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Final
Round 9
Groundwater Monitoring Report
for
Goss Cove Landfill

Naval Submarine Base
New London
Groton, Connecticut

Engineering Field Activity, Northeast
Naval Facilities Engineering Command
Contract Number N62472-02-D-0810
Contract Task Order 0002

February 2005

223 pgs

FINAL
ROUND 9 GROUNDWATER MONITORING REPORT
FOR
GOSS COVE LANDFILL

NAVAL SUBMARINE BASE – NEW LONDON
GROTON CONNECTICUT

ENVIRONMENTAL OPERATION AND
MAINTENANCE CONTRACT

Submitted to:
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Environmental Branch, Code 18
Naval Facilities Engineering Command
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Contract No. N62472-02-D-0810
Contract Task Order 0002

February 2005

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1.0 INTRODUCTION

A Record of Decision (ROD) was signed in September 1999 for the soil and sediment Operable Units (OUs) at the Goss Cove Landfill site (TtNUS 1999b). Based on the ROD, a remedial action (RA) was required for the soil OU and no further action was required for the sediment OU. The selected remedy for the soil and waste/fill material within the Goss Cove Landfill consisted of the installation of an engineered control cap, establishment of institutional controls by restricting future activites at the site, performance of long-term groundwater monitoring, and completion of five year reviews. The remedy also included the replacement of a storm sewer system that serves the southern portion of NSB-NLON and Goss Cove Landfill parking lot and surrounding area with a four foot by 10 foot reinforced concrete box culvert. The overall objective of groundwater monitoring program is to evaluate the effectivenss of the cap and to confirm that contamination is not migrating through the soil, into the groundwater, and ultimately discharging to the Thames River. The first and second year of monitoring have been completed, and the evaluation of the data are presented in the *Year 1 Annual Groundwater Monitoring Report for Goss Cove Landfill Naval Submarine Base – New London, Groton, Connecticut* (TtNUS 2003) and *Year 2 Annual Groundwater Monitoring Report for Goss Cove Landfill Naval Submarine Base – New London, Groton, Connecticut* (ECC 2004), respectively.

The purpose of this groundwater monitoring report is to present the results of the ninth round of long-term monitoring. Groundwater samples were collected from 11 monitoring wells and submitted for a suite of analyses based on an evaluation of site history and previous analytical results. Samples collected and analyses performed were in accordance with the *Operation and Maintenance Manual for Installation Restoration Program Sites at Naval Submarine Base New London, Volume II – Groundwater Monitoring Plan* (GMP) (TtNUS 2002b)[1]. Because this is an interim report, the evaluation of the monitoring results is limited to a comparison of the results to the criteria idenfitied in the orginal GMP for the Goss Cove landfill (TtNUS 2001).

1.1 SITE DESCRIPTION

NSB-NLON is located in southeastern Connecticut in the towns of Ledyard and Groton (Figure 1-1). NSB-NLON encompasses approximately 687 acres on the east bank of the Thames River, approximately 6 miles north of Long Island Sound. The base is bounded to the east by Connecticut Route 12, to the south by Crystal Lake Road and to the west by the Thames River.

[1] Sample collection was modified with regard to collection of upgradient sample from monitor well 8MW10S instead of monitor well 8MW8S because of failure of the latter to recharge. This change was discussed with DEP and is documented in the *Round 1 Groundwater Monitoring Report for the Goss Cove Landfill,* submitted in May 2002 and prepared by TetraTech NUS, Inc.

The northern border is a low ridge that trends approximately east – southeast from the Thames River to Baldwin Hill. The location of the Goss Cove Landfill is shown on Figure 1-2. The Nautilus Museum and paved parking lot are constructed directly over the site of the former landfill. The Nautilus Museum is a submarine museum operated by the US Navy and is open to the public.

Land use adjacent to the Base is residential and commercial. Residential development along Military Highway, Sleepy Hollow, Long Cove Road, and Pinelock Drive borders the site to the north and extends north into the Gales Ferry section of Ledyard. Property along Route 12 to the east of the Base is open and wooded land, containing widely-spaced private home. Development is mixed commercial and residential further south on Route 12. Private residences, an automobile service station and a dry cleaner are located along the south side of Crystal Lake Road.

The Initial Assessment Study (IAS) report (NEESA, 1983) indicated that a landfill was operated at this site from 1946 to 1957. Incinerator ash and inert rubble were disposed of at the site, in what was then the northern portion of Goss Cove. It is not known if any other materials were disposed in the former landfill. It has been reported that several large compressed gas cylinders were uncovered during the excavation of a utility trench in the parking area north of the Nautilus Museum building. One of the cylinders was leaking propane, one was filled with ammonia, and the others were empty.

In a 1934 aerial photograph, the limits of Goss Cove appeared to be open water with no evidence of fill. Railroad tracks are shown at their present position between the cove and the Thames River. In 1951 aerial photographs, the fill extended south to approximately the location of an access driveway to the museum. In 1965 aerial photographs show the landfill extending to the present limit of encroachment on Goss Cove. Aerial photographs from 1965, 1970, 1975, and 1980 show cars parked on the landfill surface. In 1986 photographs, the Nautilus Museum was present on the southern limits of the landfill and a paved parking area extended over the remaining limit of the landfill to the north. Construction of the Nautilus Museum was completed in 1985. Construction of an addition to the Nautilus Museum was initiated in 1999 and completed in the summer of 2000. No major changes have been made to the area since 2000.

1.2 REPORT ORGANIZATION

This report has been prepared to address the requirement for long-term groundwater monitoring at the Goss Cove Landfill. Section 2.0 describes the Round 9 field activities from March 2004 and Section 3.0 presents the analytical results from the Round 9 sampling effort.

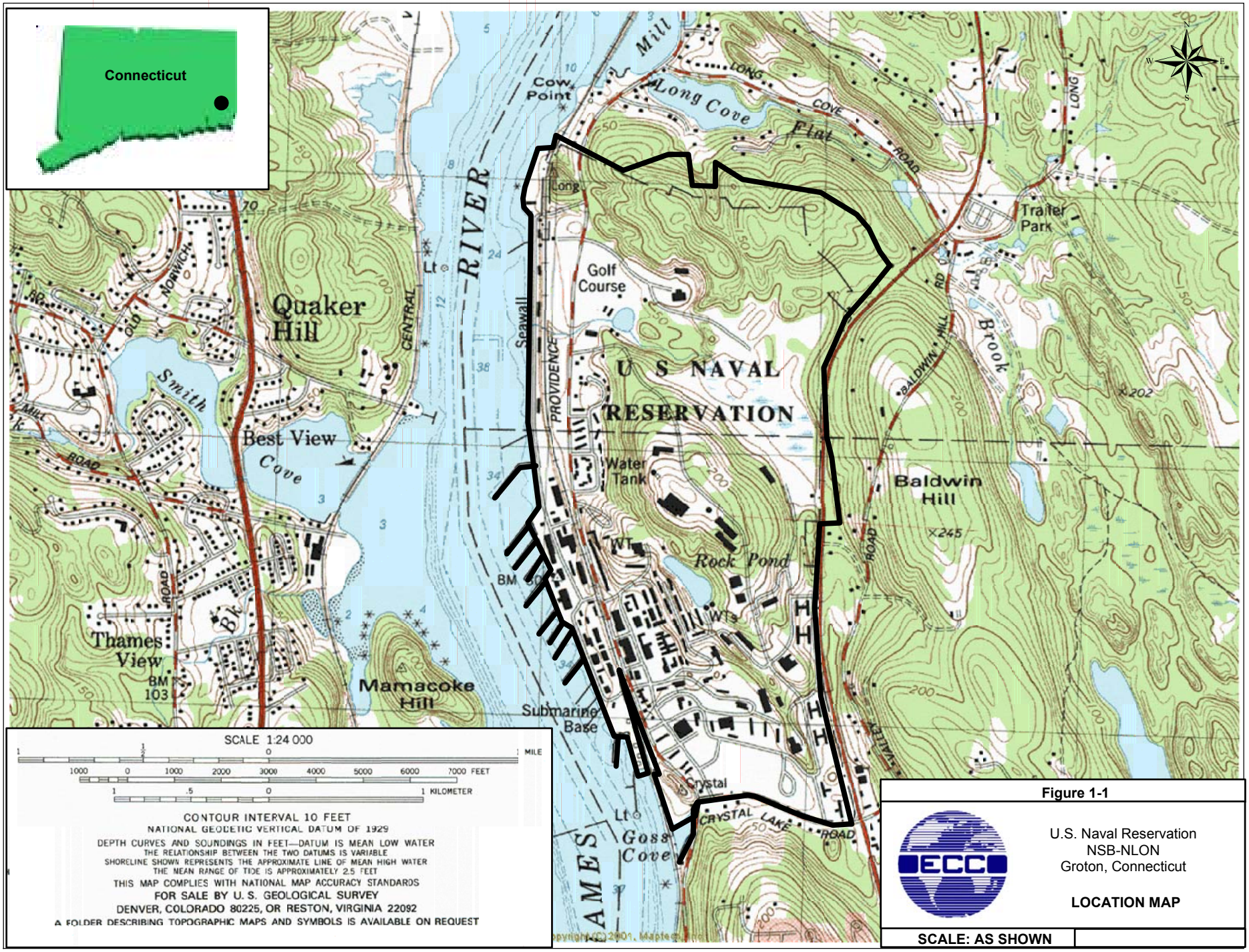


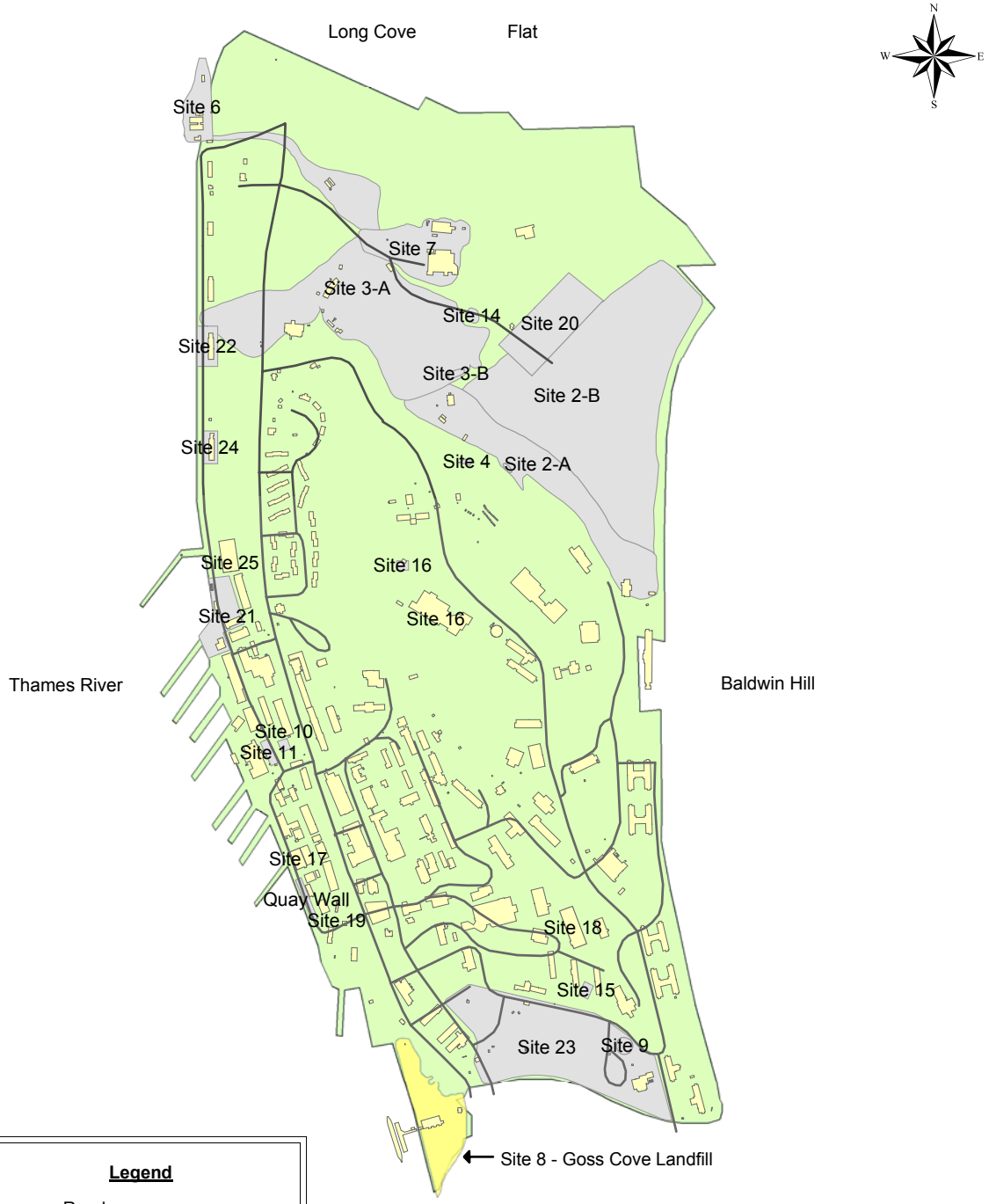
Figure 1-1

U.S. Naval Reservation
NSB-NLON
Groton, Connecticut

LOCATION MAP

SCALE: AS SHOWN

H:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\GC Round 9\Maps\Figure 1-1 (Location Map)



