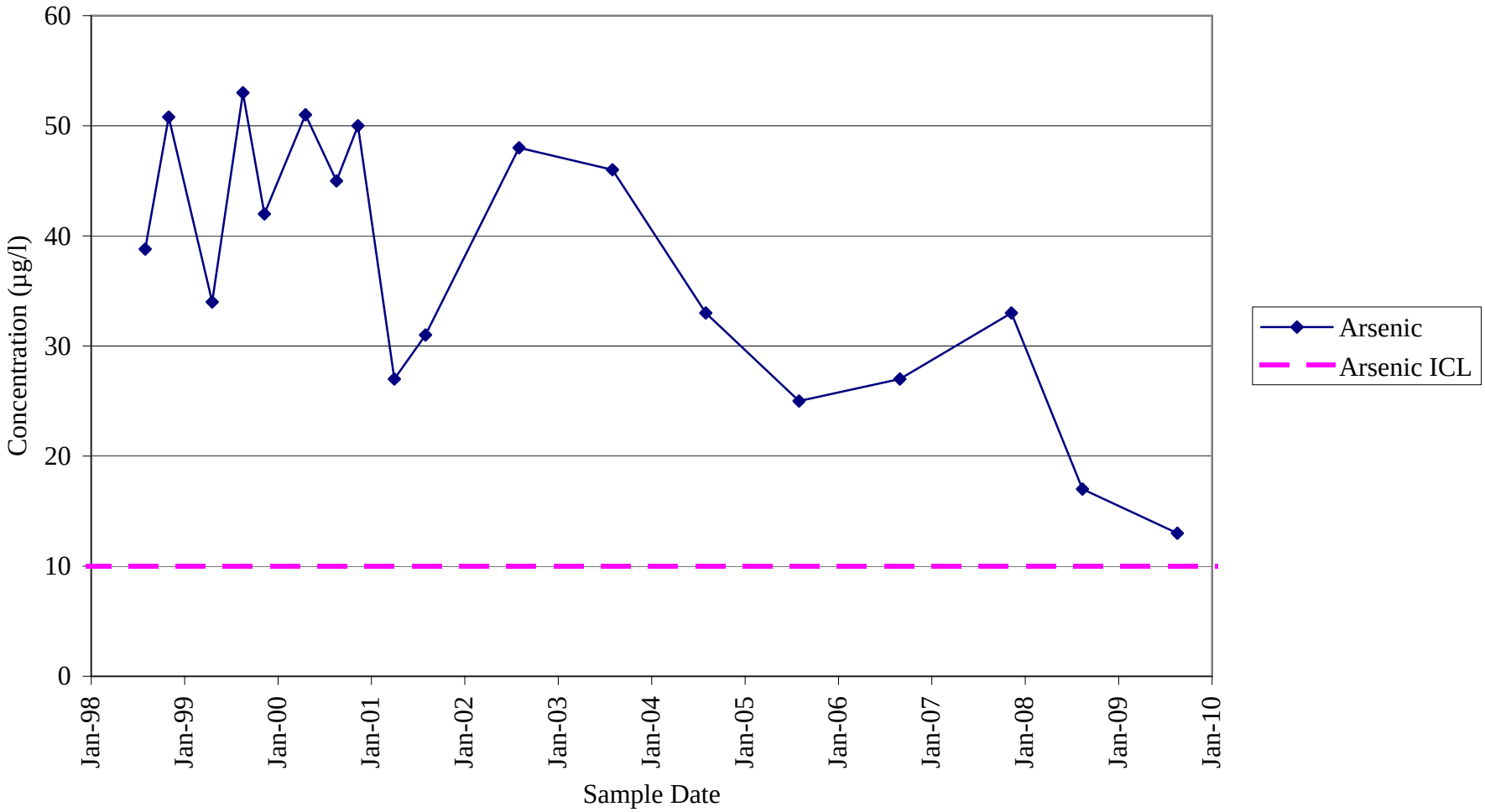
OP-2

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



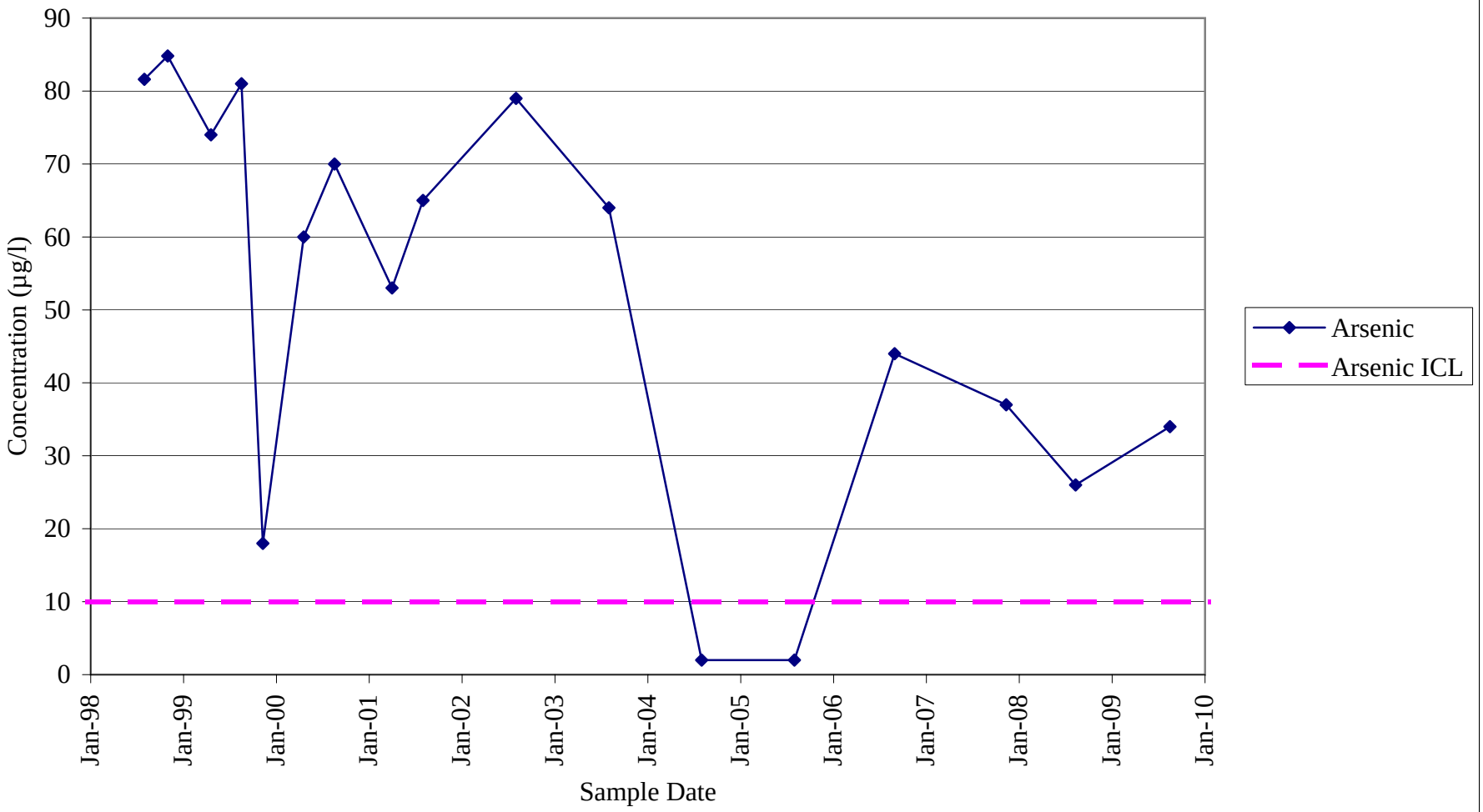
OP-5

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



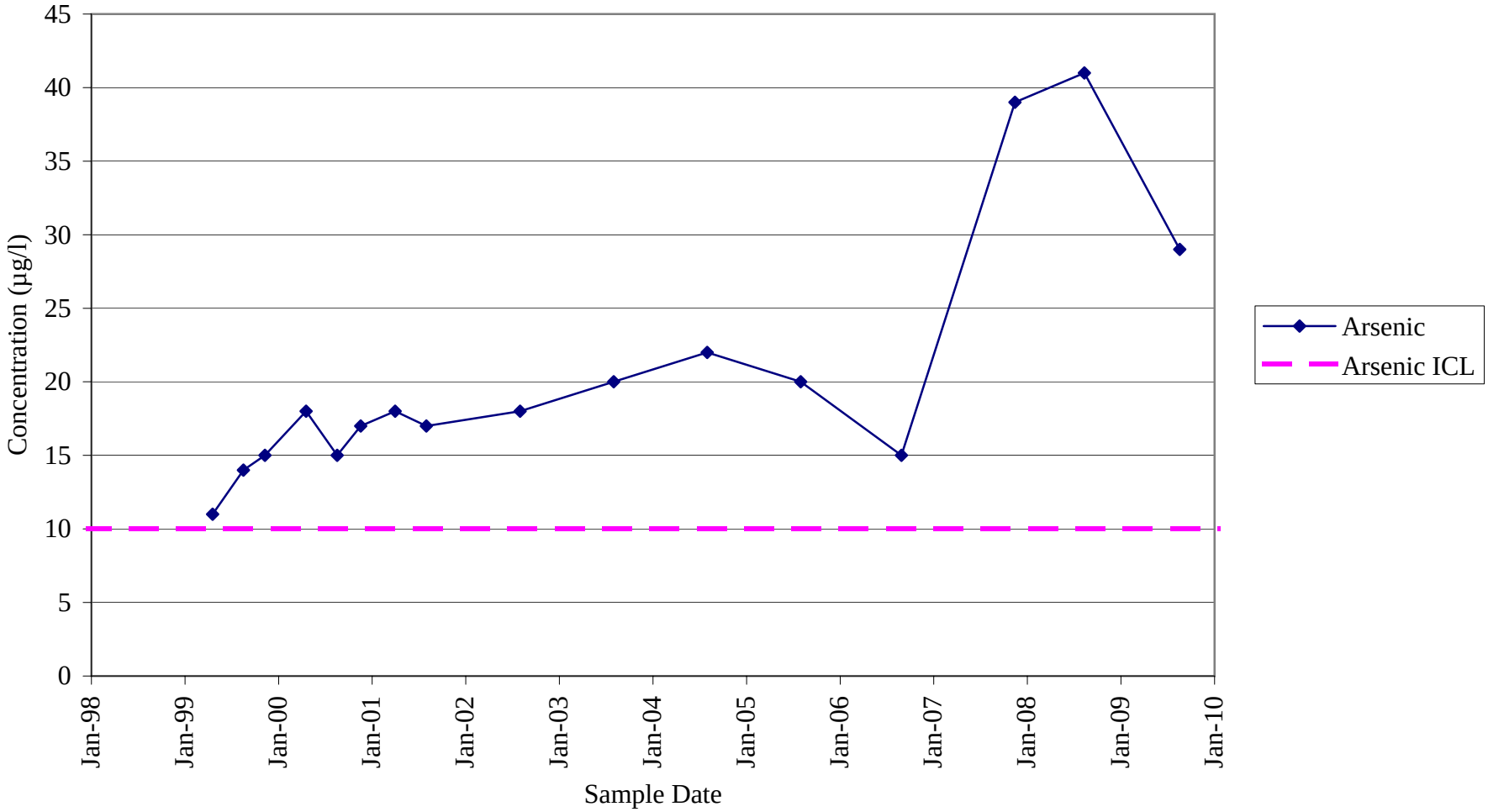
FPC-9A

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



AE-1A

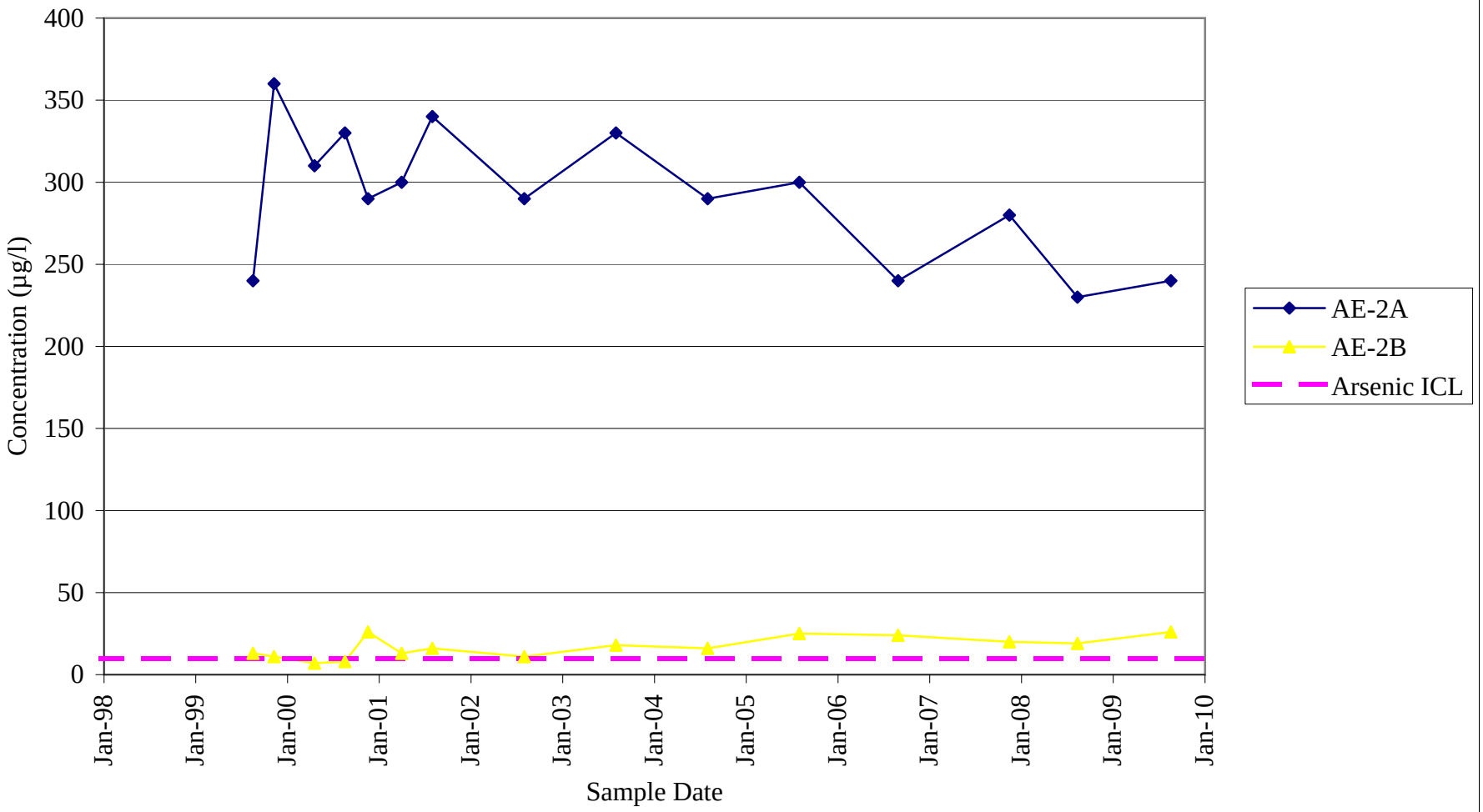
Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