Legend

- Roads
- Buildings
- Naval Base Area
- Site 8 - Goss Cove Landfill
- Other Study Area Locations

0 415 830 1,660 2,490 3,320 Feet

Figure 1-2

Goss Cove Landfill
NSB-NLON
Groton, Connecticut

SITE MAP

SCALE: AS SHOWN

H:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\GC Round 9\Maps\Figure 1-2 (Site Map)

2.0 FIELD INVESTIGATION ACTIVITIES

Field investigation activities performed as part of the ninth round of groundwater monitoring at Goss Cove Landfill include the following:

- Two rounds of water level measurements at 11 wells and one staff gauge. Water levels were measured at both low and high tide.
- Collection of groundwater samples from 11 monitoring wells.

Round 9 field activities took place between 08 - 11 March 2004. Figure 2-1 shows the locations monitored during this event.

2.1 MONITORING WELL INSPECTION

Prior to water level measurements, all 11 monitoring wells were inspected. The groundwater wells were in good condition and well inspection sheets are included in Appendix A. Standing water was noted around monitoring well HNUS23 but was removed prior to sampling. The protective cases and the surrounding concrete and asphalt of monitoring wells 8MW-2D and 8MW-2S were severely damaged during winter plowing activities. The well cap of 8MW-2D was still able to be secured even though pieces of the metal were torn off; however, the seal of the road box cap was most like compromised. The asphalt around the concrete pad of 8MW-2D was beginning to break apart. ECC personnel were unable to secure the well cap of 8MW-2S; the screws were ripped off the casing and the bolts were bent inside the cap. Cones were places around the well by base personnel and the well seal was secured to the 2-in PVC casing; therefore the well was sampled during Round 9. Inspections will continue in upcoming sampling events.

2.2 WATER LEVEL MEASUREMENT

Prior to groundwater purging and sampling, water levels were measured at 11 monitoring wells and one staff gauge during low and high tide. Low tide water levels were measured 08 March 2004, and high tide water levels were measured on 10 March 2004. Groundwater measurements are presented in Table 2-1. Figures 2-2 and 2-3 illustrate the potentiometric surface map of shallow groundwater at the Goss Cove Landfill during low and high tides. Groundwater level measurement sheets are provided in Appendix B.

2.3 GROUNDWATER SAMPLING

A total of 11 monitoring wells were sampled during this event; 8MW1, 8MW2D, 8MW2S, 8MW3, 8MW5S, 8MW6D, 8MW6S, 8MW7S, 8MW8D, 8MW10S, and HNUS23. All monitoring wells were

sampled in accordance with the *Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells* (EPA 1996). Sampling was done using bladder and peristaltic pumps, with dedicated tubing. In order to collect representative samples of site groundwater, tidally influenced wells (8MW1, 8MW2D, 8MW2S, 8MW3, 8MW5S, 8MW6D, and 8MW8D) were sampled at low tide. Optimum sample times for each tidally influenced well were determined by using the Connecticut State pier tide predicted tables in order to find out the times of high and low tide at the Smith Cove Entrance. These numbers were then added to the well specific lag times presented in the GMP (TtNUS, 2002b).

Prior to purging, the initial static water level was measured in the well using a water-level indicator. During purging, the water level was measured every 5 to 10 minutes. The pumping rate was adjusted to prevent drawdown from exceeding 0.3 ft, during purging.

During purging, water quality parameters of pH, turbidity, specific conductance (SpC), temperature, oxidation-reduction potential (ORP) and dissolved oxygen (DO) were measured and recorded every 5 to 10 minutes using a water quality meter and flow-through cell until stabilization and the minimum purge volume (equal to the stabilized drawdown volume plus the tubing volume) was removed. A summary of groundwater water quality data for Round 9 is provided in Table 2-2. Stabilization of the above parameters was generally defined as follows:

- pH $\pm$ 0.2 standard units
- turbidity $\pm$ 10 % for values greater than 1 nephelometric turbidity unit (NTU)
- SpC $\pm$ 10 %
- temperature $\pm$ 10 %
- ORP $\pm$ 10 (mV)
- DO $\pm$ 10 %

Instruments used to monitor stabilization parameters were calibrated daily before sampling and instrument readings were checked at the end of the day against the calibration standards. It should be noted that salinity was not recorded on the calibration logs, this reading, measured with the conductivity probe, is reflected in the record of specific conductance.

Following purging, the well tubing was removed from the flow through cell and samples were collected directly from the discharge end of the tubing. All sample containers were filled by allowing the discharge to flow gently down the inside of the container with minimal turbulence. For filtered inorganic samples, a disposable in-line 0.45-micron filter was used. Field tests for iron (Fe^{+2}) were completed using a HACH model 1R-18C Cat. # 26672-00 colorimeter kit with a range of 0-10 mg/L.

The results of these measurements are presented in Table 2-2. Equipment calibration logs are provided in Appendix C. Copies of the groundwater sample forms and Chain of Custody Records are provided in Appendices D and E, respectively.

Groundwater samples were sent to the project laboratory (Alpha Analytical Labs) for analysis of select target compound list (TCL) volatile organic compounds (VOCs),TCL semivolatile organic compounds (SVOCs), TCL polynuclear aromatic hydrocarbons (PAHs), TCL pesticides / polychlorinated biphenyls (PCBs), target analyte list (TAL) metals (total and dissolved), and water chemistry parameters (sulfate, nitrate, and hardness) (TtNUS 2002b). Data validation memos and laboratory datasheets are provided in Appendix E. Analytical results for the contaminants of potential concern (COPCs) are discussed in Section 3.0.

2.4 DECONTAMINATION AND INVESTIGATION – DERIVED WASTE

All water quality meters and water level meters were decontaminated by washing the instruments with Alkinox® and rinsing with deionized water prior to and after use. Liquid investigation derived waste (IDW) from sampling of the groundwater at Goss Cove was contained in 55 gallon drums. The drummed water was sampled for waste classification and transported by United Industrial Services of Meriden, Connecticut, for appropriate off-site disposal on 30 April 2004. The waste manifest and disposal chain of custody in included as Appendix F.

TABLE 2-1
GROUNDWATER MEASUREMENTS AND ELEVATIONS
ROUND 9 - QUARTERLY GROUNDWATER MONITORING REPORT
GOSS COVE LANDFILL, NSB-NLON, GROTON, CONNECTICUT

March 08, 2004 LOW TIDE = 16:39						March 10, 2004 HIGH TIDE = 11:39					
Location	Relative Well Screen Depth	Tidal (Y/N)	Measuring Point Elevation (ft NAVD 88)	Depth to Water(1) (feet)	Groundwater Elevation (ft NAVD 88)	Location	Relative Well Screen Depth	Tidal (Y/N)	Measuring Point Elevation (ft NAVD 88)	Depth to Water(1) (feet)	Groundwater Elevation (ft NAVD 88)
8MW1	S	Y	11.97	13.21	-1.24	8MW1	S	Y	11.97	11.54	0.43
8MW2D	D	Y	9.93	10.09	-0.16	8MW2D	D	Y	9.93	9.16	0.77
8MW2S	S	Y	9.63	9.93	-0.30	8MW2S	S	Y	9.63	9.58	0.05
8MW3	S	Y	8.27	8.39	-0.12	8MW3	S	Y	8.27	8.27	0
8MW5S	S	Y	12.32	13.04	-0.72	8MW5S	S	Y	12.32	11.28	1.04
8MW6D	D	Y	7.45	7.11	0.34	8MW6D	D	Y	7.45	6.34	1.11
8MW6S	S	N	8.41	8.24	0.17	8MW6S	S	N	8.41	8.25	0.16
8MW7S	S	N	9.19	8.84	0.35	8MW7S	S	N	9.19	8.91	0.28
8MW8D	B	Y	17.20	16.78	0.42	8MW8D	D	Y	17.20	16.17	1.03
8MW10S	S	N	19.24	16.29	2.95	8MW10S	S	N	19.24	16.06	3.18
8SG1**	NA	Y	8.37	9.09	-0.72	8SG1	NA	Y	8.37	7.85	0.52
HNUS 23	S	N	18.11	7.87	10.24	HNUS 23	S	N	18.11	7.93	10.18

ft = feet

NAVD 88 = North American Vertical Datum 1988

(1) Depth to water is the distance in feet from the measuring point (top of riser pipe) to the water.

B = bedrock groundwater

D = deep unconfined groundwater

S = shallow unconfined groundwater

N = no

NA = not applicable

Y = yes

** = staff gauge is a tape down reading.

TABLE 2-2
WATER QUALITY DATA
ROUND 9 - QUARTERLY GROUNDWATER MONITORING REPORT
GOSS COVE LANDFILL, NSB-NLON, GROTON, CONNECTICUT

WELL	DATE	TIME (24hr)	Cumulative Volume Purged (liters)	Temp (ºC)	pH (std)	Spec. Cond. (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Salinity (ppt)	Iron [Fe^{+2}]* (mg/L)	Purge Rate (ml/min)
8MW1	03/11/04	0709	5.7	6.44	7.79	19.78	128.7	1.19	0.0	11.7	0.0	100
8MW2D	03/08/04	1638	7.15	10.77	8.19	21.84	-278.8	0.14	11.00	13.14	2.2	100
8MW2S	03/10/04	0701	7.2	10.61	8.66	1.747	-201.6	1.32	0.0	0.89	0.0	200
8MW3	03/10/04	0703	5.7	9.20	8.93	1.935	-248.8	0.07	4.51	0.99	0.0	100
8MW5S	03/08/04	1639	6.26	5.80	7.12	17.85	74.3	6.71	1.0	10.45	0.08	100
8MW6D	03/08/04	1643	6.1	12.04	7.03	41.48	-19.3	0.34	49	26.55	1.2	100
8MW6S	03/10/04	1447	4.6	9.32	8.01	1.896	-186.5	0.15	0.0	0.97	1.4	100
8MW7S	03/10/04	0923	7.95	9.02	7.62	0.663	-172.1	0.22	9.44	0.32	2.6	150
8MW8D	03/11/04	0706	8.4	11.68	6.36	0.270	134.1	6.52	1.8	0.13	0.0	150
8MW10S	03/10/04	10.11	6.9	9.89	5.90	0.335	207.4	8.43	0.0	0.16	0.0	150
HNUS 23	03/10/04	1430	4.84	8.97	6.14	0.420	170.8	1.51	4	0.20	0.0	115

ºC = degrees Celcius
DO = dissolved oxygen
mg/L = milligrams per liter
ml/min = milliliters per minute
mS/cm = millisiemens per centimeter
mV = millivolts
* Fe^{+2} measured using a Hach field test kit

NR = not recorded
NTU = nephelometric turbidity units
ORP = oxidation-reduction potential
ppt = parts per thousand
Spec. Cond. = specific conductivity
std = standard units
Temp = temperature

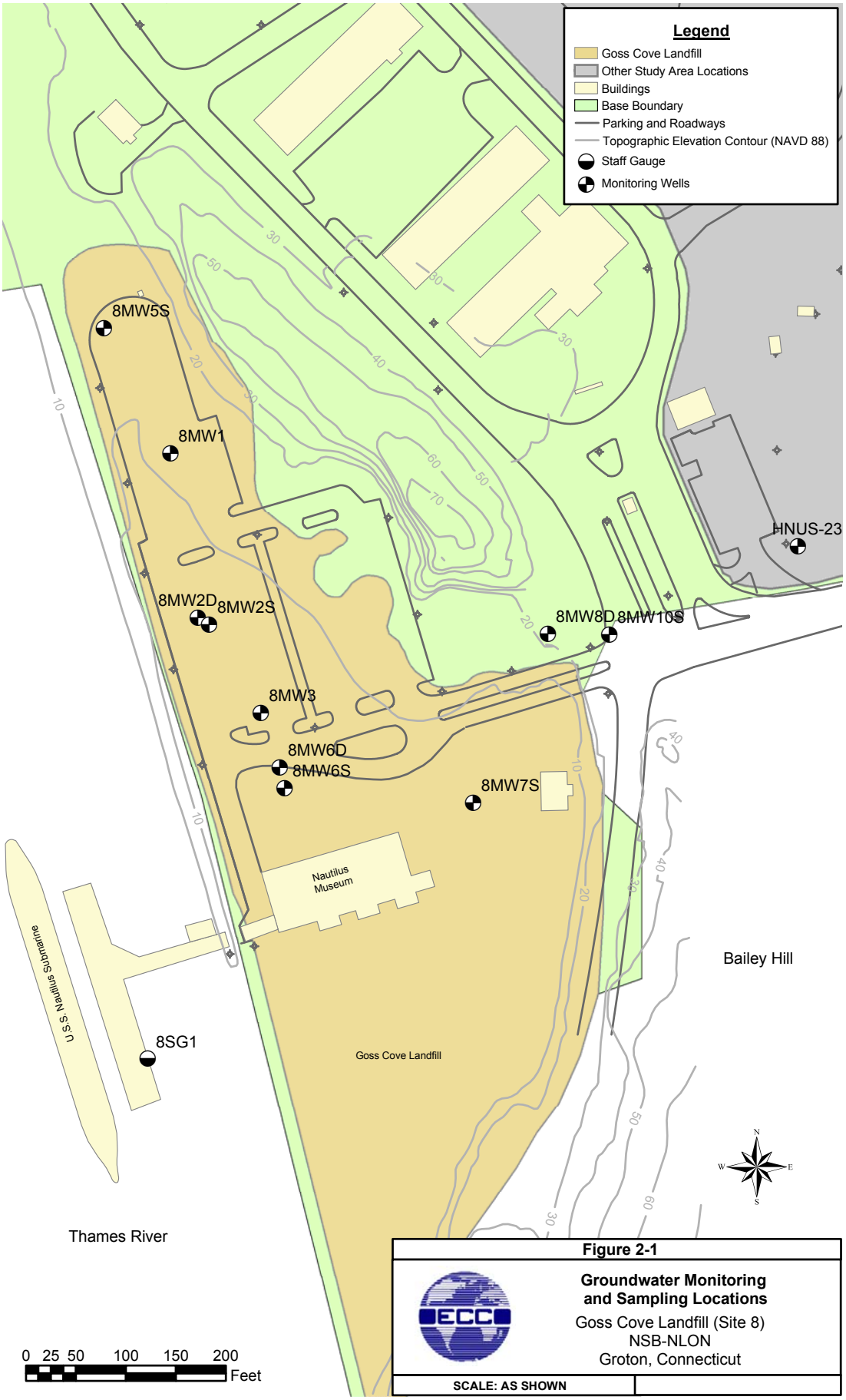


Figure 2-1

Groundwater Monitoring and Sampling Locations

Goss Cove Landfill (Site 8)
NSB-NLON
Groton, Connecticut

SCALE: AS SHOWN

H:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\GC Round 9\Maps\Figure 2-1 (GW mon. and Samp. Loc.)

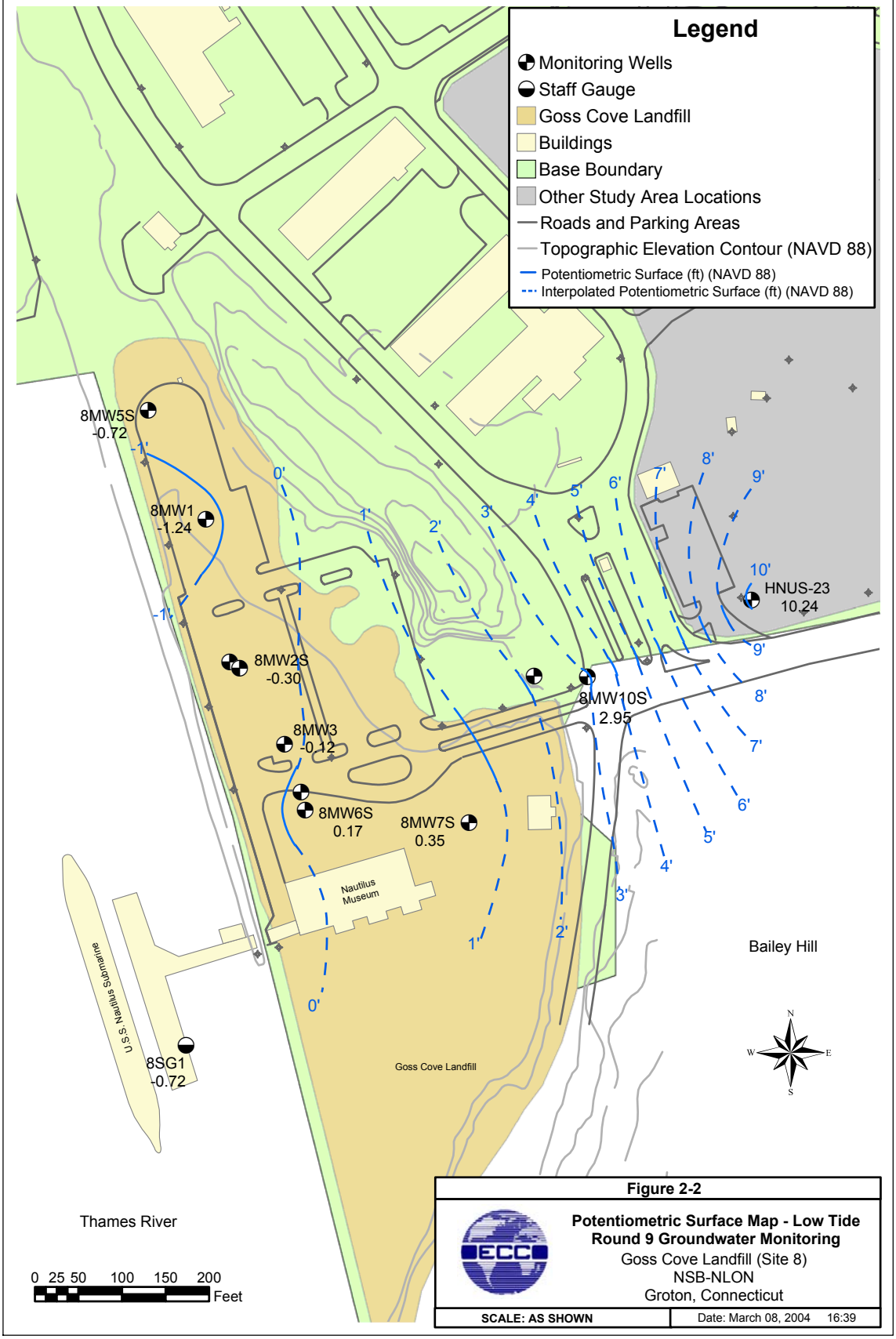


Figure 2-2

Potentiometric Surface Map - Low Tide
Round 9 Groundwater Monitoring
Goss Cove Landfill (Site 8)
NSB-NLON
Groton, Connecticut

SCALE: AS SHOWN | Date: March 08, 2004 16:39

H:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\GC Round 9\Maps\Figure 2-2 (Potentiometric Surface Map - Low Tide)

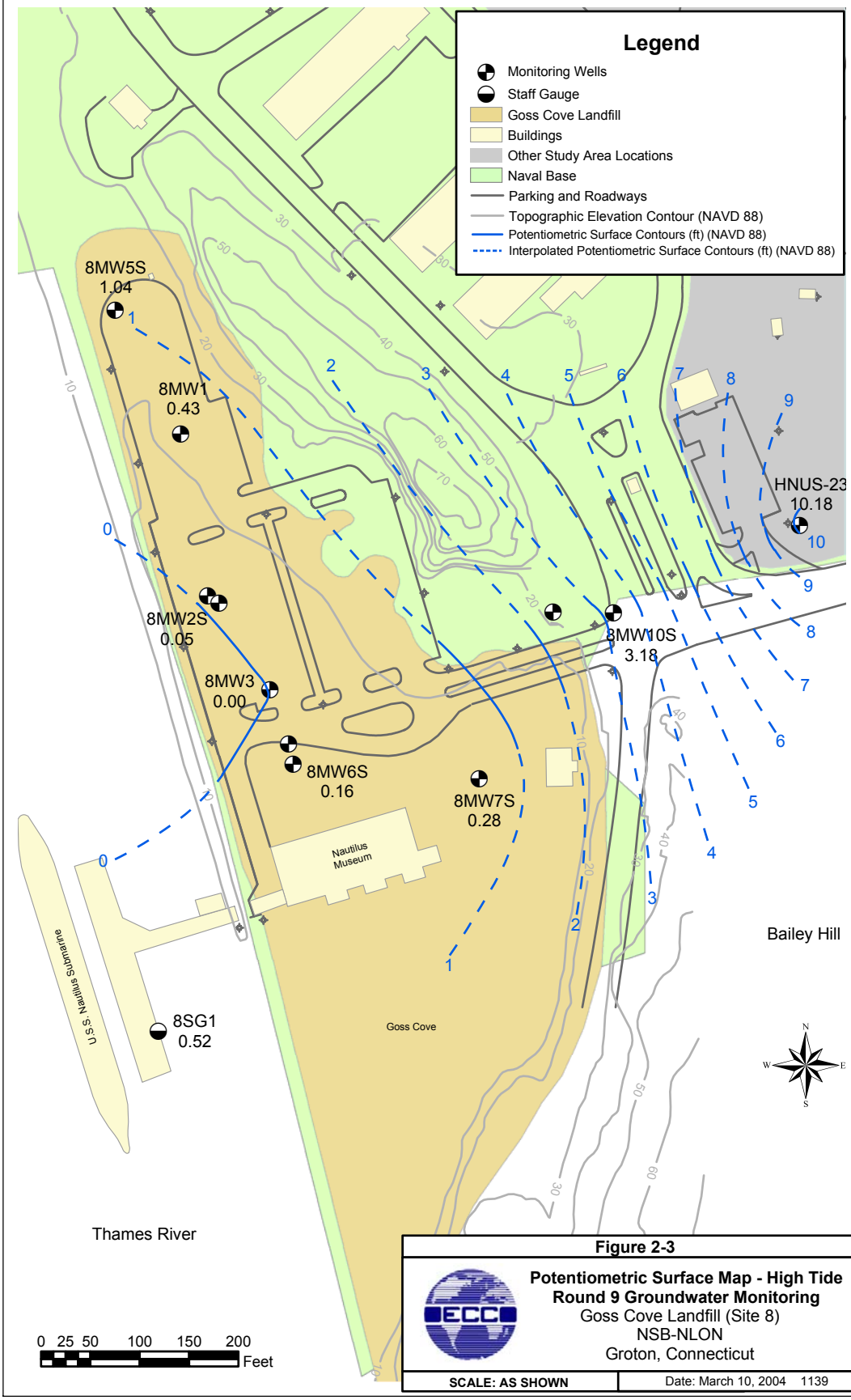


Figure 2-3

Potentiometric Surface Map - High Tide
Round 9 Groundwater Monitoring
Goss Cove Landfill (Site 8)
NSB-NLON
Groton, Connecticut

SCALE: AS SHOWN | Date: March 10, 2004 1139

vH:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\GC Round 9\Maps\Figure 2-3 (Potentiometric Surface Map - High Tide)

3.0 MONITORING RESULTS

The groundwater samples collected from 11 monitoring wells were analyzed for selected TCL VOCs, SVOCs, PAHs, pesticides, PCBs, TAL metals (total and dissolved), nitrate, sulfate and hardness. In addition iron (Fe^{+2}) was analyzed using field test kits. Monitoring focused on the following organic and inorganic chemicals of potential concern (COPCs), as identified in the GMP (TtNUS 2002b).