AE-2A & AE-2B

Arsenic Concentrations vs. Time

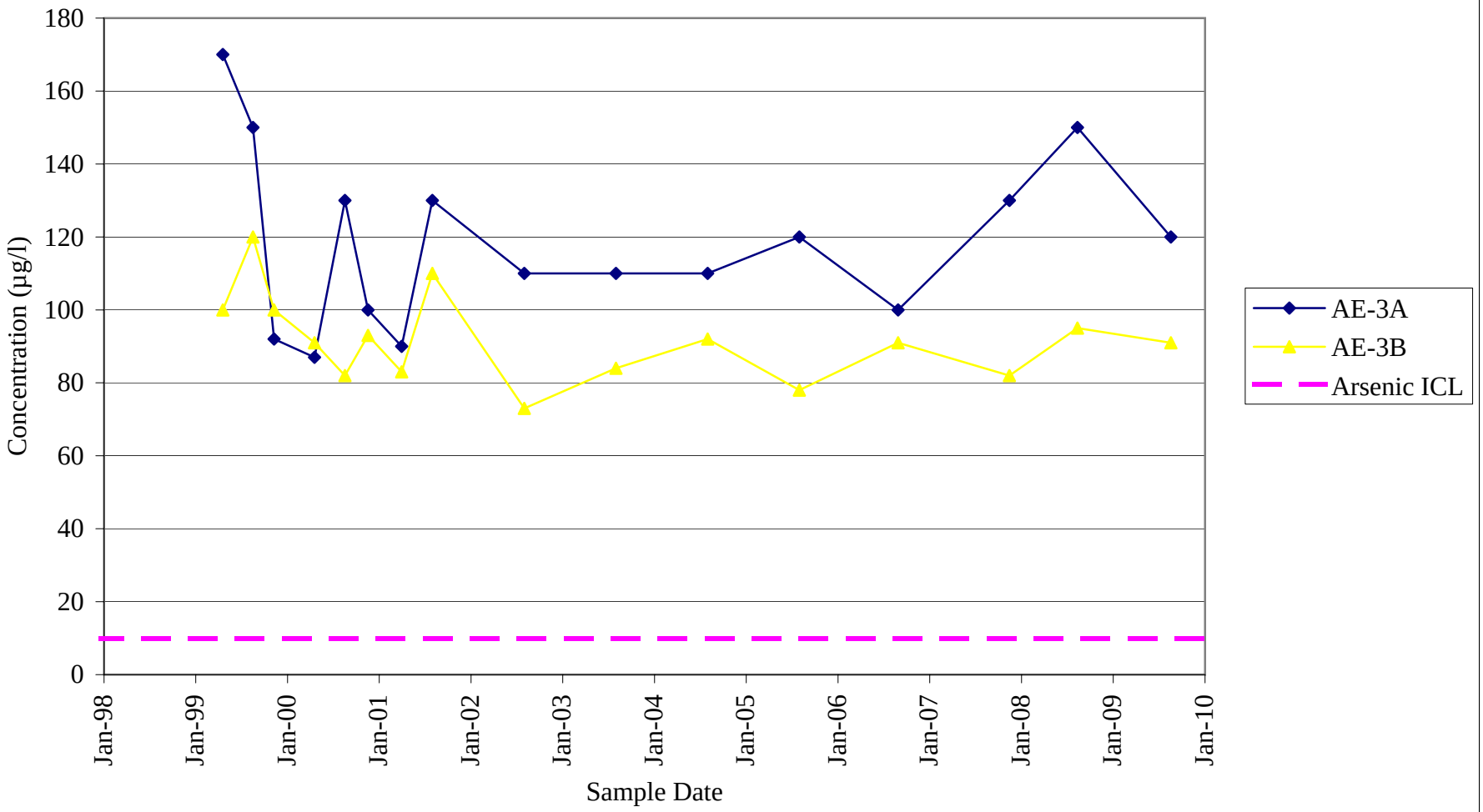
Coakley Landfill, North Hampton, NH



AE-3A & AE-3B

Arsenic Concentrations vs. Time

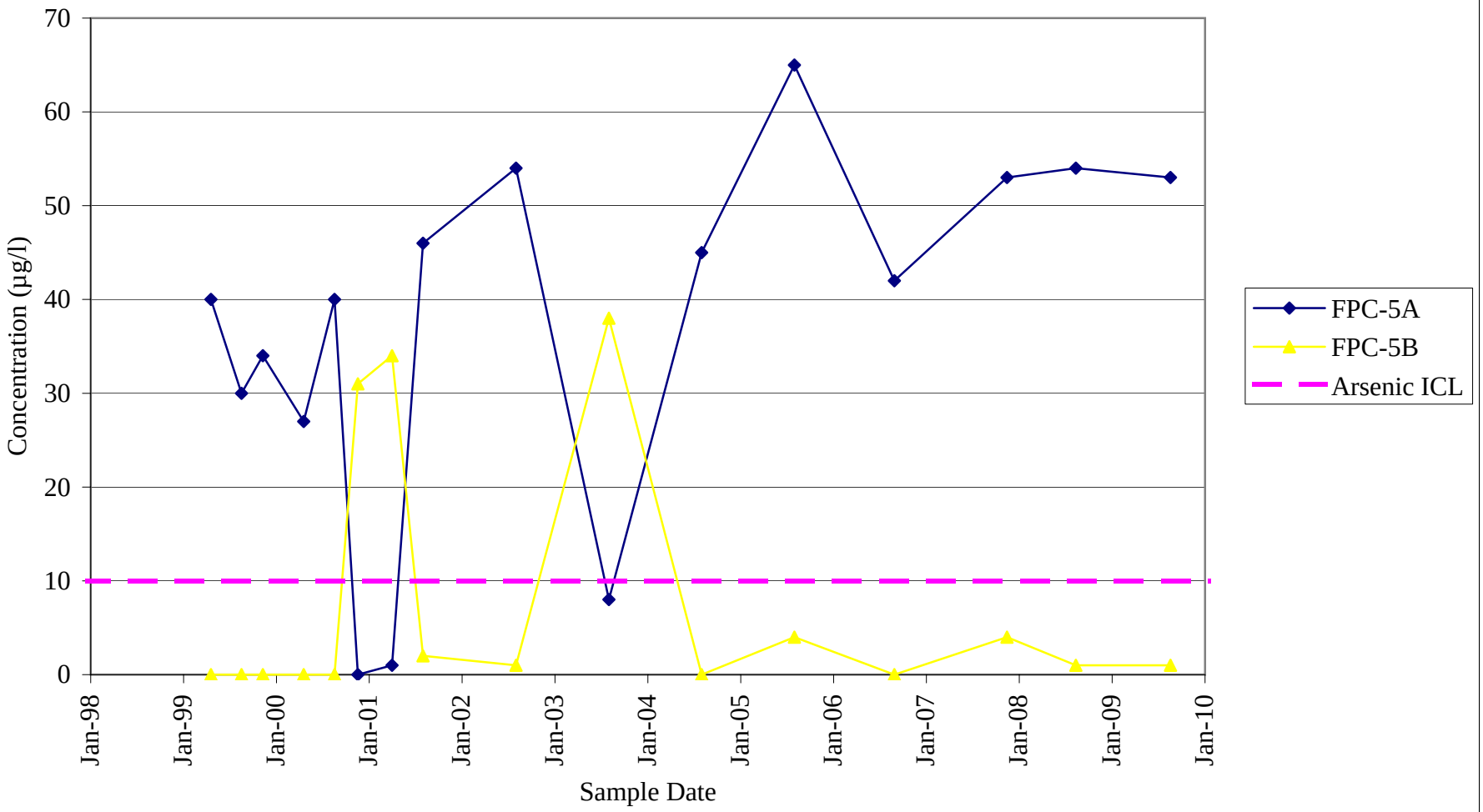
Coakley Landfill, North Hampton, NH



FPC-5A & FPC-5B

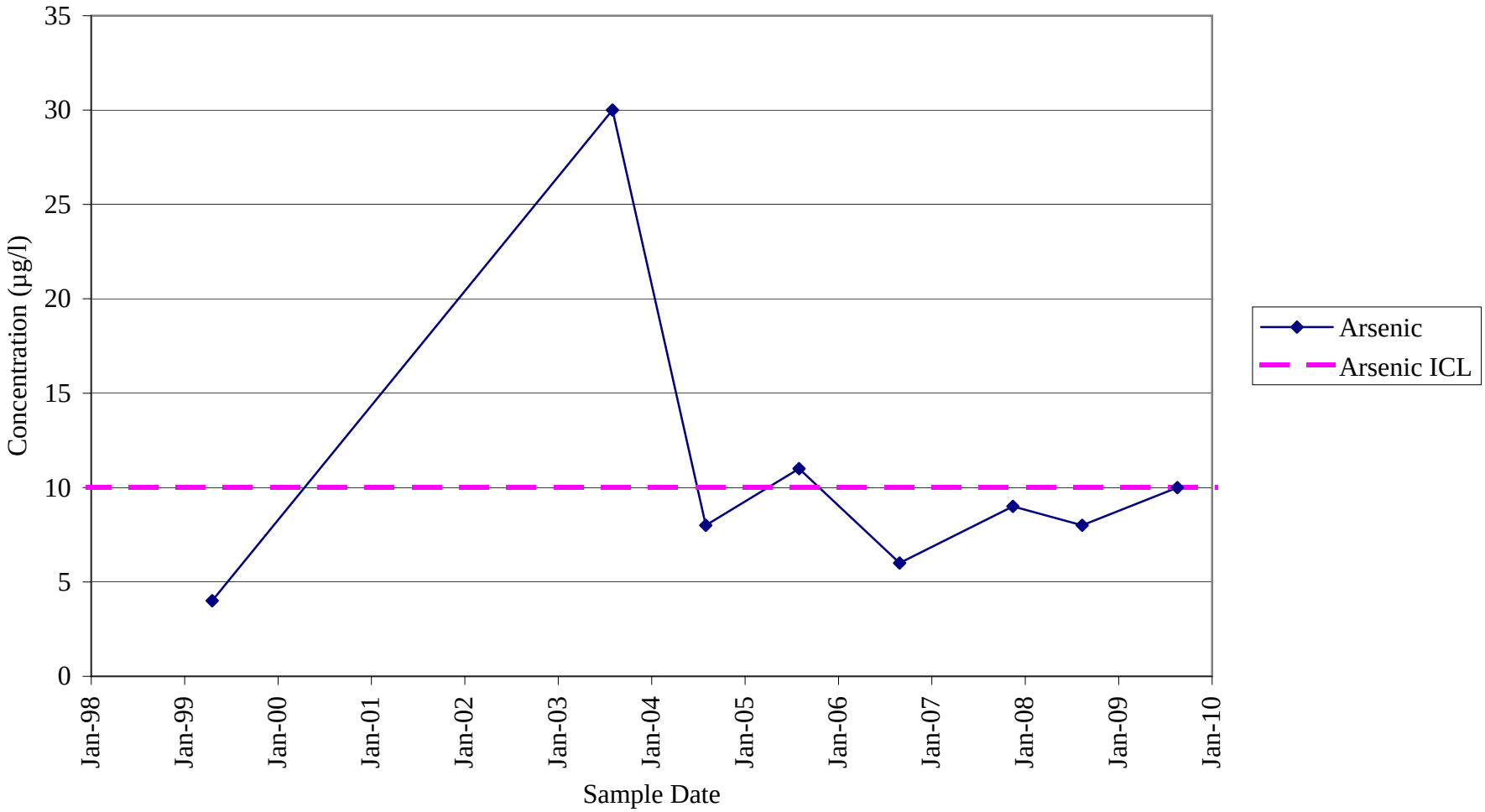
Arsenic Concentrations vs. Time

Coakley Landfill, North Hampton, NH



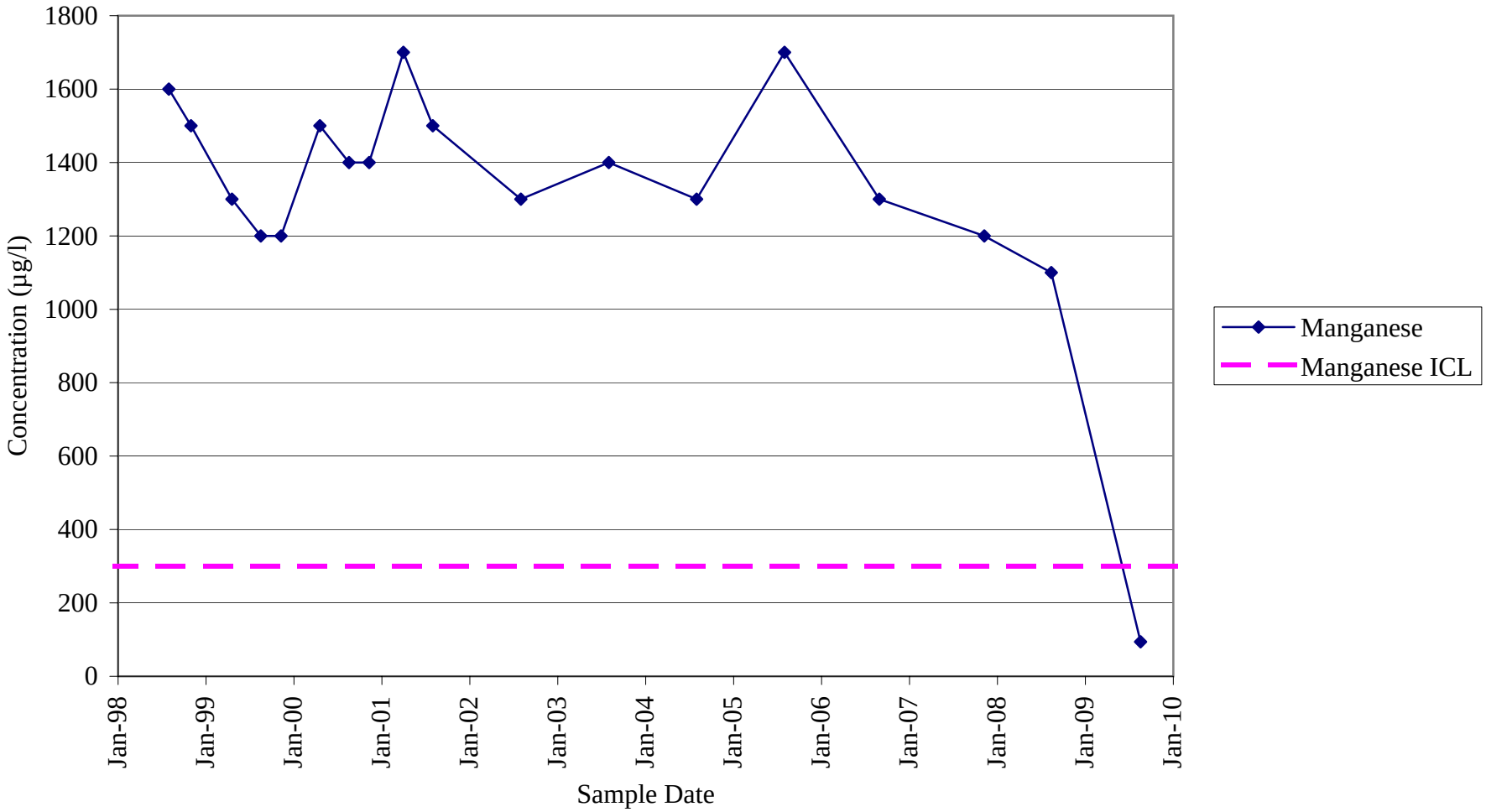
FPC-11B

Arsenic Concentrations vs. Time
Coakley Landfill, North Hampton, NH



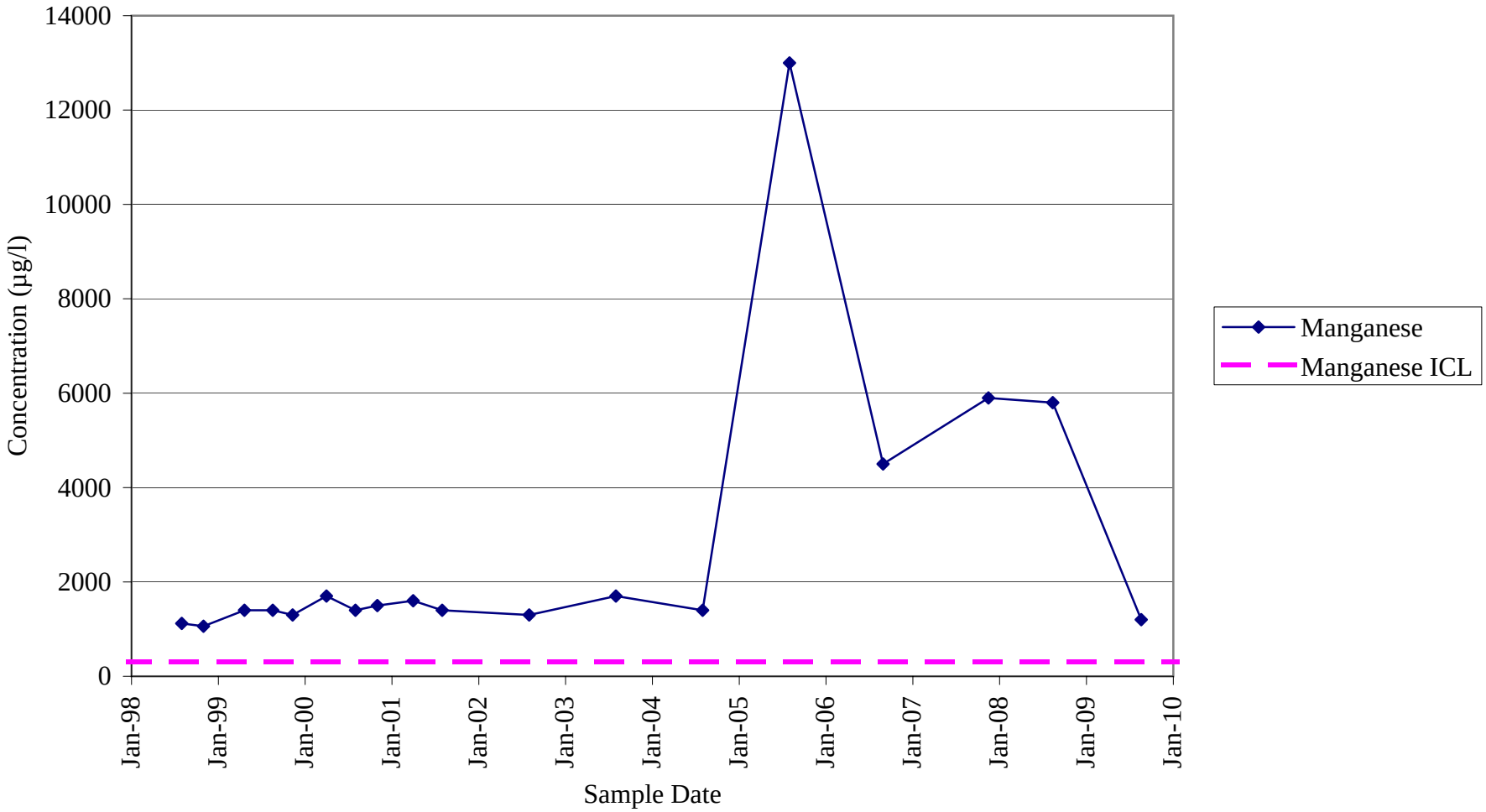
BP-4

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-4

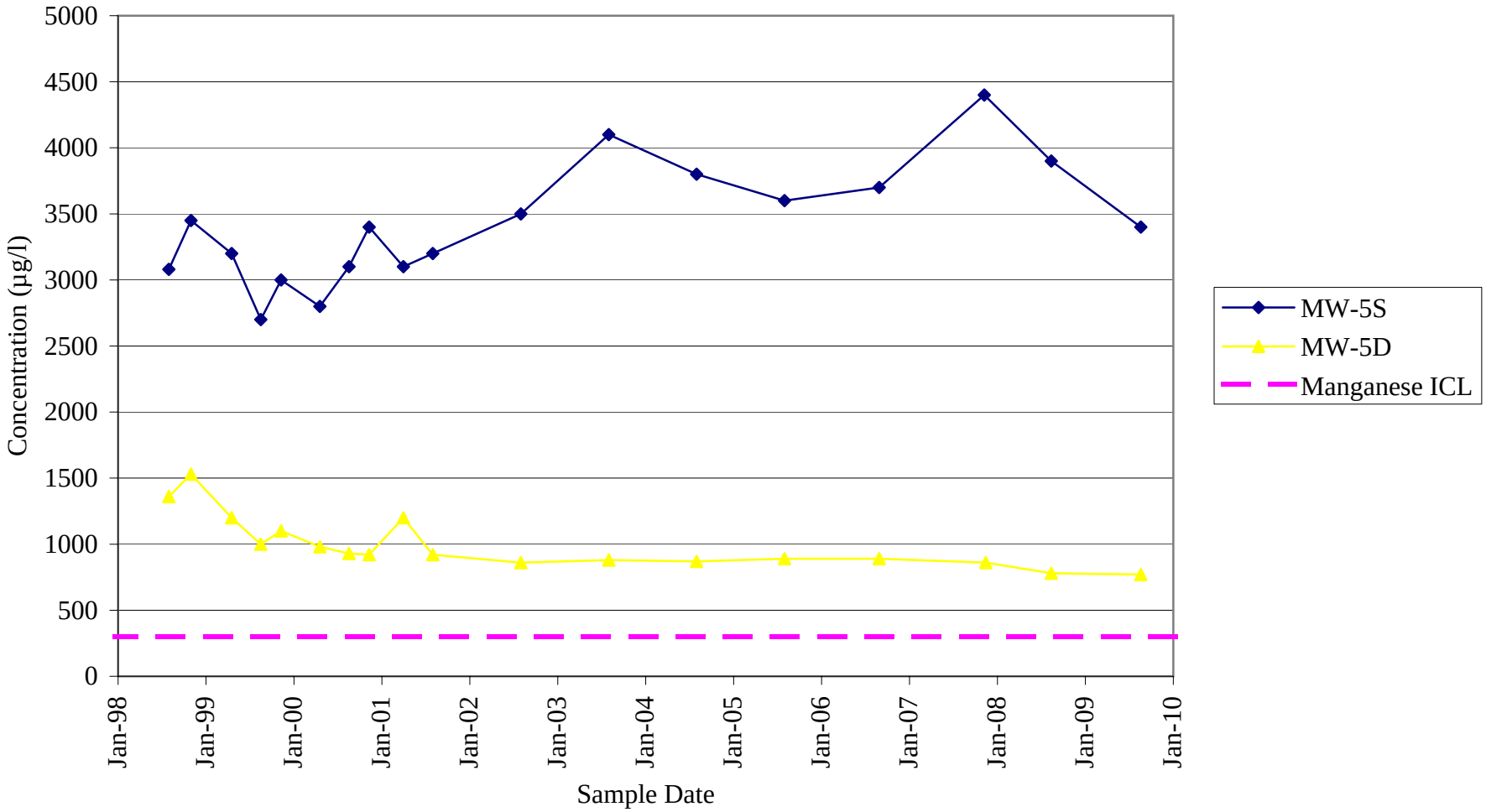
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-5S & MW-5D