- Methylene Chloride
- Tetrachloroethene
- Total Xylenes
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Bis(2-ethylhexyl)phthalate
- Carbazole
- Chrysene
- Dibenzo(a,h)anthracene
- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Phenanthrene
- Pyrene
- 4,4-DDD
- 4.4-DDE
- 4-4-DDT
- Aldrin
- Aroclor-1248
- Aroclor-1254
- Aroclor-1260
- Dieldrin
- Heptachlor
- Antimony
- Arsenic
- Beryllium
- Cadmium
- Copper
- Lead
- Mercury
- Nickel
- Vanadium
- Zinc

A complete summary of analytical results can be found in Appendix E. The Round 9 analytical results for the COPCs are summarized on Table 3-1 and compared to primary and secondary groundwater criterion set forth in the the Groundwater Monitoring Plan for the Goss Cove landfill prepared by TtNUS in 2001. Modified criteria are proposed in the pending Operation and Maintenance Manual currently under preparation by TtNUS. Results for this ninth round as well as the rest of the rounds scheduled during the third year of sampling will be compared to updated criteria in the Annual Report. The inorganic results are also compared to NSB-NLON background groundwater concentrations established in the Basewide Groundwater OU RI (TtNUS, January 2002a). Chemicals detected at levels above the primary or secondary monitoring criteria, or metals detected at levels above background concentrations are noted by shading in Table 3-1. Figure 3-1 shows the chemicals detected in groundwater samples that exceeded the criteria. The results of this comparison can be summarized as follows**:**

- **Methylene Chloride** was detected in monitoring well 8MW10S but the concentration did not exceed the primary or secondary monitoring criterion.

- **Tetrachloroethene (PCE)** was detected in both monitoring well 8MW8D and its corresponding field duplicate at a concentration of 3200 micrograms per liter (µg/L). It was also detected in well 8MW10S at a concentration of 490 µg/L. These results exceed the primary monitoring criterion of 88 µg/L and the secondary monitoring criterion of 8.85 µg/L for PCE. PCE was also detected in monitoring well 8MW2D but the concentration did not exceed either the primary or secondary monitoring criteria.

- **Total xylenes** were detected in monitoring wells 8MW2S, 8MW3, 8MW6D, 8MW6S, 8MW7S, and the field duplicate for 8MW7S but concentrations did not exceed the primary monitoring criteria of 50,000 µg/L.

- **Benzo(a)Anthracene** was detected at concentrations of 0.17 J[2] µg/L, 0.12 J µg/L, and 0.07 J µg/L in monitoring wells 8MW2S, 8MW3, and 8MW6S, respectively. These values were below the primary monitoring criterion of 0.3 µg/L but exceeded the secondary monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound.

- **Benzo(a)Pyrene** was detected at a concentration of 0.06 J µg/L in monitoring well 8MW3. This value was below the primary monitoring criterion of 0.3 µg/L but exceeded the secondary monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound.

- **Benzo(b)Fluoranthene** was detected at concentrations of 0.078 J µg/L and 0.084 J µg/L in monitoring wells 8MW2S and 8MW3, respectively. These values were below the primary monitoring criterion of 0.3 µg/L but exceeded the secondary monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound.

- **Benzo(k)Fluoranthene** was detected at concentrations of 0.055 J µg/L and 0.084 J µg/L in monitoring wells 8MW2S and 8MW3, respectively. These values were below the primary monitoring criterion of 0.3 µg/L but exceeded the secondary monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound.

- **Carbazole** was detected in monitoring wells 8MW2S and 8MW3 but concentrations did not exceed the primary monitoring criterion.

- **Chrysene** was detected in monitoring wells 8MW2S, 8MW3, 8MW6S, and 8MW7S at concentrations of 0.17 J µg/L, 0.15 J µg/L, 0.065 J µg/L, and 0.05 J µg/L, respectively. These values were below the primary monitoring criterion of 0.3 µg/L but exceeded the secondary

[2] The letter "J" following concentration indicates that the values was estimated by the laboratory.

monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound; however, the laboratory minimum dectection level (MDL) of 0.024 µg/L was below the secondary criterion.

- **Fluoranthene** was detected in monitoring wells 8MW2D, 8MW2S, 8MW3, 8MW6D, 8MW6S, 8MW7S, and the field duplicate of 8MW7S but the concentrations did not exceed either the primary or secondary monitoring criteria.
- **Phenanthrene** was detected in monitoring wells 8MW2D, 8MW2S, 8MW3, 8MW7S, and the 8MW7S field duplicate at concentrations of 0.97 µg/L, 3.6 µg/L, 7.4 µg/L, 0.57 µg/L and 0.58 µg/L, respectively. These results exceeded the primary monitoring criterion of 0.3 µg/L and the secondary monitoring criterion of 0.031 µg/L. The reporting limit from the laboratory (0.2 µg/L) also exceeded the secondary monitoring criterion for this compound; however, the MDL was the same concentration as the secondary criterion.
- **Pyrene** was detected in monitoring wells 8MW2D, 8MW2S, 8MW3, 8MW6D, 8MW6S, 8MW7S, and the 8MW7S field duplicate but the results did not exceed either the primary or secondary monitoring criteria.
- **Benzo(g,h,i)Perylene**, **Bis(2-ethylhexyl)phthalate**, **Dibenzo(a,h)Anthracene** and **Indeno(1,2,3-cd)Pyrene** were not detected in any of the samples. For all of these compounds the reporting limits exceeded the secondary monitoring criterions; however, the MDLs for each compound were below the respective secondary monitoring concentration.
- There were no pesticide nor PCB detections in any of the Round 9 samples. The reporting limits for the pesticide samples exceeded the respective secondary monitoring concentrations.
- **Total antimony** was detected in monitoring wells 8MW1, 8MW2S, 8MW3, 8MW5S, 8MW6D, and 8MW6S at concentrations below the primary and secondary monitoring criertia and below the background concentration.
- **Dissolved antimony** was detected in monitoring wells 8MW1, 8MW2S, 8MW3, 8MW5S, and 8MW6S at concentrations below the primary and secondary monitoring criertia and below the background concentrations.
- **Total arsenic** was detected at concentrations above the primary (4 µg/L), secondary (0.14 µg/L), and background (1.92 µg/L) concentrations in monitoring wells 8MW2D (26.5 J µg/L) and 8MW6D (15.4 J µg/L). Concentrations above the both the secondary criterion and the background concentrations were detected in wells 8MW1 (2.9 J µg/L), 8MW5S (2 J µg/L), and 8MW6S (3.7 J µg/L). Detections in wells 8MW2S, 8MW3, 8MW7S, the field duplicate for 8MW7S, and HNUS23 at concentrations of 0.82 J µg/L, 0.87 J µg/L, 1.4 J µg/L, 1.2 J µg/L,

and 0.46 J µg/L, respectively, were above the secondary monitoring criteria only. The laboratory reporting limit (1 µg/L) exceeded the secondary monitoring criterion of 0.14 µg/L.

- **Dissolved arsenic** was detected at concentrations above the primary and secondary criteria and the background concentration (2.55 µg/L for dissolved arsenic) in monitoring wells 8MW2D (25.8 J µg/L) and 8MW6D (12.9 J µg/L). A concentration above both the secondary criterion and the background concentration was detected in well 8MW6S (3.9 J µg/L). Detections in wells 8MW1, 8MW2S, 8MW3, 8MW5S, 8MW7S, and the field duplicate for 8MW7S at concentrations of 1.7 J µg/L, 1.1 J µg/L, 0.82 J µg/L, 2.5 J µg/L, 0.87 J µg/L and 1.2 J µg/L, respectively, were above the secondary monitoring criteria only. The laboratory reporting limit (1 µg/L) exceeded the secondary monitoring criterion of 0.14 µg/L.
- **Total cadmium** was detected in monitioring well 8MW5S but the concentration was below all monitoring criteria.
- **Total copper** was detected in monitoring wells 8MW1, 8MW3, 8MW5S, 8MW6D, 8MW6S, 8MW7S and HNUS23 at concentrations of 12.2 J µg/L, 5.5 J µg/L, 20.1 J µg/L, 16.2 J µg/L, 2.91 J µg/L, 4.29 J µg/L and 2.52 J µg/L, respectively. The dectections were above the secondary monitoring criteria of 2.4 µg/L. The laboratory reporting limit (5 µg/L) exceeded the secondary monitoring criterion; however, the MDL (1.72 µg/L) was below the secondary criterion.
- **Dissolved copper** was detected at concentrations above the secondary monitoring criterion in monitoring wells 8MW1 (7.6 µg/L) and 8MW3 (5.1 µg/L). The laboratory reporting limit of 5 µg/L also exceeded the secondary monitoring criterion; however, the MDL of 1.72 µg/L was below the secondary criterion.
- **Total lead** was detected in monitoring wells 8MW2D at a concentration of 13.2 µg/L which exceeded the primary monitoroing criteria of 13 µg/L, secondary monitoring criteria of 8.1 µg/L and the background concentration of 6.63 µg/L. Well 8MW6D had a concentration of 7.1 µg/L which also exceeded the background concentration. Monitoring wells 8MW1, 8MW2S, 8MW3, 8MW5S, 8MW6S, 8MW7S (and field duplicate), 8MW8D, and HNUS23 had detect concentrations that were below the primary, secondary, and background concentrations.
- **Dissolved lead** was detected in monitoring wells 8MW1, 8MW2D, 8MW2S, 8MW3, 8MW5S, 8MW6D, 8MW6S, 8MW8D, 8MW10, and HNUS23 but concentrations did not exceed any of the monitoring or background concentrations.
- **Total nickel** was detected in well 8MW6D at a concentration of 10 µg/L which exceeded the secondary criterion of 8.2 µg/L. There were also detections in all the other monitoring wells, with the exception of well 8MW8S and its corresponding field duplicate, but the concentrations of the other wells were below all monitoring and background criteria.