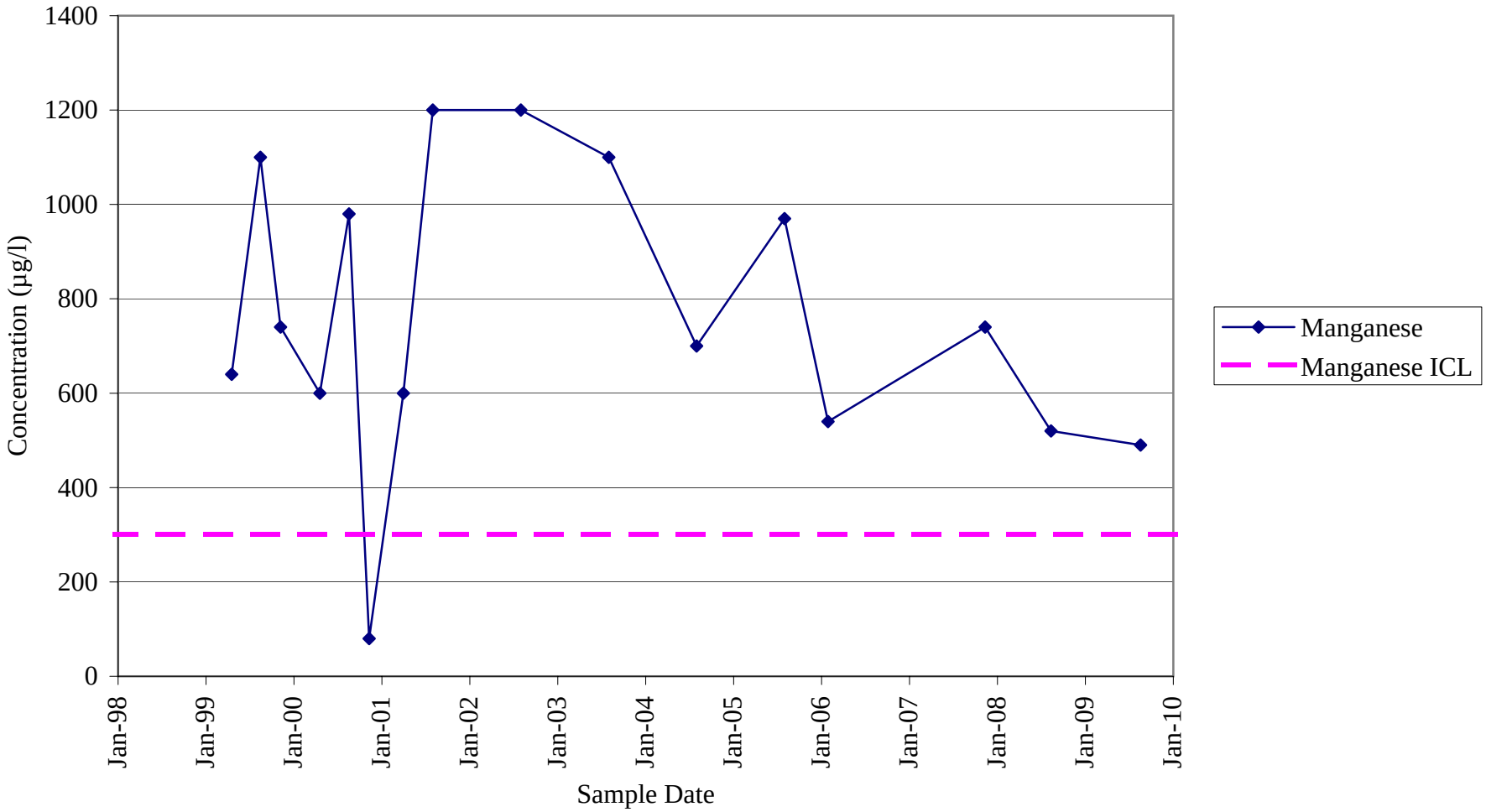
Manganese Concentrations vs. Time

Coakley Landfill, North Hampton, NH



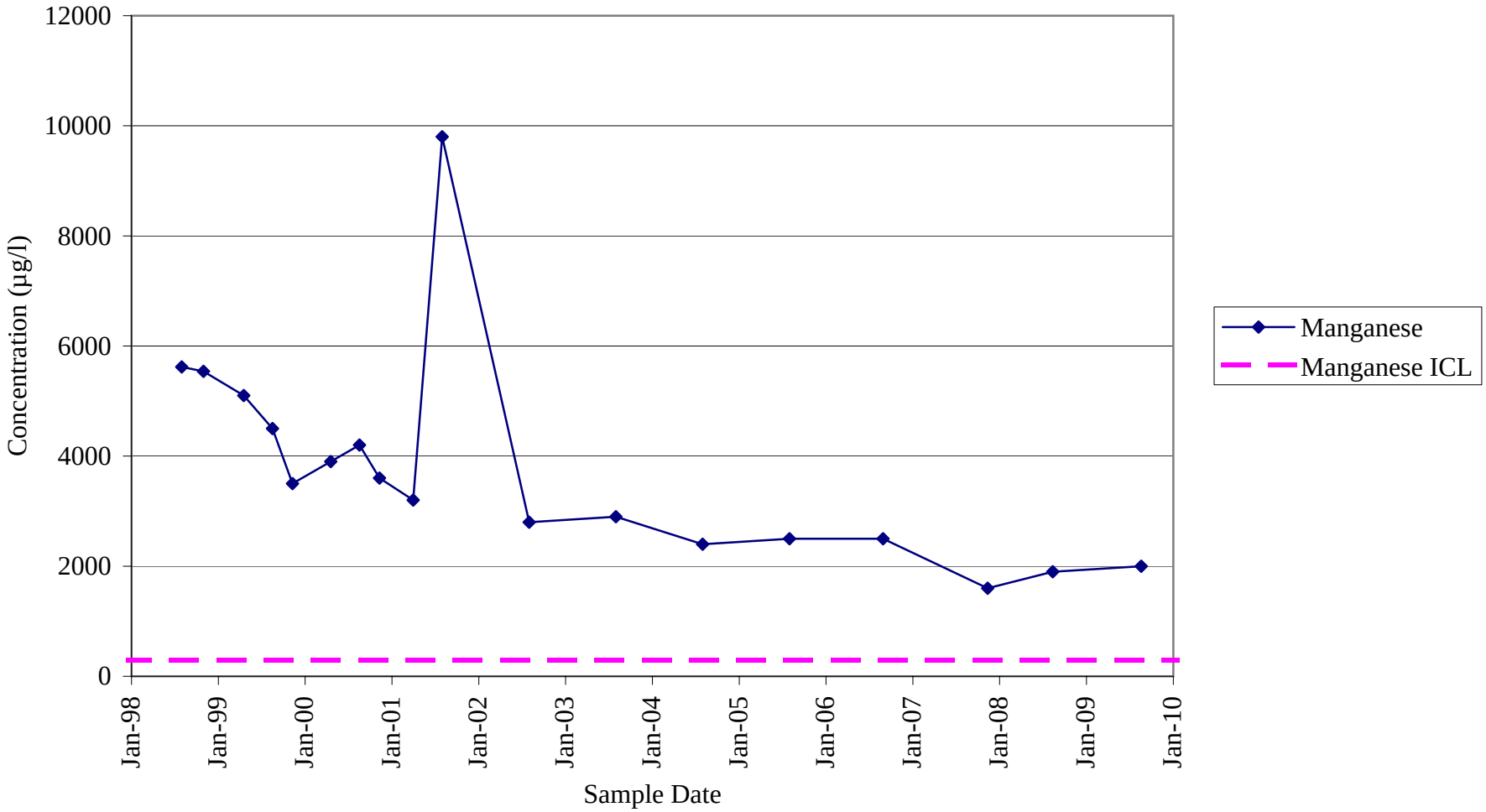
MW-6

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



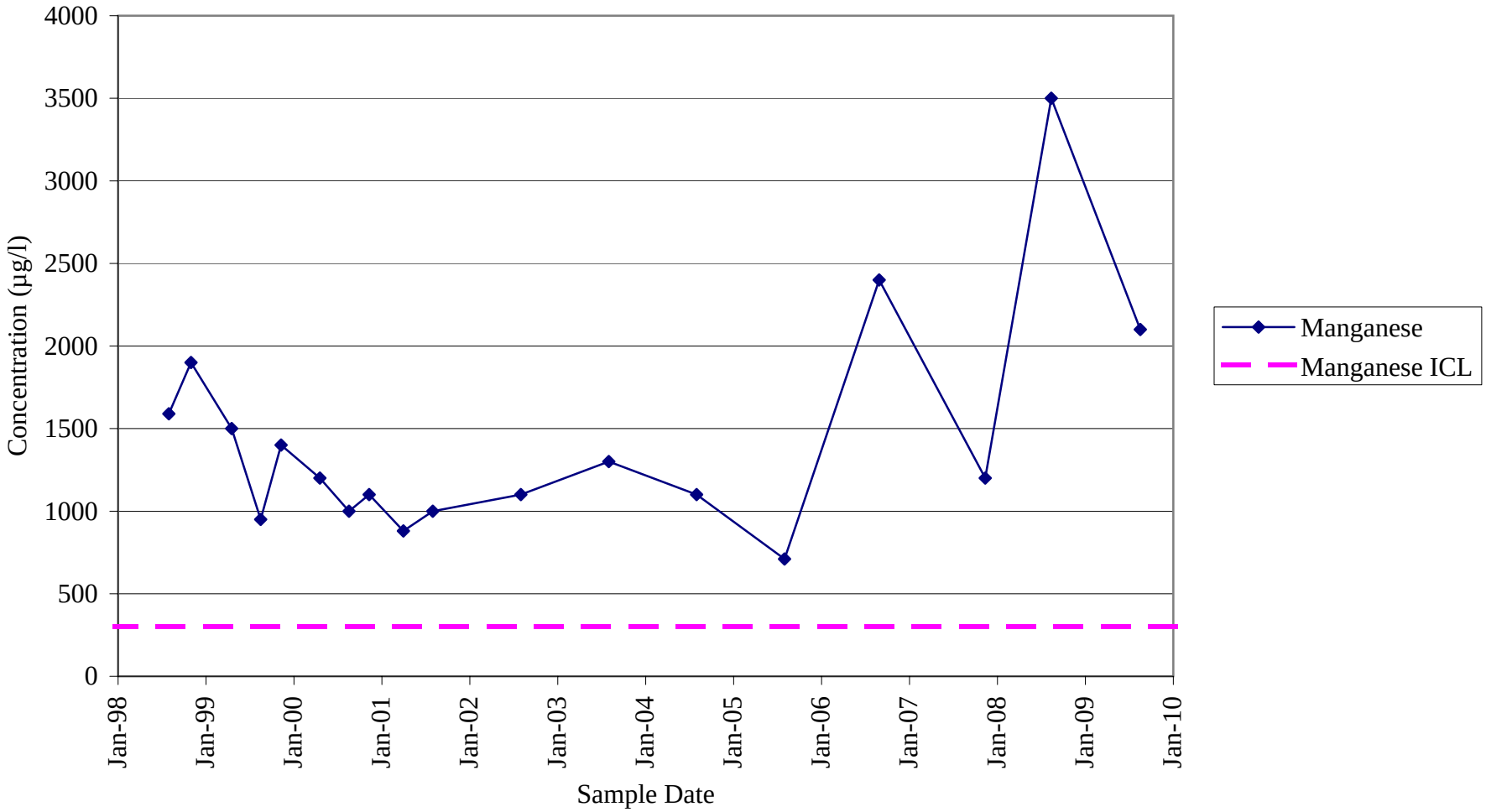
MW-8

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



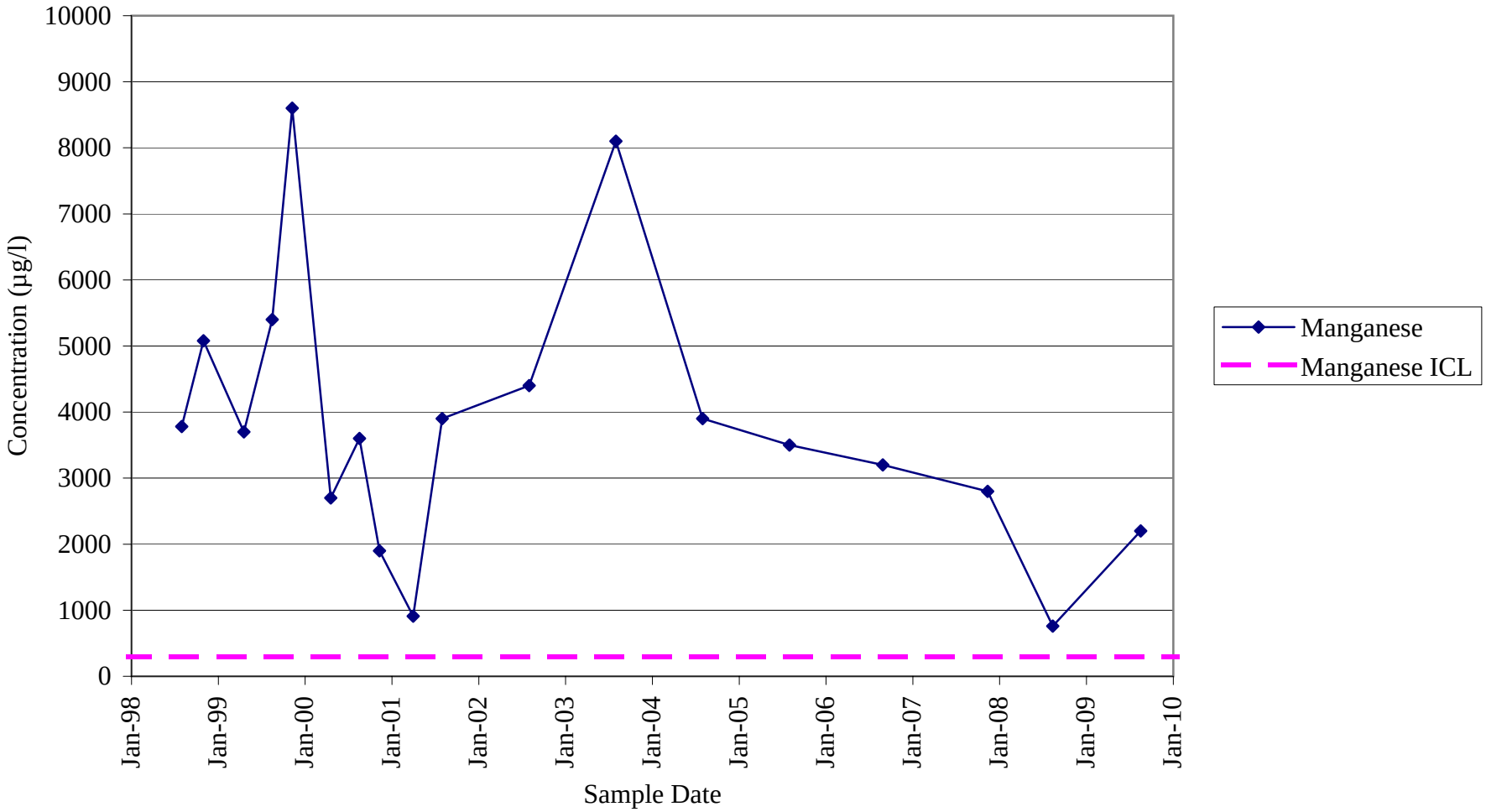
MW-9

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



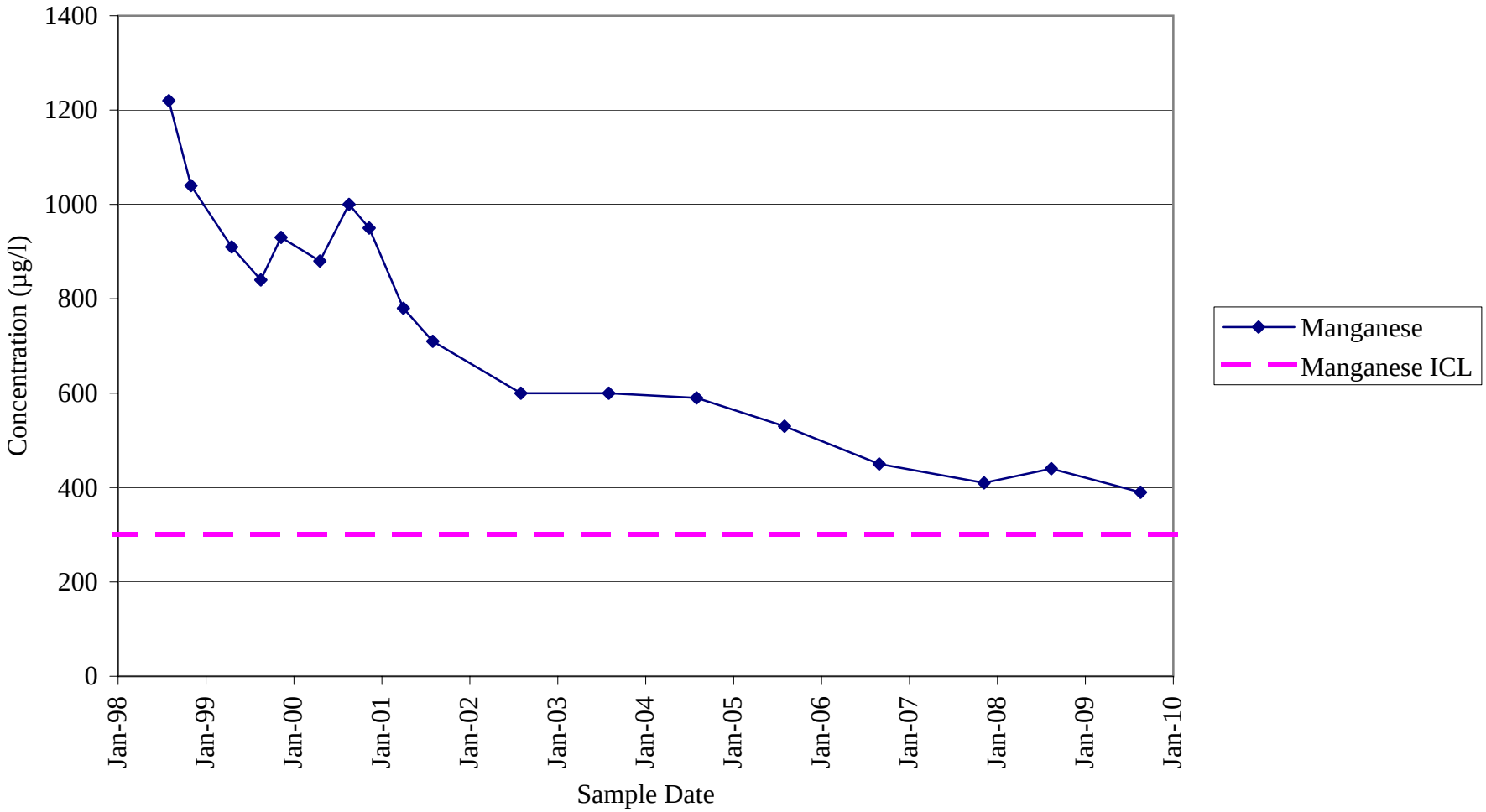
MW-10

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



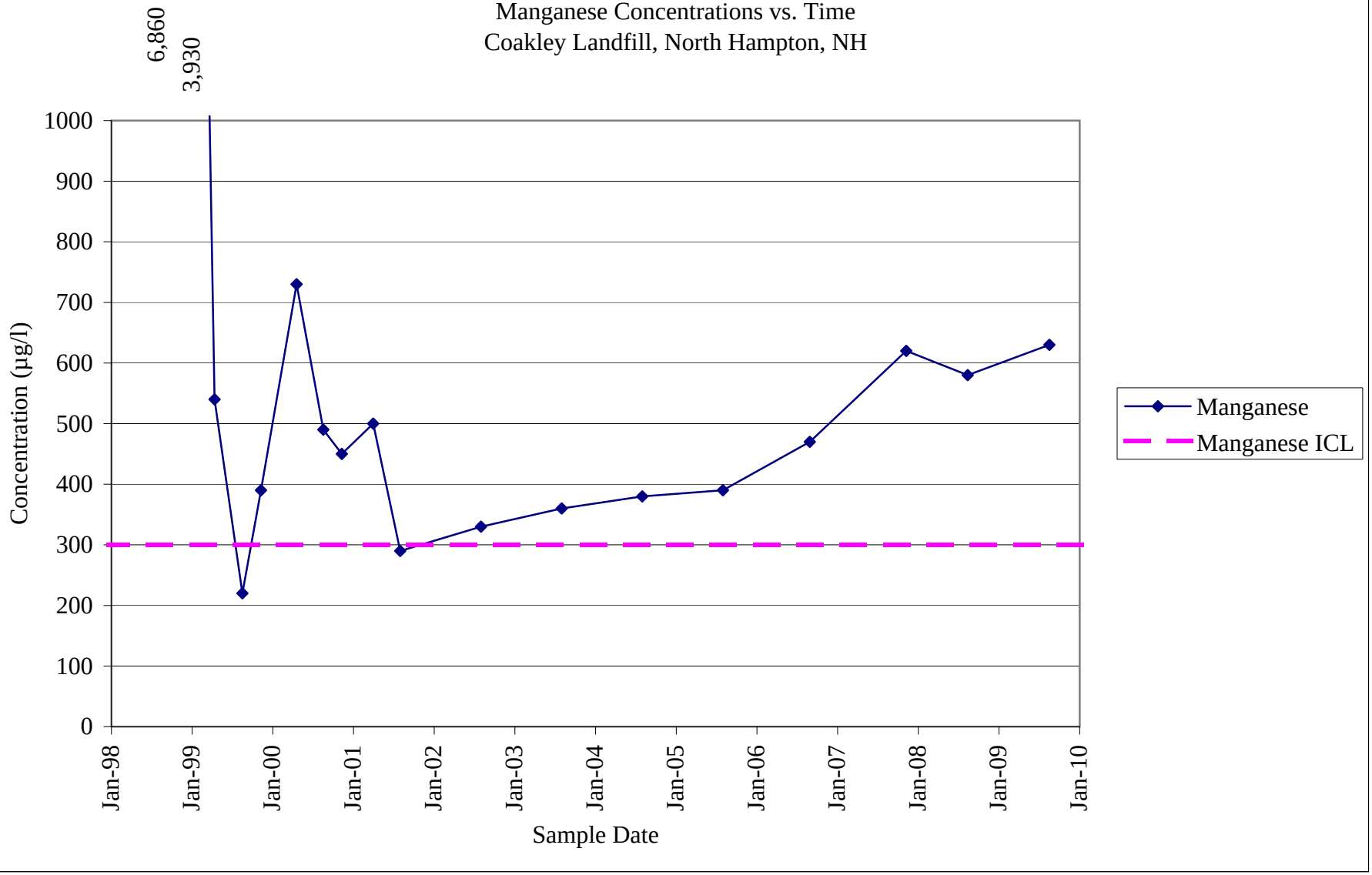
MW-11

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



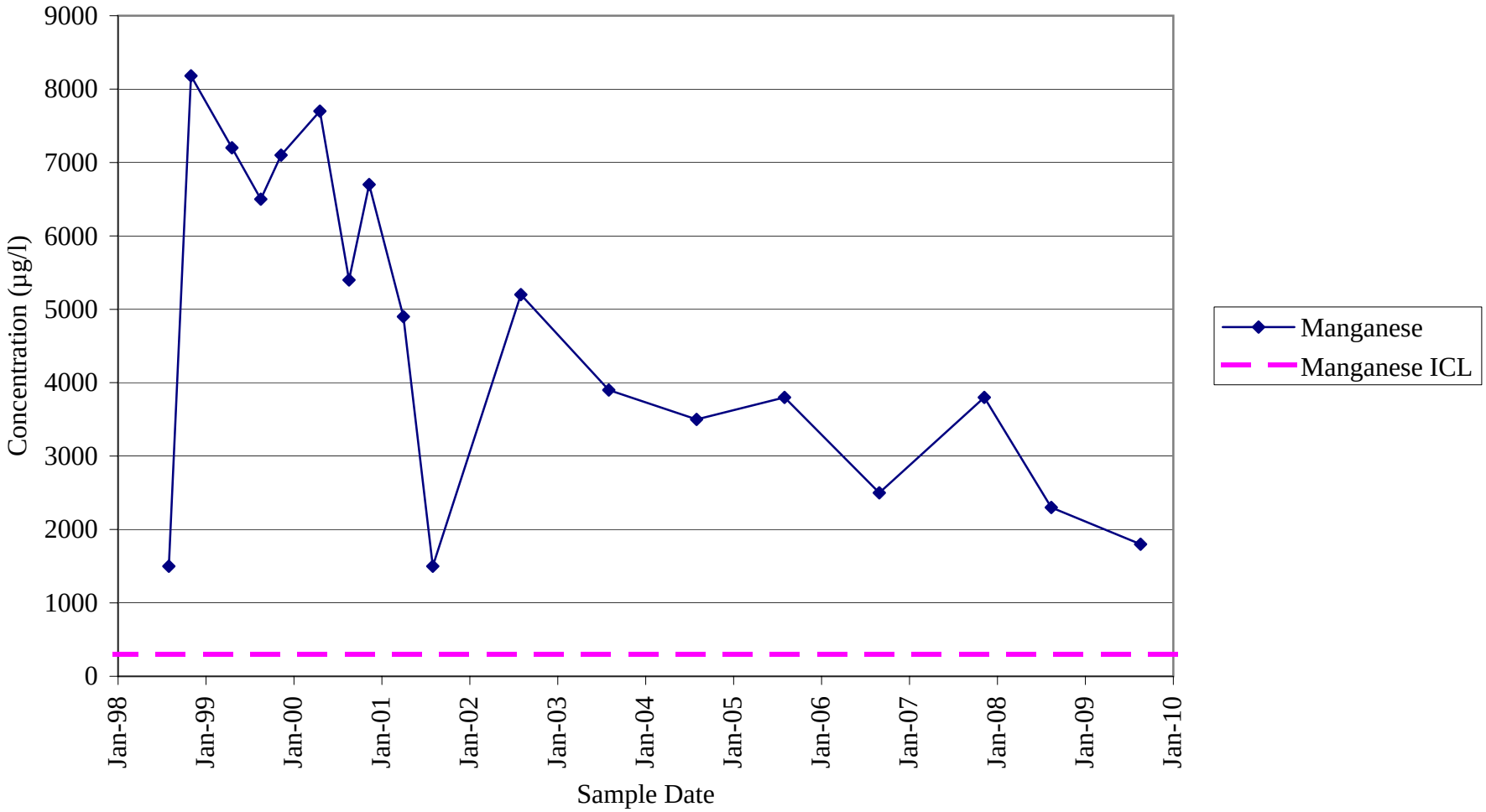
OP-2

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



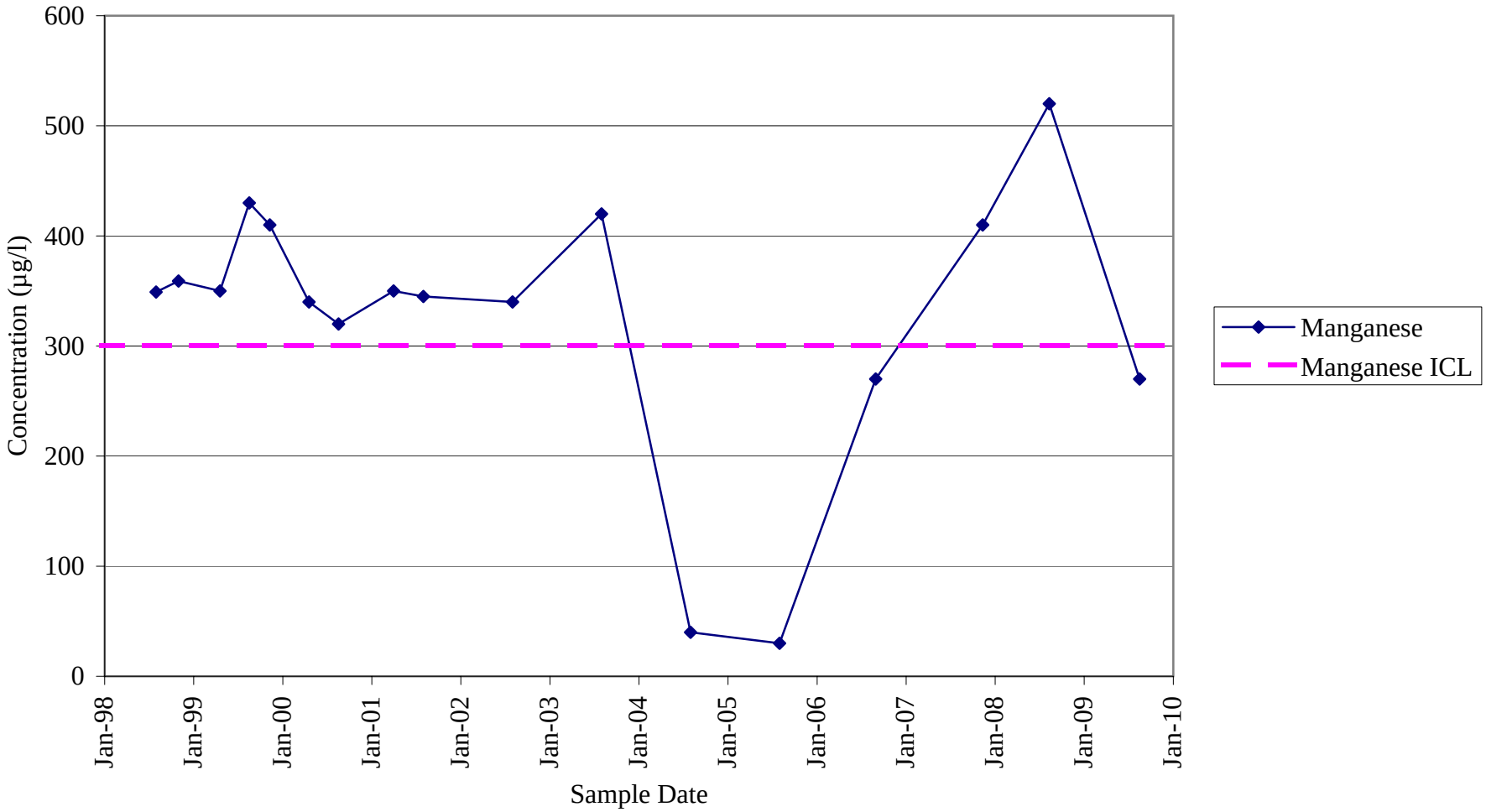