- **Dissolved nickel** was detected in all the monitoring wells at concentrations below the primary criterion, secondary criterion, and background concentration.
- **Total vanadium** was detected in monitoring wells 8MW2S, 8MW5S, 8MW6D, and HNUS23 but the concentrations were below the background concentration of 10.2 µg/L.
- **Dissolved vanadium** was detected in monitoring wells 8MW3, 8MW5S, 8MW6D, 8MW6S, 8MW8D (and its corresponding field duplicate), 8MW10S, and HNUS23 but concentrations did not exceed the background concentration of 9.9 µg/L..
- **Total zinc** was detected in monitoring well 8MW6D at a concentration of 253.7 µg/L which exceeded the primary (123 µg/L), secondary (81 µg/L), and background (131 µg/L) criterion. There were detections in wells 8MW1, 8MW2S, 8MW3, 8MW5S, 8MW6S, 8MW7S, the field duplicate for 8MW8D, 8MW10S and HNUS23 but the concentrations did not exceed the background concentration or the primary and secondary monitoring criteria.
- **Dissolved zinc** was detected in monitoring well 8MW6D at a concentration of 91.1 µg/L which exceeded the secondary monitoring criterion. There were also detections in wells 8MW1, 8MW5S, and 8MW10S but the concentrations did not exceed the background concentration or the primary and secondary monitoring criteria.
- **Beryllium (total and dissolved), dissolved cadmium, and mercury (total and dissolved)** were not detected in any samples. The reporting limits for beryllium (1 µg/L) and mercury (0.2 µg/L) were above the secondary monitoring criteria, 0.13 µg/L and 0.025 µg/L, respectively. However, the MDL of mercury, 0.012 µg/L, was below its secondary monitoring criteria.
- Results for the Fe^{+2} field tests can be found on Table 2-2.
- Results for sulfate, nitrate, and hardness are presented in the data summary table located in Appendix E. A summary of this data is not presented in Table 3-1 because there are no monitoring criteria for the above mentioned parameters.

As discussed in Section 1.0 the evaluation of this data is limited to the comparison to the criteria idenfitied in the orginal GMP for the Goss Cove landfill (TtNUS 2001). The final Operation and Maintenance manual with revised GMP and criteria is currently under preparation by TtNUS and is expected to be issued later this year. No conclusions or recommendations are drawn from the comparison at this time. A evaluation of all four quarters worth of data in comparison to revised criteria will be done for the Year 3 Groundwater Monitoring Report for Goss Cove.

TABLE 3-1
ROUND 9 GROUNDWATER ANALYTICAL RESULTS SUMMARY
INTERIM GROUNDWATER MONITORING REPORT
GOSS COVE LANDFILL, NSB-NLON, GROTON, CONNECTICUT

Chemical	Primary Monitoring Criteria [1]	Secondary Monitoring Criteria [4]	NSB-NLON Background Concentration[7]	8MW1 Round 09 3/11/2004	8MW2D Round 09 3/8/2004	8MW2S Round 09 3/10/2004	8MW3 Round 09 3/10/2004	8MW5S Round 09 3/8/2004	8MW6D Round 09 3/8/2004	8MW6S Round 09 3/10/2004	8MW7S Round 09 3/10/2004	8MW7S (DUP) Round 09 3/10/2004	8MW8D Round 09 3/11/2004	8MW8D (DUP) Round 09 3/11/2004	8MW10S Round 09 3/10/2004	HNUS23 Round 09 3/10/2004
VOCs (µg/L)																
METHYLENE CHLORIDE	48,000	1,600	--	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	200 U	500 U	9.1 J	5 U
TETRACHLOROETHENE	88	8.85	--	0.5 U	0.54	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**3200**	**3200**	**490**	0.51
XYLENES, TOTAL	50000[2]	NA	--	0.5 U	0.5 U	147	129	0.5 U	12	1.3	2.2	1.2	20 U	50 U	10 U	0.5 U
SVOCs (µg/L)																
BENZO(A)ANTHRACENE	0.3	0.031[8]	--	0.2 U	0.2 U	**0.17 J**	**0.12 J**	0.2 U	0.2 U	**0.07 J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BENZO(A)PYRENE	0.3	0.031[8]	--	0.2 U	0.2 U	0.2 U	**0.06 J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BENZO(B)FLUORANTHENE	0.3	0.031[8]	--	0.2 U	0.2 U	**0.078 J**	**0.084 J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BENZO(G,H,I)PERYLENE	0.3[3]	0.031[8]	--	0.25 U	0.25 UJ	0.25 U	0.25 U	0.25 UJ	0.25 UJ	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
BENZO(K)FLUORANTHENE	0.3	0.031[8]	--	0.2 U	0.2 U	**0.055 J**	**0.084 J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
BIS(2-ETHYLHEXYL)PHTHALATE	59	5.9[8]	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
CARBAZOLE	29[3]	NA	--	5 U	5 U	7.4	7	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CHRYSENE	0.3[3]	0.031[8]	--	0.2 U	0.2 U	**0.17 J**	**0.15 J**	0.2 U	0.2 U	**0.065 J**	**0.05 J**	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
DIBENZO(A,H)ANTHRACENE	NA	0.031[8]	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
FLUORANTHENE	3,700	370	--	0.2 U	0.8	2.2	1.2	0.2 U	0.48	0.17 J	1.4	1.3	0.2 U	0.2 U	0.2 U	0.2 U
INDENO(1,2,3-CD)PYRENE	0.3[3]	0.031[8]	--	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
PHENANTHRENE	0.3[3]	0.031[8]	--	0.2 U	**0.97**	**3.6**	**7.4**	0.2 U	0.2 U	0.2 U	**0.57**	**0.58**	0.2 U	0.2 U	0.2 U	0.2 U
PYRENE	110,000	11,000	--	0.2 U	0.59	1.5	0.81	0.2 U	0.26	0.15 J	0.74	0.71	0.2 U	0.2 U	0.2 U	0.2 U
Pesticides/PCBs (µg/L)																
4,4-DDD	NA	0.00059[5][8]	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4,4-DDE	NA	0.00059[8]	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
4,4-DDT	NA	0.00059[8]	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
ALDRIN	NA	0.00014[8]	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
AROCLOR-1248	0.5	NA	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR-1254	0.5	NA	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
AROCLOR-1260	0.5	NA	--	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
DIELDRIN	0.1	0.00014[8]	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
HEPTACHLOR	0.05	0.00021[8]	--	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

NOTES:

DUP = Field duplicate sample, J = Estimated Value, U = Undetected Value, NA = Not available, ND = Not Detected in background samples, -- = Not analyzed for in background samples.

Bold numbers denote exceedances of primary or secondary monitoring criterion and/or background groundwater concentrations.

Primary and Secondary Monitoring Criteria ahown in table are from the Goss Cove Sampling Plan dated 2001.

Monitoring Criteria are currently under review as Goss Cove Operation and Maintenance Plan is finalized.

1 Surface Water Protection Criteria for Substances in Groundwater (CTDEP 1996)

2 Industrial/commercial volatilization criteria in groundwater (CTDEP 1996)

3 Surface Water Protection Criteria for Substances in Groundwater, using a site specific dilution factor (TtNUS 1999a).

4 Connecticut Water Quality Standards for the protection of Human Health for the consumption of organisms (CTDEP 1997).

5 National Recommended Water Quality Criteria for the Protection of human health from the consumption of organisms (USEPA, 1999).

6 Connecticut Water Quality Standards for the protection of aquatic life (chronic, saltwater) (CTDEP 1997).

7 Background Concentrations taken from the Basewide Groundwater Operable Unit Remedial Investigation Report (TtNUS, 2002a).

8 The reporting limit from the laboratory exceeds the secondary monitoring criterion for this compound.

H:\NAVY\New London_NSB\Goss Cove\2004\Round 09\TABLES\[Table 2-2.xls]Table 2-2

TABLE 3-1
ROUND 9 GROUNDWATER ANALYTICAL RESULTS SUMMARY
INTERIM GROUNDWATER MONITORING REPORT
GOSS COVE LANDFILL, NSB-NLON, GROTON, CONNECTICUT

Chemical	Primary Monitoring Criteria (1)	Secondary Monitoring Criteria (4)	NSB-NLON Background Concentration(7)	8MW1 Round 09 3/11/2004	8MW2D Round 09 3/8/2004	8MW2S Round 09 3/10/2004	8MW3 Round 09 3/10/2004	8MW5S Round 09 3/8/2004	8MW6D Round 09 3/8/2004	8MW6S Round 09 3/10/2004	8MW7S Round 09 3/10/2004	8MW7S (DUP) Round 09 3/10/2004	8MW8D Round 09 3/11/2004	8MW8D (DUP) Round 09 3/11/2004	8MW10S Round 09 3/10/2004	HNUS23 Round 09 3/10/2004
Inorganics (total) (µg/L)																
ANTIMONY	86,000	4,300	2.9	1.1	1 U	0.38 J	0.45 J	0.77 J	0.62 J	0.43 J	1 U	1 U	1 U	1 U	1 U	1 U
ARSENIC	4	0.14(8)	1.92	**2.9 J**	**26.5 J**	**0.82 J**	**0.87 J**	**2 J**	**15.4 J**	**3.7 J**	**1.4 J**	**1.2 J**	1 UJ	1 UJ	1 UJ	**0.46 J**
BERYLLIUM	4	0.13(8)	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CADMIUM	6	9.3(6)	NA	1 U	1 U	1 U	1 U	0.48 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
COPPER	48	2.4(6)(8)	107	**12.2 J**	5 UJ	5 UJ	**5.5 J**	**20.1 J**	**16.2 J**	**2.91 J**	**4.92 J**	5 UJ	5 UJ	5 UJ	5 UJ	**2.52 J**
LEAD	13	8.1(6)	6.63	0.46 J	**13.2**	2	3.6	3.1	7.1	1.4	0.45 J	0.48 J	0.28 J	1 U	1 U	0.63 J
MERCURY	0.4	0.025(6)(8)	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	880	8.2(6)	32.2	4	1.1	0.74 J	0.68 J	4.5	**10**	3.1	0.45 J	0.45 J	1 U	1 U	0.88 J	2
VANADIUM	NA	NA	10.2	1 U	1 U	1.3	1 U	1.1	6.7	1 U	1 U	1 U	1 U	1 U	1 U	1.5
ZINC	123	81(6)	131	32.8	10 U	18 J	8.6 J	52.4	**253.7**	12.7 J	8.59 J	10 U	10 U	6.74 J	31.8 J	12.5 J
Inorganics (dissolved) (µg/L)																
ANTIMONY	86,000	4,300	2.01	1.1	1 U	0.59 J	0.43 J	0.77 J	1 U	0.51 J	1 U	1 U	1 U	1 U	1 U	1 U
ARSENIC	4	0.14(8)	2.55	**1.7 J**	**25.8 J**	**1.1 J**	**0.82 J**	**2.5 J**	**12.9 J**	**3.9 J**	**0.87 J**	**1.2 J**	1 UJ	1 UJ	1 UJ	1 UJ
BERYLLIUM	4	0.13(8)	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CADMIUM	6	9.3(6)	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
COPPER	48	2.4(6)(8)	39.4	**7.6**	5 U	5 U	**5.1**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
LEAD	13	8.1(6)	2.52	0.39 J	0.3 J	0.46 J	0.33 J	0.54 J	0.72 J	0.37 J	1 U	1 U	0.34 J	1 U	0.37 J	0.51 J
MERCURY	0.4	0.025(6)(8)	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
NICKEL	880	8.2(6)	15.3	4	1.3	0.87 J	0.75 J	3.2	5.9	2.8	0.45 J	0.51 J	0.48 J	0.37 J	0.99 J	1.9
VANADIUM	NA	NA	9.9	1 U	1 U	1 U	0.35 J	0.79 J	0.55 J	0.35 J	1 U	1 U	0.52 J	0.44 J	0.39 J	0.63 J
ZINC	123	81(6)	109	29.6	10 U	10 U	10 U	38.4	**91.1**	10 U	10 U	10 U	10 U	10 U	26.6	10 U