OP-5

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



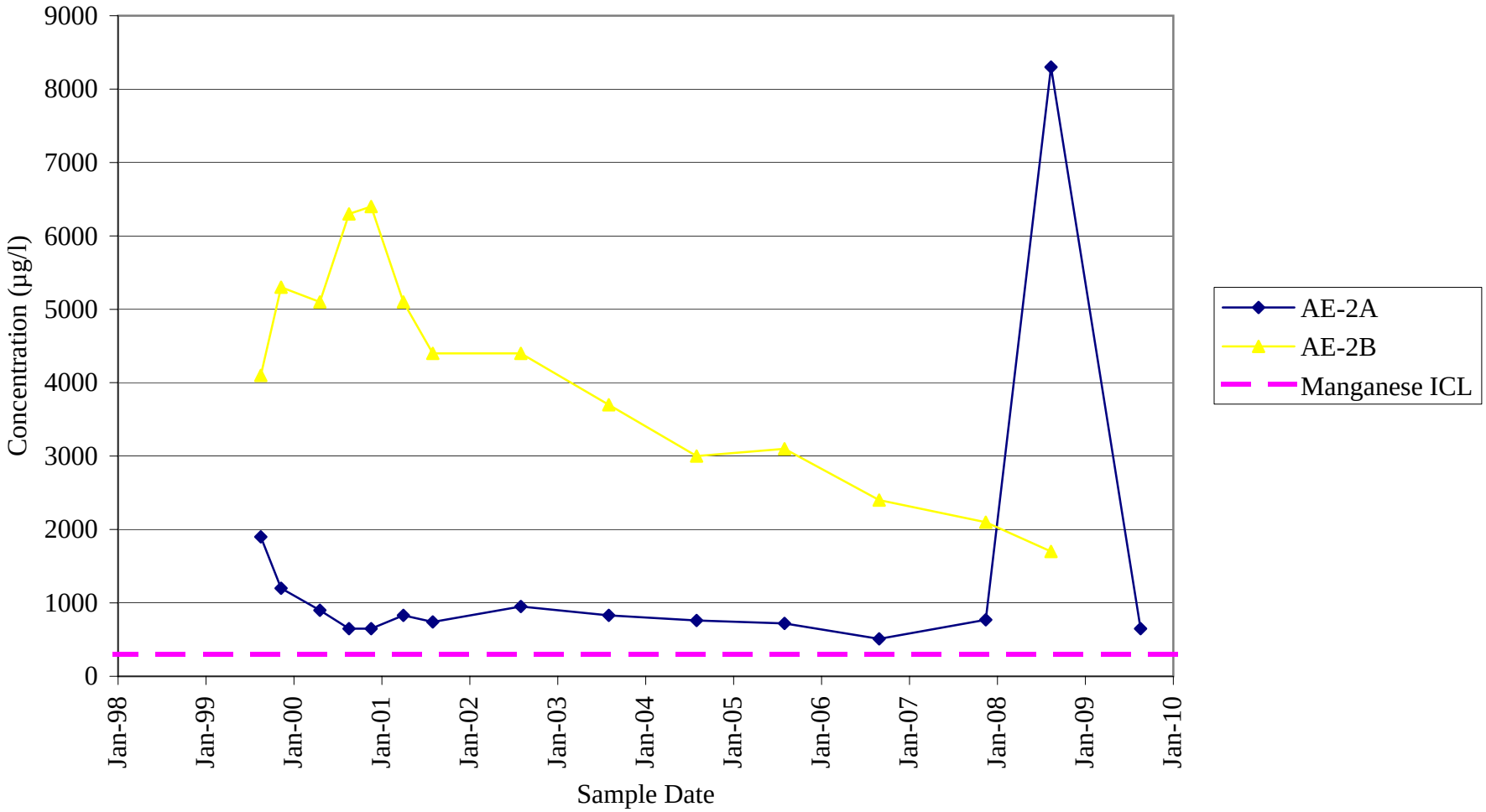
FPC-9A

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



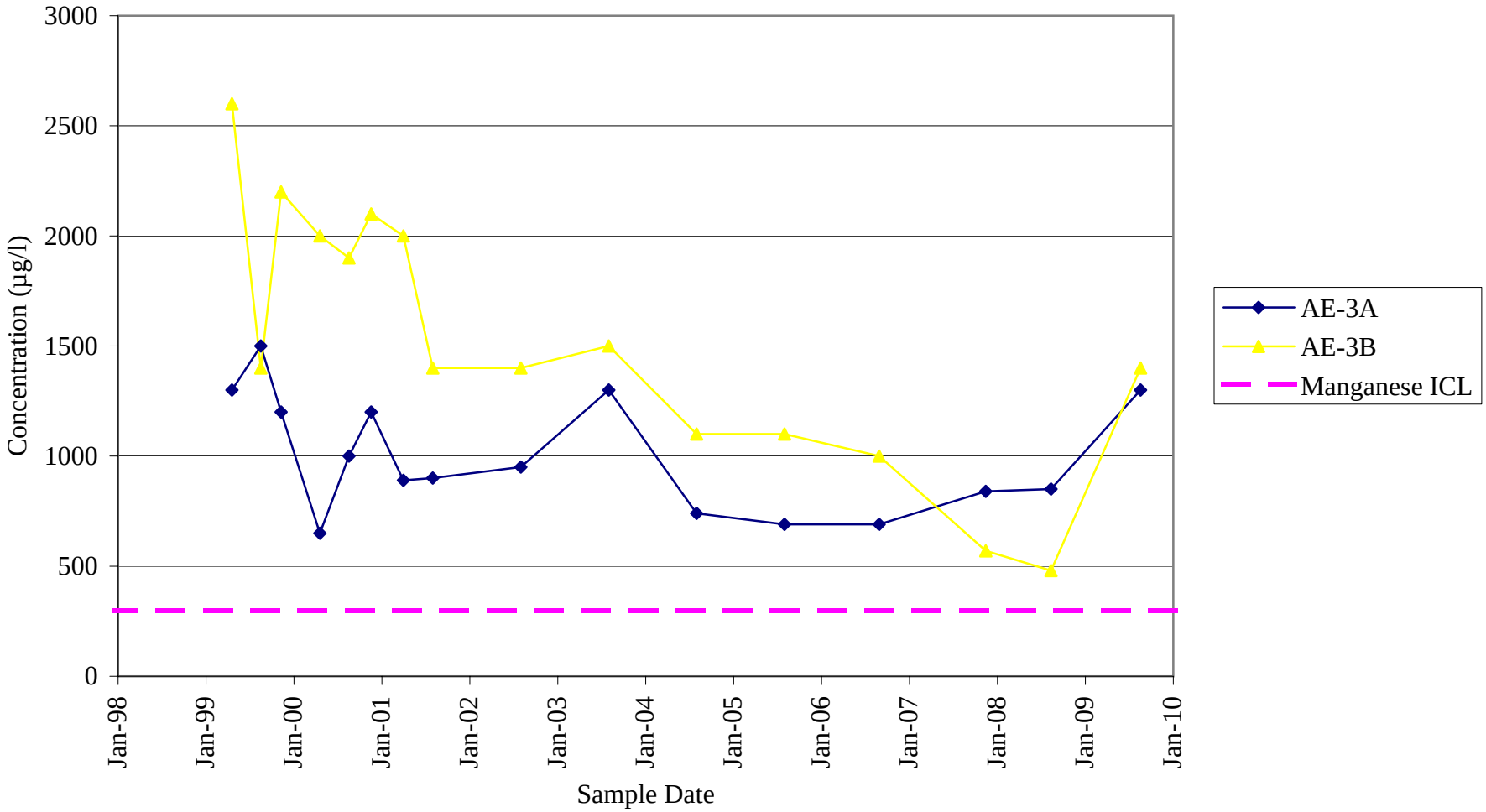
AE-2A & AE-2B

Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



AE-3A & AE-3B

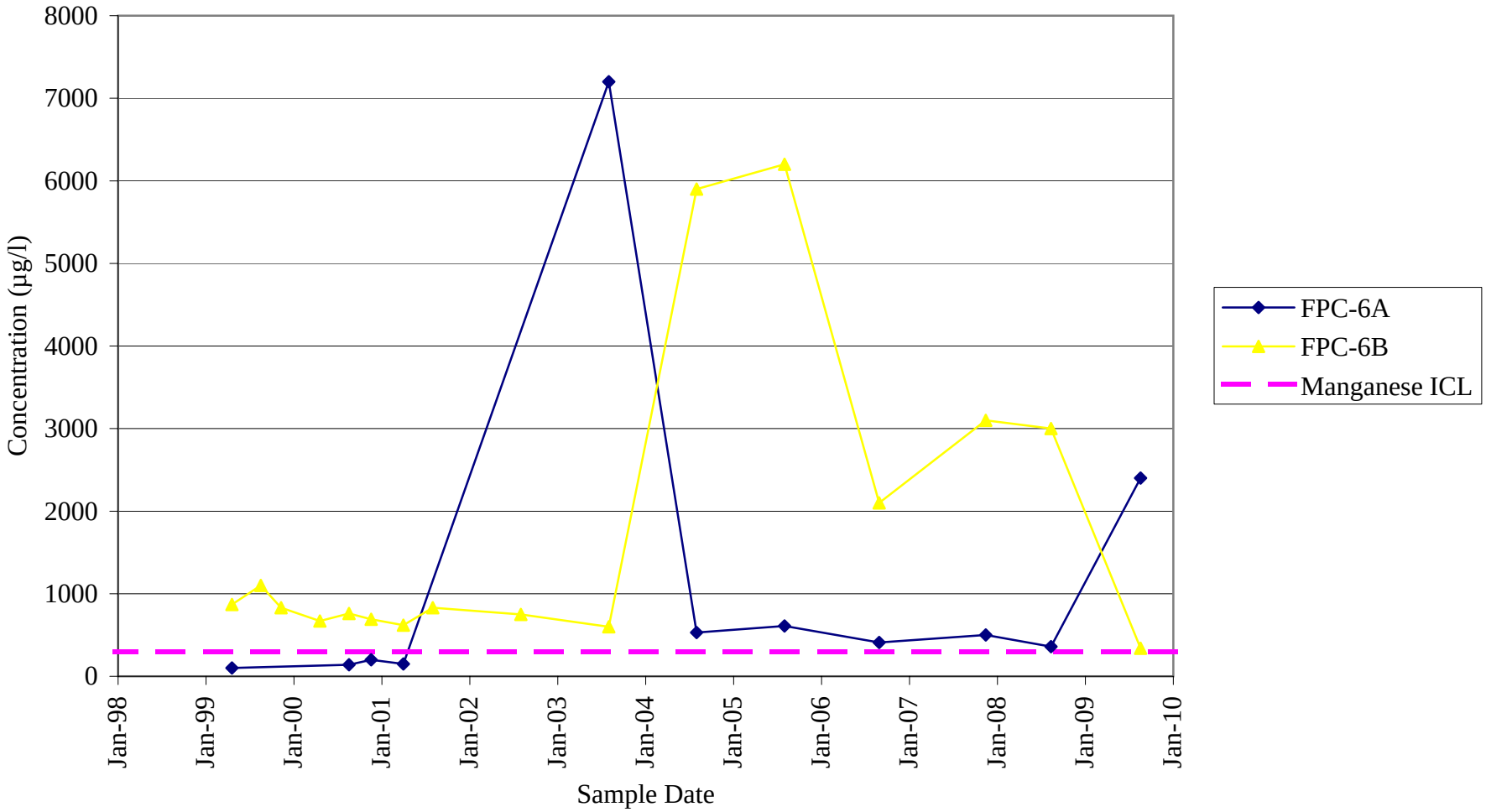
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



FPC-6A & FPC-6B

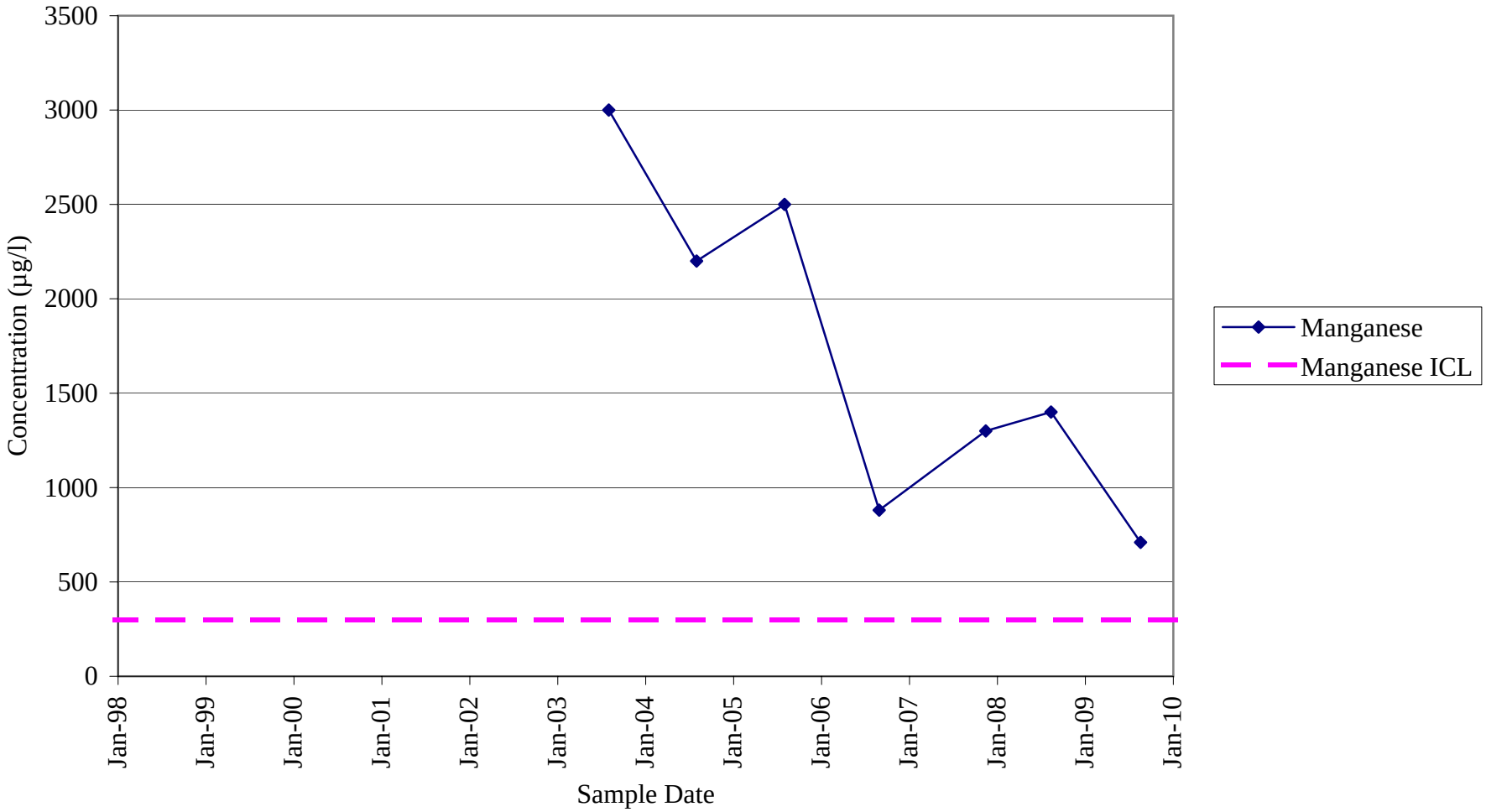
Manganese Concentrations vs. Time

Coakley Landfill, North Hampton, NH



FPC-11B

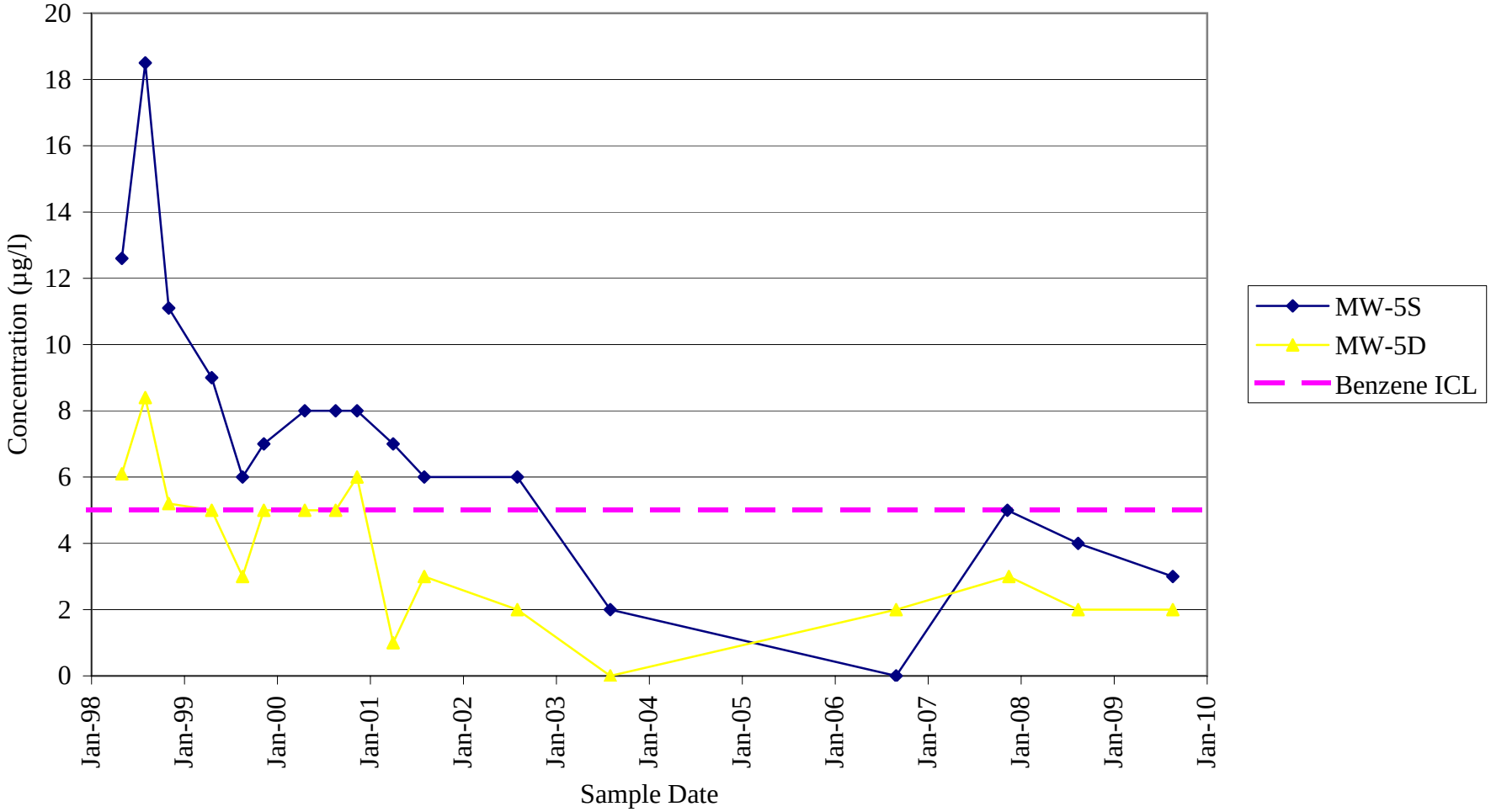
Manganese Concentrations vs. Time
Coakley Landfill, North Hampton, NH