NOTES:
DUP = Field duplicate sample, J = Estimated Value, U = Undetected Value, NA = Not available, ND = Not Detected in background samples, -- = Not analyzed for in background samples.
Bold numbers denote exceedances of primary or secondary monitoring criterion.
Primary and Secondary Monitoring Criteria ahown in table are from the Goss Cove Sampling Plan dated 2001.
Monitoring Criteria are currently under review as Goss Cove Operation and Maintenance Plan is finalized.
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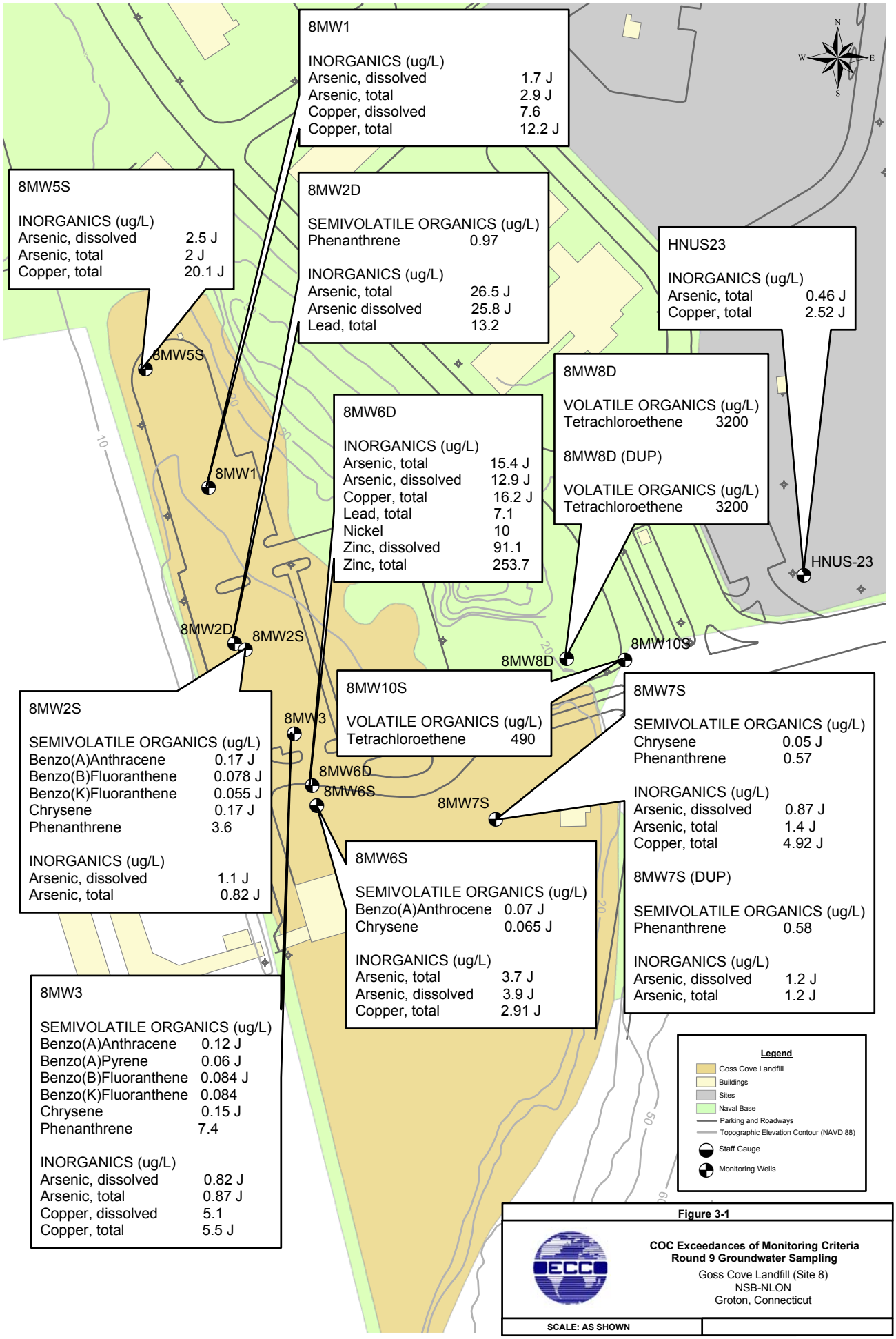
3 Surface Water Protection Criteria for Substances in Groundwater, using a site specific dilution factor (TtNUS 1999a).
4 Connecticut Water Quality Standards for the protection of Human Health for the consumption of organisms (CTDEP 1997).
5 National Recommended Water Quality Criteria for the Protection of human health from the consumption of organisms (USEPA, 1999).
6 Connecticut Water Quality Standards for the protection of aquatic life (chronic, saltwater) (CTDEP 1997).
7 Background Concentrations taken from the Basewide Groundwater Operable Unit Remedial Investigation Report (TtNUS, 2002a).
8 The reporting limit from the laboratory exceeds the secondary monitoring criterion for this compound.

H:\NAVY\New London_NSB\Goss Cove\2004\Round 09\TABLES\[Table 2-2.xls]Table 2-2



H:\Groups\Navy\New London_NSB\Goss Cove and Area A GIS\Round 9\Maps\Figure 3-1 (COC Exceedances)

4.0 REFERENCES

Connecticut Department of Environmental Protection (CTDEP). 1996 (January). Remediation Standard Regulations, Connecticut Department of Environmental Protection, Bureau of Water Management, Permitting. Hartford, Connecticut.

CTDEP. 1997 (April). Groundwater Quality Standards, Connecticut Department of Environmental Protection, Bureau of Water Management, Planning & Standards Division. Hartford, Connecticut.

Environmental Chemical Corporation. 2004 (March). Year 1 Annual Groundwater Monitoring Report for Goss Cove Landfill, Naval Submarine Base - New London, Groton, Connecticut. Marlborough, Massachusetts.

Navy. 2003 (February). SOPA (ADMIN) New London Instruction 5090.18B – Installation Restoration Site Use Restrictions at Naval Submarine Base New London. J.E. Ratte Jr., Commanding Officer, Naval Submarine Base New London, Groton, Connecticut.

Naval Engineering and Environmental Support Activity (NEESA). 1983 (March). Final Initial Assessment Study of Naval Submarine Base, New London, Connecticut. NEESA 13-025. Port Hueneme, California

TtNUS. 1999a (September). Feasibility Study for Goss Cove Landfill (Site 8) Soil Operable Unit, Naval Submarine Base - New London, Groton, Connecticut. King of Prussia, Pennsylvania.

TtNUS. 1999b (September). Record of Decision for Goss Cove Landfill (Site 8), Naval Submarine Base - New London, Groton, Connecticut. King of Prussia, Pennsylvania.

TtNUS. 2001. Groundwater Monitoring Plan for Goss Cove Landfill, Naval Submarine Base, New London, Groton, Connecticut. King of Prussia, Pennsylvania.

TtNUS. 2002a (January). Base-wide Groundwater Operable Unit Remedial Investigation Report, Naval Submarine Base - New London, Groton, Connecticut. King of Prussia, Pennsylvania.

TtNUS. 2002b (November). Operation and Maintenance Manual for Installation Restoration Program Sites at Naval Submarine Base - New London, Groton, Connecticut, Volumes II. King of Prussia, Pennsylvania.

TtNUS. 2003 (August). Year 1 Annual Groundwater Monitoring Report for Goss Cove Landfill, Naval Submarine Base - New London, Groton, Connecticut. King of Prussia, Pennsylvania.

United States Environmental Protection Agency (U.S. EPA). 1996. Low Stress (Low Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells. Boston, MA.

U.S. EPA. 2002 (April). National Recommended Water Quality Criteria: Correction, EPA 822-Z-99-047. Office of Water (4304). Washington, D.C.

APPENDIX A

Monitoring Well Inspections Sheets

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-1 **DATE:** 3/8/04

INSPECTOR'S NAME: Fred Santos **TIME:** 4:30 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Se

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-2D

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:40 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.		✓	Chunks of metal around the cap were ripped off by a plow. Well cap can still be secured.
Well Pad	Concrete or gravel & condition		✓	Asphalt starting to break apart around the concrete pad
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: [signature]

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-2S **DATE:** 3/8/04

INSPECTOR'S NAME: Fred Santos **TIME:** 4:43 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.		✓	Protective case and cap ripped off by a plow. Unable to secure well.
Well Pad	Concrete or gravel & condition		✓	Chunks of concrete missing
Well Seal	Condition of.....		✓	Unable to secure well cap. Screws ripped off the casing and bent in the cap.
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition.....	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments: Rubber cap continues to seal the pvc well. No standing water in or near the well. The well will be sampled due to secure seal on the well.

Signature: [signature]

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-3

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:48pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Santos

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-5S

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:25 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Santos

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-6D

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:53

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: [illegible]

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-6S

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:55

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: [illegible]

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-7S

DATE: 3/1/04

INSPECTOR'S NAME: Fred Santos

TIME: 5:00 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Santos

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-8D **DATE:** 3/8/04

INSPECTOR'S NAME: Fred Santos **TIME:** 4:18 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Santos

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: 8MW-10S

DATE: 3/8/04

INSPECTOR'S NAME: Fred Santos

TIME: 4:15 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well	✓		
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Santos

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

MONITORING WELL INSPECTION SHEET

WELL ID: HNUS 23 **DATE:** 3/8/09

INSPECTOR'S NAME: Fred Santos **TIME:** 4:00 pm

INSPECTION ITEM	TYPES OF PROBLEMS	STATUS		OBSERVATION
		S	U	
Well Tag	Is it in place, legible?	✓		
Well Security	Condition of protective case, cap and lock.	✓		
Well Pad	Concrete or gravel & condition	✓		
Well Seal	Condition of…..	✓		
Area immediately around well pad.	Record any evidence of /or standing water in area of well		✓	Standing water inside the well. Water was removed prior to gauging well.
Dedicated sampling equipment	Condition……	✓		
PVC Riser	Condition of riser & survey reference point	✓		

Comments:

Signature: Fred Ml

S = satisfactory, U = unsatisfactory
Check one, if unsatisfactory please explain

APPENDIX B

Groundwater Level Measurements

Groundwater Level Measurement Sheet

Project Site: *NSB-NLON*

Location: *GOSS COVE - SITE 8*

Date: 3/8/04

High Tide:

Water Level Meter: Solinst

Weather:

Field Crew: Fred Santos

Low Tide: 1639

Well ID	Time	Depth to Water (FT)	PID Reading (ppm)	Comments
8MW5S	1610	12.32	0.0	
8MW1	1614	13.21	0.0	
8MW2D	1618	9.93	0.0	
8MW2S	1621	9.63	0.0	
8MW3	1625	8.27	0.0	
8MW6D	1628	7.45	0.0	
8MW6S	1632	8.41	0.0	
8SG01	1653	~~9.19~~ 8.37	0.0	
8MW7S	1638	9.19	0.0	
8MW8D	1642	17.2	0.0	
8MW10S	1648	19.24	0.0	
HNUS23	1700	18.11	0.0	

Groundwater Level Measurement Sheet

Project Site: *NSB-NLON*

Location: *GOSS COVE - SITE 8*

Date: 3/10/04

High Tide: 1139

Water Level Meter: Solinst

Weather: Partly cloudy 45°

Field Crew: Fred Santos / Sue Whiteside

Low Tide:

Well ID	Time	Depth to Water (FT)	PID Reading (ppm)	Comments
8MW5S	11:12	11.28	0.0	
8MW1	11:15	11.54	0.0	
8MW2D	1120	9.16	0.0	
8MW2S	1123	9.58	0.0	
8MW3	1125	8.27	0.0	
8MW6D	1130	6.34	0.0	
8MW6S	1133	8.25	0.0	
8SG01	1155	7.85	0.0	
8MW7S	1140	8.91	0.0	
8MW8D	1145	16.17	0.0	
8MW10S	1150	16.06	0.0	
HNUS23	1205	7.93	0.0	

APPENDIX C

Calibration Logs

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove / Dolphin Mart **Calibrated By** Fred Santos