MW-5S & MW-5D

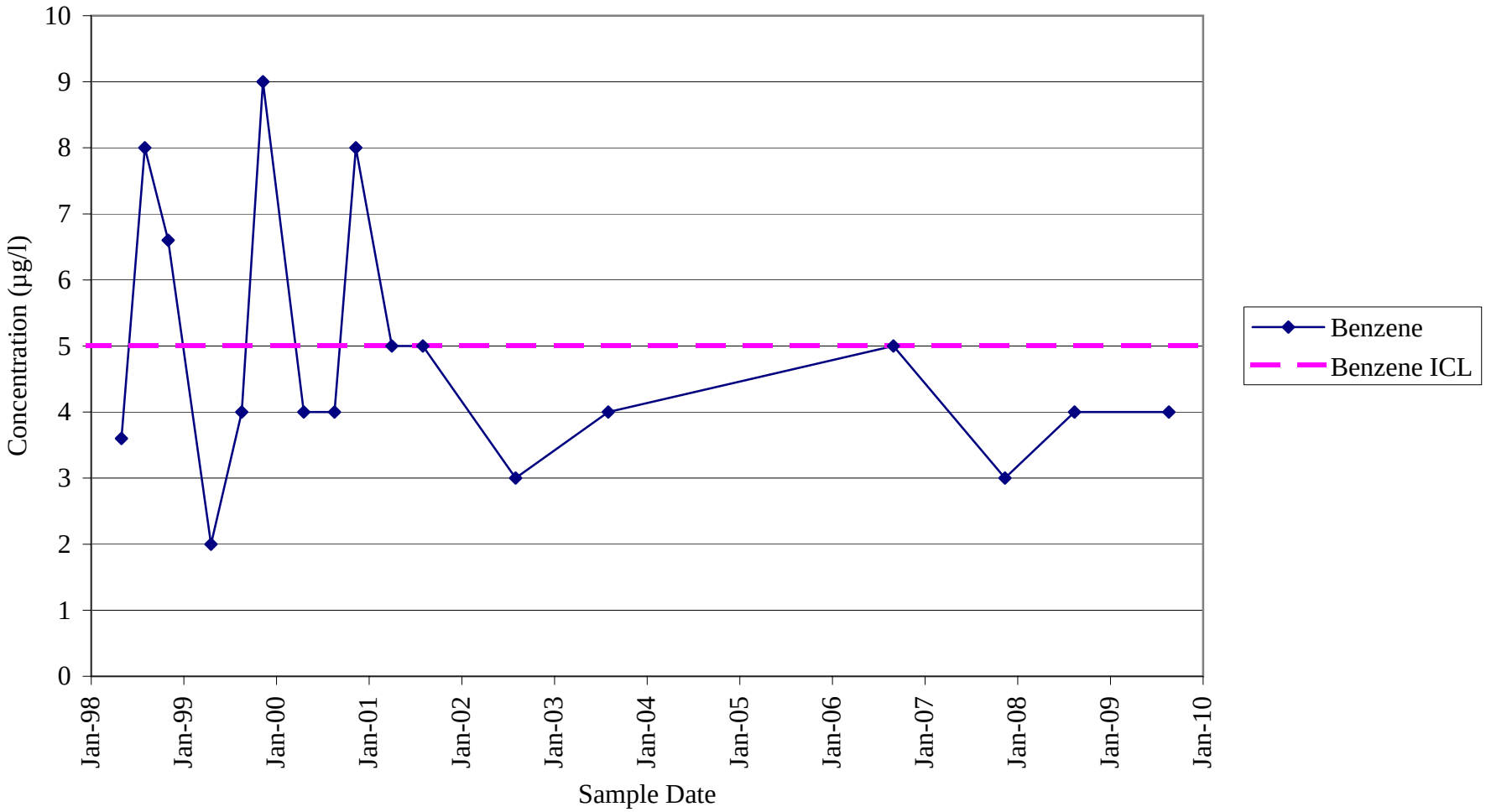
Benzene Concentrations vs. Time

Coakley Landfill, North Hampton, NH



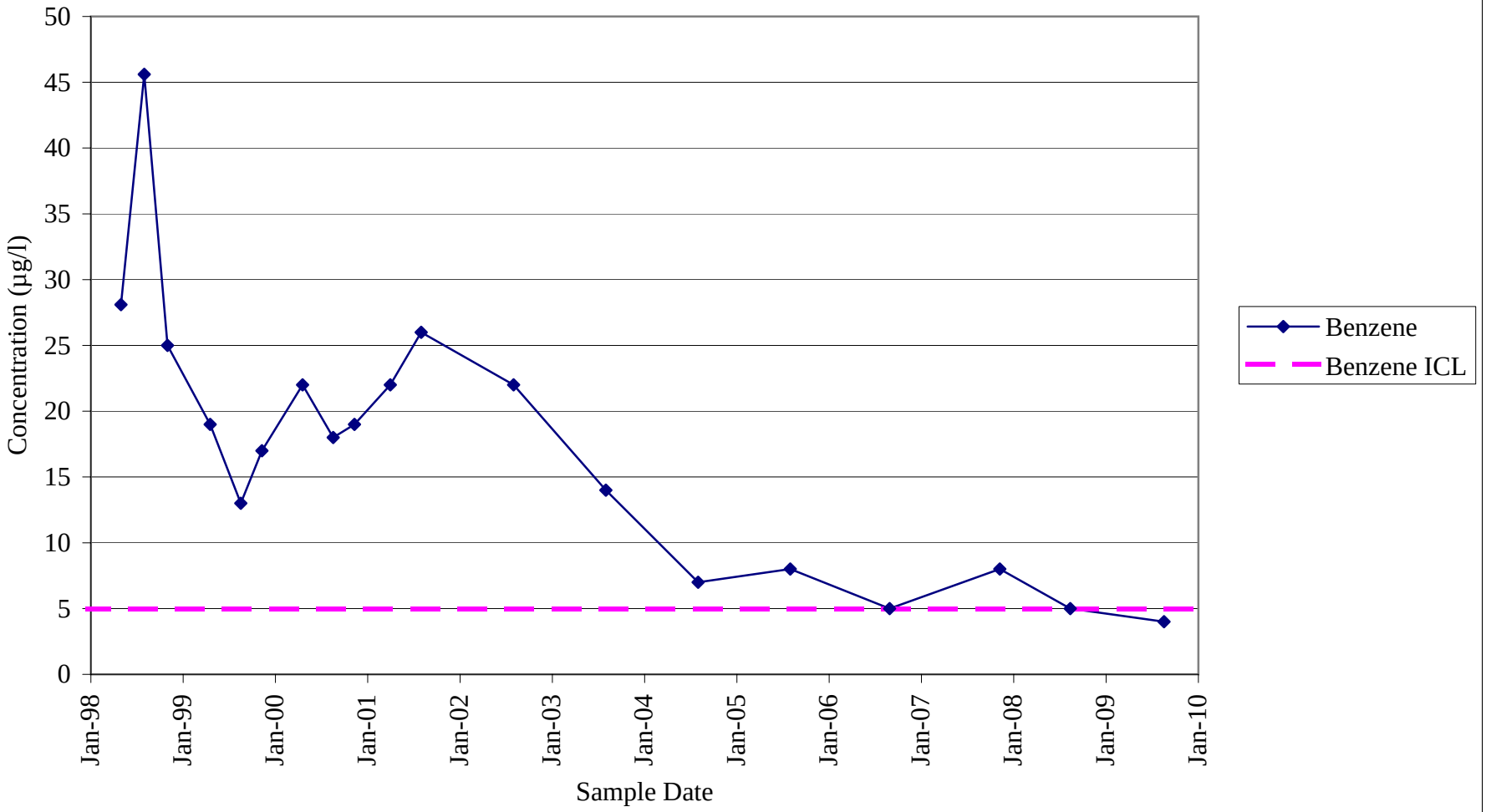
MW-8

Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



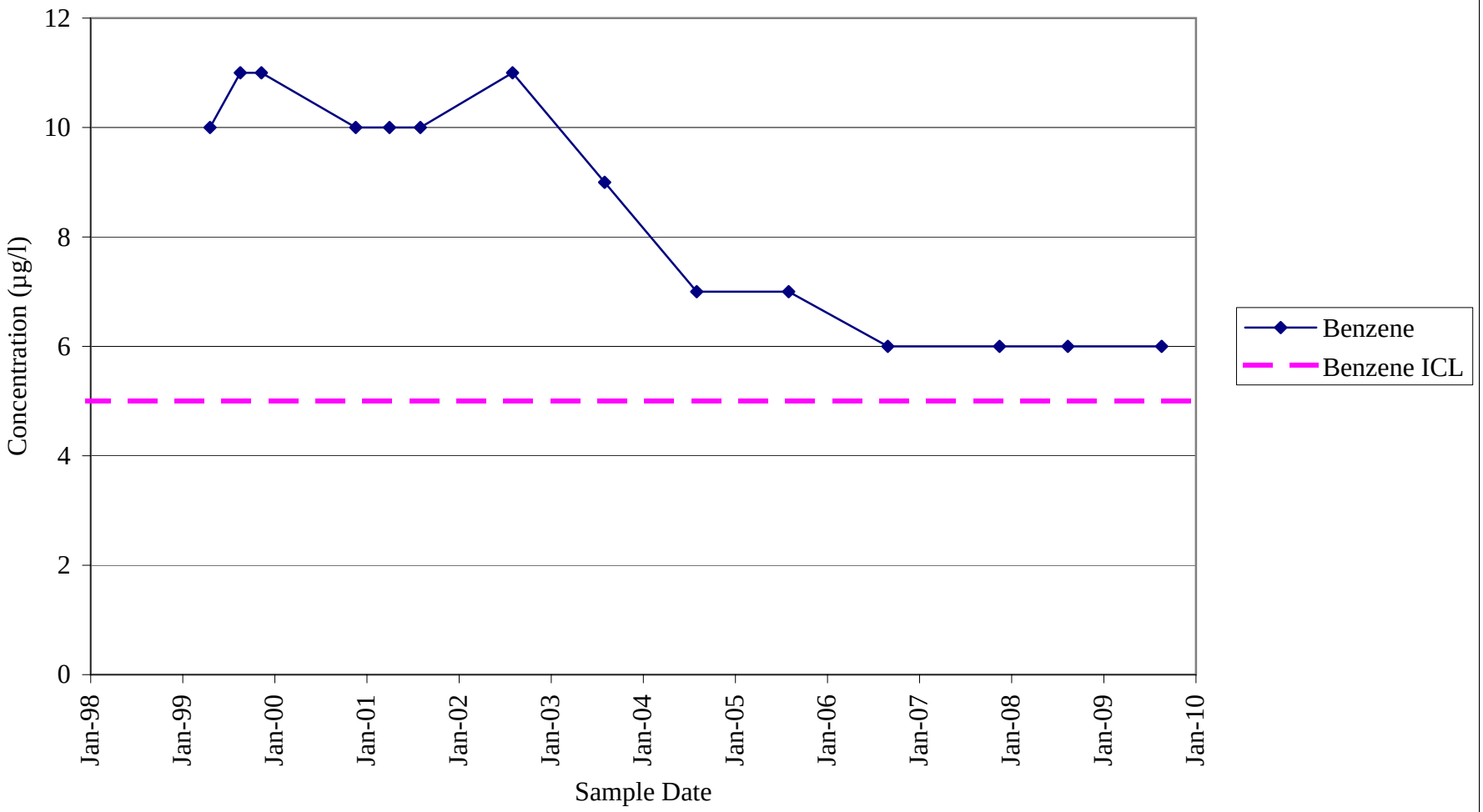
MW-11

Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



GZ-105

Benzene Concentrations vs. Time
Coakley Landfill, North Hampton, NH



SECTION 4

DATA USABILITY SUMMARY REPORT
Organics and Inorganics
USEPA REGION I

Site: Coakley L.F/M8114__ SDG #: 81984

Client: Provan & Lorber (CO) Date: October 06, 2009

Laboratory: Eastern Analytical Reviewer: L. Wright

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix
81984.01	GW-MW-9-0809	8/18/09	8/18/09	aqueous
81984.02	GW-MW-10-0809	8/18/09	8/18/09	aqueous
81984.03	GW-AE-2A-0809	8/18/09	8/18/09	aqueous
81984.04	GW-AE-2B-0809	8/18/09	8/18/09	aqueous
81984.05	GW-AE-2B-DUP-0809	8/18/09	8/18/09	aqueous
81984.06	GW-AE-4A-0809	8/18/09	8/17/09	aqueous
81984.07	GW-AE-4B-0809	8/18/09	8/17/09	aqueous
81984.08	GW-FPC-2A-0809	8/18/09	8/17/09	aqueous
81984.09	GW-FPC-2B-0809	8/18/09	8/17/09	aqueous
81984.1	GW-FPC-4B-0809	8/18/09	8/17/09	aqueous
81984.11	GW-FPC-6A-0809	8/18/09	8/17/09	aqueous
81984.12	GW-FPC-6B-0809	8/18/09	8/17/09	aqueous
81984.13	GW-FPC-7A-0809	8/18/09	8/18/09	aqueous
81984.14	GW-FPC-7B-0809	8/18/09	8/18/09	aqueous
81984.15	GW-FPC-7B-FB-0809	8/18/09	8/18/09	aqueous
81984.16	GW-FPC-9A-0809	8/18/09	8/17/09	aqueous
81984.17	GW-FPC-11A-0809	8/18/09	8/17/09	aqueous
81984.18	GW-FPC-11B-0809	8/18/09	8/17/09	aqueous
81984.19	GW-GZ-123-0809	8/18/09	8/18/09	aqueous
81984.2	GW-GZ-125-0809	8/18/09	8/18/09	aqueous
81984.21	Trip Blank	8/18/09	7/20/09	aqueous

The data package contained twenty one (21) aqueous samples which were collected on 7/20/09 and 8/16/09 to 8/18/09. The samples were analyzed for volatile, metals and wet chemistry parameters via SW-846 and USEPA Test Methods. A tier 1 data validation was done. The adherence of laboratory analytical performance to this method's Analytical Specifications was evaluated. The data package was evaluated for its completeness as defined by "Region I Tiered Organic and Inorganic Data Validation Guidelines", July 1, 1993.

Cover letter, Narrative and Data Reporting Forms (Form 1s): All were present.

Chain of Custody (COC) and Traffic Report: COC was included.

Calibration Quality Control: Calibration information was present.

Matrix Spike: Matrix spike information was present.

Duplicate Results: Duplicate results were present.

Laboratory Control Sample (LCS): LCS information was present.

Completeness: All the required information was present.

DATA USABILITY SUMMARY REPORT
Organics and Inorganics
USEPA REGION I

Site: Coakley L.F/M8114__ SDG #: 82084

Client: Provan & Lorber (CO) Date: October 06, 2009

Laboratory: Eastern Analytical Reviewer: L. Wright

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix
82084.01	GW-BP-4-0809	8/20/09	8/19/09	aqueous
82084.02	GW-MW-4-0809	8/20/09	8/20/09	aqueous
82084.03	GW-MW-5S-0809	8/20/09	8/20/09	aqueous
82084.04	GW-MW-5S-Dup-0809	8/20/09	8/20/09	aqueous
82084.05	GW-MW-5D-0809	8/20/09	8/20/09	aqueous
82084.06	GW-MW-6-0809	8/20/09	8/19/09	aqueous
82084.07	GW-MW-8-0809	8/20/09	8/19/09	aqueous
82084.08	GW-MW-11-0809	8/20/09	8/19/09	aqueous
82084.09	GW-OP-2-0809	8/20/09	8/18/09	aqueous
82084.1	GW-OP-5-0809	8/20/09	8/19/09	aqueous
82084.11	GW-AE-1A-0809	8/20/09	8/20/09	aqueous
82084.12	GW-AE-1B-0809	8/20/09	8/20/09	aqueous
82084.13	GW-AE-3A-0809	8/20/09	8/18/09	aqueous
82084.14	GW-AE-3B-0809	8/20/09	8/18/09	aqueous
82084.15	GW-FPC-5A-0809	8/20/09	8/20/09	aqueous
82084.16	GW-FPC-5B-0809	8/20/09	8/20/09	aqueous
82084.17	GW-FPC-8A-0809	8/20/09	8/19/09	aqueous
82084.18	GW-FPC-8B-0809	8/20/09	8/19/09	aqueous
82084.19	GW-GZ-105-0809	8/20/09	8/19/09	aqueous
82084.2	SW-SW-4-0809	8/20/09	8/19/09	aqueous
82084.21	SW-SW-5-0809	8/20/09	8/19/09	aqueous
82084.22	LC-L-1-0809	8/20/09	8/19/09	aqueous
82084.23	LC-L-1-Dup-0809	8/20/09	8/19/09	aqueous
82084.24	SW-SW-103-0809	8/20/09	8/19/09	aqueous
82084.25	S-SED-4-0809	8/20/09	8/19/09	soil
82084.26	S-SED-5-0809	8/20/09	8/19/09	soil
82084.27	S-SED-5-Dup-0809	8/20/09	8/19/09	soil
82084.28	Bowl Equip Blank	8/20/09	8/19/09	aqueous
82084.29	GW-MW-4-FB-0809	8/20/09	8/20/09	aqueous
82084.3	DW-R-3-0809	8/20/09	8/19/09	aqueous
82084.31	DW-R-5-0809	8/20/09	8/19/09	aqueous
82084.32	Trip Blank	8/20/09	7/20/09	aqueous
82084.33	Trip Blank	8/20/09	7/29/09	aqueous

The data package contained thirty (30) aqueous and three (3) soil samples which were collected on 7/20/09, 7/29/09 and 8/18/09 to 8/20/09. The samples were analyzed for volatile, metals and wet chemistry parameters via SW-846 and USEPA Test Methods. A tier 1 data validation was done. The adherence of laboratory analytical performance to this method's Analytical Specifications was evaluated. The data package was evaluated for its completeness as defined by "Region I Tiered Organic and Inorganic Data Validation Guidelines", July 1, 1993.

Cover letter, Narrative and Data Reporting Forms (Form 1s): All were present.

Chain of Custody (COC) and Traffic Report: COC was included.

Calibration Quality Control: Calibration information was present.

Matrix Spike: Matrix spike information was present.

Duplicate Results: Duplicate results were present.

Laboratory Control Sample (LCS): The following qualification was made due to low LCS recoveries.

Sample ID	Compound	Qualifier
82084.2 80842.21 80842.24 82084.3 82084.31 82084.32	Bromomethane carbon disulfide 2,2-dichloropropane	UJ

Completeness: All the required information was present.

ATTACHMENT A

FORM 1S AND COC

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82084

Client: **Provan & Lorber (Co)** Client Designation: **Coakley Landfill / M9081**

Sample ID:	SW-SW-4-0809	SW-SW-5-0809	LC-L-1-0809	SW-SW-103-0809	DW-R-3-0809	DW-R-5-0809	Trip Blank
Lab Sample ID:	82084.2	82084.21	82084.22	82084.24	82084.3	82084.31	82084.32
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	8/19/09	7/20/09
Date Received:	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09	8/20/09
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	8/28/09	8/28/09	8/28/09	8/28/09	8/25/09	8/28/09	8/28/09
Analyst:	BAM	BAM	BAM	BAM	BAM	BAM	BAM
Method:	524.2	524.2	524.2	524.2	524.2	524.2	524.2
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
Chloroethane	< 0.5	< 0.5	**4.4**	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Diethyl Ether	< 5	< 5	**13**	< 5	< 5	< 5	< 5
Acetone	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butyl Alcohol (TBA)	< 30	< 30	< 30	< 30	< 30	< 30	< 30
Methylene chloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ
Methyl-t-butyl ether(MTBE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl-t-butyl ether(ETBE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl ether(DIPE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-amyl methyl ether(TAME)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl acetate	< 10	< 10	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
cis-1,2-Dichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone(MEK)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrahydrofuran(THF)	< 5	< 5	**12**	< 5	< 5	< 5	< 5
Chloroform	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	< 0.5	< 0.5	**1.9**	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Toluene	< 0.5	**7.2**	< 0.5	**1.2**	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1,2-Trichloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Tetrachloroethene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromoethane(EDB)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 0.5	< 0.5	**20**	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1,2-Tetrachloroethane	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5