Instrument/Serial Number	Pre-cal 1.0 (NTU)	Pre-cal 10 (NTU)	Post-cal 1.0 (NTU)	Post-cal 10 (NTU)	Date
Lamotte Turbidimeter 0914 - 4098	0.99	10.25	1.0	10.0	3/9/04
Lamotte Turbidimeter 4042 - 1103	1.0	10.64	1.0	10.0	3/9/04
Lamotte Turbidimeter 4074 - 1103	0.99	9.97	1.1	9.9	3/9/04
Lamotte Turbidimeter 0914 - 4098	1.0	9.98	1.1	10.0	3/10/04
Lamotte Turbidimeter 4074 - 1103	1.0	10.0	1.0	10.0	3/10/04
Lamotte Turbidimeter 4042 - 1103	0.99	9.96	1.0	9.97	3/10/04
Lamotte Turbidimeter 0914 - 4098	1.2	10.20	0.9	10.0	3/11/04
Lamotte Turbidimeter 4042 - 1103	0.98	9.88	0.9	10.1	3/11/04
Lamotte Turbidimeter 4074 - 1103	0.99	10.0	1.0	9.9	3/11/04
Lamotte Turbidimeter					
Lamotte Turbidimeter					
Lamotte Turbidimeter					

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove/ Dolphin Mart **Calibrated By** Fred Santos

Instrument/Serial Number	Pre-calibration Reading	Post-calibration Reading	Calibration Gas/Concentration	Date
Photovac 20/20 PID FDN 311	105	101	Isobutylene / 100ppm	3/9/04
Photovac 20/20 PID FDN 311	102	99.8	Isobutylene / 100ppm	3/10/04
Photovac 20/20 PID FDN 311	98.7	98.7	Isobutylene / 100ppm	3/11/04
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	
Photovac 20/20 PID			Isobutylene / 100ppm	

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-9-04 **Weather** Snowy 30°

Calibrated By Suzanne Mott **Instrument** YSI sonde **Serial Number** 03D0609AJ 99C0323AA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	1.051	0.979		
pH (7)	7.09	7.05		
pH (4)	4.02	3.89		
pH (10)	9.75	9.99		
ORP	247.5	248.0		
Dissolved Oxygen	100.4	104.0		
Barometric Pressure	760.7			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-9-04 **Weather** snowy 30°

Calibrated By Suzanne **Instrument** YSI Sonde **Serial Number** 01D1391AD 99K0055AF

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	0.964	1.004	6.48	
pH (7)	7.12	7.14	7.15	
pH (4)	3.91	3.96	7.32	
pH (10)	9.73	10.53	7.53	
ORP 257.0	246.1	254.3	7.51	
Dissolved Oxygen	97.4	107.5	8.55	
Barometric Pressure	761.1			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-9-04 **Weather** snowy 30°

Calibrated By Suzanne Matt **Instrument** YSI **Serial Number** 02F0869 AG
DC0979 AA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	1.23	0.822	6.48	
pH (7)	~~1.23~~ 7.08	7.16	7.15	
pH (4)	3.99	4.06	7.32	
pH (10)	9.61	10.06	7.33	
ORP	252	254.3	7.51	
Dissolved Oxygen	97.9	97.5		
Barometric Pressure	757.8	760.5		

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-18-04 **Weather** Some sun cold

Calibrated By Suzanne **Instrument** YSI **Serial Number** 03D0609AJ 99C0323AA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	0.968	0.956	16.80	
pH (7)	7.07	7.07	17.43	
pH (4)	3.85	3.89	17.63	
pH (10)	9.73	9.79	17.59	
ORP 244	247.5	252.6	15.22	
Dissolved Oxygen	104.0	104.7		
Barometric Pressure	762.7			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-10-04 **Weather** Some sun cold 30°

Calibrated By M. Marty **Instrument** TSI **Serial Number** 02F0809 HG 01C0979 HA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	0.827	0.988	17.06	
pH (7)	7.15	7.11	17.44	
pH (4)	3.89	3.97	17.65	
pH (10)	9.72	9.69	17.72	
ORP	243.0	250.5		
Dissolved Oxygen	97.5	97.5	11.66	
Barometric Pressure	761.5			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-11-04 **Weather** _____

Calibrated By Suzanne **Instrument** YSI **Serial Number** 03D0609AJ 99C032AA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	0.956		13.08	
pH (7)	7.07		13.17	
pH (4)	3.89		13.30	
pH (10)	9.79		13.47	
ORP 244.	252.6			
Dissolved Oxygen	104.7		10.06	
Barometric Pressure	764.3			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-11-04 **Weather** _____

Calibrated By Suzanne **Instrument** YSI Sonde **Serial Number** 02F0809 AG 01C0979 AA

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	0.988	0.956	13.5	
pH (7)	7.11	7.08	13.21	
pH (4)	3.97	4.0	12.8	
pH (10)	9.69	9.8	13.2	
ORP	250.5	252.6		
Dissolved Oxygen	97.5	98%	11.66	
Barometric Pressure	762.8			

INSTRUMENT CALIBRATION LOG

Project/Site Name Goss Cove **Date** 3-11-04 **Weather** _____

Calibrated By Suzanne **Instrument** YSI / YSI sonde **Serial Number** 01D1391AD / 99K0055AF

Parameters	Pre-calibration Reading	Post-calibration Reading	Temperature °C	Comments
Conductivity	1.004	0.995	13.29	
pH (7)	7.14	7.12	12.89	
pH (4)	3.96	3.98	13.29	
pH (10)	10.52	10.25	13.43	
ORP 244	254.3	257.2	8.62	
Dissolved Oxygen	107.5	105%	8.55	
Barometric Pressure	765.4			

APPENDIX D

Groundwater Field Forms

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton, CT
Well ID: 8MW-1

Date: 3/11/04
Sampler: M. Martin
PID Reading: 0.0

Start Time: 0612 End Time: 0712
Well Construction: 2" PVC
Depth to water: 12.46
Well Depth: 14.2
Water Column: 1.74
Total Volume Removed (L) 5.7

Field Testing Equipment

Make	Model	Serial #
YSI		99K0055 AF
Sonde		01D1391 AD
QED	MP10	1438
Lamotte	Turbidimeter	0914-4048

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
0620	0.8	100	12.6	6.52	7.43	19.7	2.57	174	5.4	11.68	clear
0630	1	100	12.6	6.5	7.63	19.8	2.36	157.4	1.18	11.71	"
0640	1	100	12.63	6.43	7.7	19.84	2.08	147.8	0.4	11.75	"
0645	0.5	100	12.65	6.41	7.72	19.87	1.89	143.1	0.46	11.74	"
0650	0.5	100	12.66	6.42	7.74	19.86	1.75	139.8	0.0	11.75	"
0655	0.5	100	12.68	6.44	7.76	19.84	1.52	135.1	0.0	11.76	"
0700	0.5	100	12.68	6.41	7.77	19.84	1.47	134	0.0	11.74	"
0703	0.3	100	12.69	6.42	7.77	19.85	1.30	131.8	|	11.72	"
0706	0.3	100	12.69	6.42	7.78	19.81	1.22	130.2	|	11.71	"
0709	0.3	100	12.7	6.44	7.79	19.78	1.19	128.7		11.7	"
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
0711	8-GW01-01	40 mL vial	2	HCl	VOC
|	|	1 L amber	8	—	PCB/Pest/Pest/SVOC
|	|	500 mL poly	2	HNO_3	Total & Dissolved Metals
		250 mL poly	1	—	Anion

Comments Fe^{2+} = 0.0

M. Martin
Signature

3/11/04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton, CT
Well ID: 8 MW-2D

Date: 3/8/04
Sampler: M. Martin
PID Reading: 0.0

Start Time: 1534 End Time: 1640
Well Construction: 2" PVC
Depth to water: 10
Well Depth: 16.1
Water Column: 6.1
Total Volume Removed (L) 7.15

Field Testing Equipment

Make	Model	Serial #
YSI		0100979 AA
Solinst		0LF0869 AC
Peristaltic	GeoPump	US 360
Lamotte	Turbidimeter	4074-1103

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
1549	1.25	250	11.8	11.95	7.56	32.5	0.45	-217.6	1.4	27.84	clear
1559	2	200	12.62	12.25	7.75	38	0.25	-301.5	11	23.3	
1609	1	100	12.17	10.92	8.18	23.63	0.12	-327	15	14.23	
1619	1		11.9	10.83	8.21	22.37	1	-299.6	14	13.48	
1629	1		11.85	10.74	8.2	22.02	0.13	-276.6	13	13.25	
1632	0.3			10.82	8.19	21.91	1	-280.2	12	13.18	
1635	0.3			10.81		21.84	0.14	-281.5	11	13.14	
1638	0.3			10.77		1	1	-278.8	1	1	

Acceptance Criteria: < 0.3 ft 3% ± 0.1 3% 10% ±10mv 10%

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
1639	8-GW02D-01	40mL vial	2	HCl	VOC
		1 L amber	2	–	PCB
		1 L amber	2	–	PAH
		1 L amber	2	–	SVOC
		1 L amber	2	–	Pest
		500mL poly	1	HNO_3	Inorganics (Total) +che
		500mL poly	1	HNO_3	Inorganics (Dissolved)
		250mL poly	1	–	Anions (Sulfate & Nitra

Comments

$Fe^+ = 2.2$

Signature

3/8/04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton CT
Well ID: 2S

Date: 3-10-04
Sampler: Suzanne
PID Reading: 0.0

Start Time: 6:06 End Time: 0702
Well Construction: 2" PVC
Depth to water: 9.55
Well Depth: 10.92
Water Column: 1.37
Total Volume Removed (L) 7.2

Field Testing Equipment

Make	Model	Serial #
YSI	650 MDS	01D1391AD
YSI	Sonde 600	99K0055AF
LaMotte turbidimeter		0914-4078
QED MP10		1056
HACH test Kit		

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
6:26		200	9.60	9:39	7:58	5.638	7.57	-122.8	2.4	1.77	clear
6:31	1	200	9.77	11.33	8.56	1.846	2.47	-212.8	1.55	0.94	clear
6:36	1	200	9.77	10.76	8.58	1.818	2.19	-198.3	1.06	0.93	clear
6:41	1	200	9.78	10.75	8.61	1.785	1.54	-197.2	0.58	0.91	clear
6:46	1	200	9.78	10.72	8.64	1.764	1.48	-196.4	0.42	0.90	clear
6:51	1	200	9.79	10.71	8.65	1.752	1.42	-201.9	0.	0.89	clear
6:56	1	200	9.79	10.68	8.66	1.748	1.39	-202.8	0	0.89	clear
7:01	1	200	9.79	10.61	8.66	1.747	1.32	-201.6	0	0.89	clear
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
0702	8-GW02S-01	40 ml vial	2	HCL	VOCs
0702	8-GW02S-01	250 ml poly	1	None	Anions
0702	8-GW02S-01	500 ml poly	2	HNO3	Inorganics total & dissF
0702	8-GW02S-01	1 L Amber	8	None	SVOCs, PAH, Pest, PCB

Comments

Ferrous Iron 0.0

Suzanne Whitesell
Signature

3-10-04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Gross Cove
Location: Groton, CT
Well ID: 8 MW-3

Date: 3/10/04
Sampler: M. Martin
PID Reading: 0.0

Start Time: 0615 **End Time:** 0705
Well Construction: 2" PVC
Depth to water: 8.2
Well Depth: 14.1
Water Column: 5.9
Total Volume Removed (L) 5.7

Field Testing Equipment

Make	Model	Serial #
YSI		01C0979AA
Sonde		02F0869AC
QED	MP10	1438
Lamotte	Turbidimeter	4042-1103

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
0623	1.2	150.0	8.2	9.07	8.37	2.086	0.32	-216.3	9.25	1.07	clear
0633	1	100	8.2	8.51	8.84	1.995	0.15	-229.4	8.39	1.02	"
0643	1	100	8.2	9.1	8.88	1.942	0.09	-238.6	7.41	0.99	"
0648	1	100	8.2	9.17	8.91	1.939	0.08	-240.2	6.61	0.99	"
0653	.5	100	8.2	9.2	8.91	1.937	0.08	-244.6	4.92	0.99	"
0658	.5	100	8.2	9.28	8.92	1.932	0.07	-247.4	4.63	0.99	"
0703	.5	100	8.2	9.2	8.93	1.935	0.07	-248.8	4.51	0.99	"
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
0704	8-GW03-01	40ml vial	2	HCl	VOC
|	|	1L amber	8	—	PAH/PCB/Pest/SVOC
|	|	500ml Poly	2	HNO_3	Total Metals / Dissolved Metals FT
		250 mL Poly	1	—	Anion

Comments

Fe^{+} - 0.0

M. Martin
Signature

3/10/04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton, CT.
Well ID: 8-GW-055-01

Date: 3/8/04
Sampler: David C.
PID Reading: 0.0 ppm

Start Time: 1542 **End Time:** 16:39
Well Construction: 2" PVC Peristaltic
Depth to water: 12.95'
Well Depth: 13.97'
Water Column: 1.02'
Total Volume Removed (L) 6.26

Field Testing Equipment

Make	Model	Serial #
YSI	650MDS	03D0609 AJ
YSI	600XL	99C0323 AA
Lamotte	Turbidimeter	4042-1103
Geopump2	Peristaltic	360

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm c	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
1550	1.36	170	13.02	5.89	7.56	18.29	7.39	180.0	2	10.58	clear
1600	1.0	100	13.08	5.94	7.25	17.93	7.63	88.4	2	10.51	clear
1610	1.0	100	13.09	5.69	7.18	17.93	7.29	88.1	1	10.49	clear
1620	1.0	100	13.17	5.58	7.15	17.84	7.09	85.5	1	10.44	clear
1630	1.0	100	13.20	5.71	7.13	17.79	6.86	83.8	1	10.41	clear
1633	0.3	100	13.21	5.77	7.13	17.77	6.93	82.6	1	10.40	clear
1636	0.3	100	13.21	5.79	7.12	17.80	6.82	78.2	1	10.43	clear
1639	0.3	100	13.23	5.80	7.12	17.85	6.71	74.3	1	10.45	clear
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
16:39	8-GW055-01	40ml vial	2	HCl	VOC
1639	8-GW055-01	1L AMBER	8	NONE	SVOC, PAH, Pest., PCB
1639	8-GW055-01	500ml Poly	2	HNO3	Inorganics, Hardness, Dissolved Inorganics (F)
1639	8-GW055-01	250ml poly	1	NONE	ANIONS

Comments Hach Ferrous Iron Test Kit = .08 mg/L

Signature

3/8/04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton CT
Well ID: GW06D

Date: 3-8-04
Sampler: Suzanne Whiteside
PID Reading: 0.0

Start Time: 15:43 **End Time:** 16:43
Well Construction: 2" PVC
Depth to water: 7.3'
Well Depth: 59.01
Water Column: 51.98
Total Volume Removed (L) 6.1

Field Testing Equipment

Make	Model	Serial #
YSI	650 MDS	02F0869AC
QED	MP10	1438
LaMotte turbidimeter		0914 4098
Solinst Water Level Indicator		1234
Hach Ferrous Iron test kit		

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
15:43	.1	100	7.4	11.15	7.88	40.28	54.2	133.6	196	25.49	
15:53	1	100	7.5	11.03	7.03	40.18	0.70	-2.1	149	26.61	clear
16:03	1	100	7.59	10.91	7.03	40.15	0.71	-3.1	143	25.36	clear
16:13	1	100	7.59	10.56	7.03	40.21	0.53	-5.1	107	25.91	clear
16:23	1	100	7.61	11.40	7.03	40.29	0.49	-10.2	75	25.75	clear
16:28	.5	100	7.62	12.07	7.03	40.74	0.42	-14.4	62	26.38	clear
16:33	.5	100	7.62	12.07	7.03	41.21	0.36	-16.3	51	26.43	clear
16:38	.5	100	7.62	12.06	7.03	41.30	0.35	-18.4	52	26.53	clear
16:43	.5	100	7.63	12.04	7.03	41.48	0.34	-19.3	49	26.55	clear
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
16:43	8-GW06D-01	40 ml vial	2	HCl	VOCs
16:43	8-GW06D-01	1 L Amber	8	None	SVOCs, PAH, PEST, PCB
16:43	8-GW06D-01	500 ml poly	2	HNO3 ~~inorganics~~	totals, dissolved (FF)
16:43	8-GW06D-01	250 ml poly	1	None	Anions

Comments

Ferrous Iron 1.2 mg/L

Suzanne Whiteside
Signature

3-8-04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton CT
Well ID: GW-6S

Date: 3-10-04
Sampler: Suzanne Whiteside
PID Reading: 0.0

Start Time: 14:01 **End Time:** 14:48
Well Construction: 2" PVC
Depth to water: 8.19
Well Depth: 10.04
Water Column: 1.85
Total Volume Removed (L) 4.6

Field Testing Equipment

Make	Model	Serial #
YSI	650 MDS	01D1391 AD
YSI	600 XLM	99K0055 AF
QED	MP10	1056
LaMotte turbidimeter		0914-4098
Hach Ferrous Iron test kit		

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
14:02	.1	100	8.20	8.45	6.88	4.339	6.28	-29.4	2.14	2.32	clear
14:12	1	100	8.21	9.79	7.59	2.713	1.15	-116.4	0.62	1.39	clear
14:22	1	100	8.20	9.78	7.91	2.060	0.26	-174.9	0	1.05	clear
14:32	1	100	8.21	9.47	7.97	1.947	0.18	-186.3	0	1.00	clear
14:37	.5	100	8.20	9.34	7.99	1.925	0.17	-186.3	0	0.98	clear
14:42	.5	100	8.20	9.30	8.00	1.900	0.16	-184.6	0	0.97	clear
14:47	.5	100	8.20	9.32	8.01	1.896	0.15	-186.5	0	0.97	clear
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
14:48	8-GW06S-01	40 ml vial	2	HCL	VOCs
14:48	8-GW06S-01	250 ml poly	1	None	Anions
14:48	8-GW06S-01	500 ml poly	2	HNO_3	Inorganics, total&dis (FF)
14:48	8-GW06S-01	1 L Amber	8	None	SVOCs, PAH, PCB, Pest

Comments

Ferrous Iron = 1.4 mg/L

Suzanne Whiteside
Signature

3-10-04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Gross Cove
Location: Groton, CT
Well ID: 8MW7S

Date: 3/10/04
Sampler: M. Marton
PID Reading: 0.0

Start Time: 0830 **End Time:** 0925
Well Construction: 2" PVC
Depth to water: 8.95
Well Depth: 10.25
Water Column: 1.3
Total Volume Removed (L) 7.95

Field Testing Equipment

Make	Model	Serial #
YSI		01C0979 AA
Sonde		02F0869 AC
QED	MP10	1438
Lamotte	Turbidimeter	4042-1103

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
0840	1.5	150	8.95	9.04	7.46	0.686	0.96	-145.8	28	0.34	clear
0850	1.5	150	8.95	8.82	7.52	0.677	0.42	-155.4	19.6	0.33	"
0900	1.5	150	8.95	8.79	7.58	0.669	0.26	-164.4	10.84	0.33	"
0910	1.5	150	8.95	8.92	7.59	0.665	0.25	-168.3	10.72	0.33	"
0915	0.75	~~150~~ 150	8.95	8.99	7.61	0.665	0.24	-171.4	8.62	0.33	"
0920	0.75	150	8.95	8.91	7.62	0.665	0.23	-171.7	8.59	0.33	"
0923	0.45	150	8.95	9.02	7.62	0.663	0.22	-172.1	9.44	0.32	"

Acceptance Criteria:	< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
0924	8-GW07S-01	40mL amber vial	2	HCl	VOC
|	|	1L amber	8	-	PCB/SVOC/PAH/Pest
|	|	500mL poly	2	HNO_3	Total & Dissolved Metals
|	|	250mL poly	1	-	Anion
|	MS/MSD	same as above			
|	Field Dup (SD-031004-01)	same as above			

Comments

Fe^+ = 2.6

M. M.
Signature

3/10/04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton CT
Well ID: MW 10S

Date: 8-10-04
Sampler: Suzanne
PID Reading: 0.0

Start Time: 9:25 **End Time:** 10:12
Well Construction: 2" PVC
Depth to water: 16.10
Well Depth: 21.34
Water Column: 5.24
Total Volume Removed (L) 6.7

Field Testing Equipment

Make	Model	Serial #
YSI	650 MDS	01D1391 AD
YSI	600XLM Sonde	99K0055AF
Geopump	2	360
La Motte	turbidimeter	0914-4098
HACH	Ferrous Iron test kit	IR-18C

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
9:26	.1	150	16.13	7.28	8.37	0.419	10.81	80.4	0.45	0.20	clear
9:36	1.5	150	16.17	9.83	6.15	0.384	8.55	182.2	0.23	0.19	clear
9:46	1.5	150	16.10	10.12	5.95	0.270	8.42	197.0	0.	0.18	clear
9:56	1.5	150	16.	9.99	5.92	0.307	8.43	202.2	0.	0.18	clear
10:01	.7	150	16.	9.89	5.91	0.346	8.43	208.3	0.	0.17	clear
10:06	.7	150	16.	9.91	5.90	0.339	8.43	210.4	0.	0.16	clear
10:11	.7	150	16.	9.89	5.90	0.335	8.43	207.4	0.	0.16	clear

Acceptance Criteria:	< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
10:12	8-GW10S-01	40 ml vial	2	HCL	VOCs
10:12	8-GW10S-01	250 ml poly	1	None	Anions
10:12	8-GW10S-01	500 ml poly	2	HNO3	IN Inorganics total dissolved FF
				"	
10:12	8-GW10S-01	1 L Amber	8	None	SVOCs, PAH, PEST, PCB

Comments

Ferrous Iron = 0.0 mg/L

Suzanne Whitesell
Signature

8-10-04
Date

Environmental Chemical Corporation

Low Flow/Low Stress Groundwater Sampling Log

Project: Goss Cove
Location: Groton, CT.
Well ID: HNUS-23

Date: 3/10/04
Sampler: David C.
PID Reading: 0.0ppm

Start Time: 1349 **End Time:** 1430
Well Construction: 2" QED Bladder
Depth to water: 7.95'
Well Depth: 10.33'
Water Column: 2.38'
Total Volume Removed (L) 4.84

Field Testing Equipment

Make	Model	Serial #
YSI	650MDS	02F0869 AC
YSI	600XL	01C0979 AA
Lamotte	Turbidimeter	4042-1103
QED	controller	MP10-1438

Time	volume removed (liters)	Flow Rate (ml/min)	drawdown (ft)	Temp (celsius)	pH (STD)	SPC mS/cm	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	color
1350	0.22	220	8.30	8.78	6.86	0.461	4.73	98.7	16	0.22	clear
1400	1.15	115	8.50	9.08	6.17	0.413	1.31	145.6	17	0.20	clear
1410	1.15	115	8.62	8.91	6.15	0.418	1.65	157.9	8	0.20	clear
1415	0.58	115	8.62	8.94	6.15	0.421	1.69	161.7	7	0.20	clear
1420	0.58	115	8.60	8.80	6.15	0.421	1.62	164.7	4	0.20	clear
1425	0.58	115	8.60	9.02	6.14	0.418	1.56	167.7	4	0.20	clear
1430	0.58	115	8.61	8.97	6.14	0.420	1.51	170.8	4	0.20	clear
Acceptance Criteria:			< 0.3 ft	3%	± 0.1	3%	10%	±10mv	10%		

2" screen volume = 0.163 gal/ft or 616 ml per foot

Sample Collection

Time	Sample ID	Container	# of Bottles	Preservative	Analyses
1430	8-GWHNUS23-01	40ml vial	2	HCl	VOC
1430	8-GWHNUS23-01	1 Liter amber	8	NONE	SVOC, PAH, Pest., PCB
1430	8-GWHNUS23-01	500ml poly		HNO_3	Inorganics, hardness, inorganic (F1)
1430	8-GWHNUS23-01	250ml poly		NONE	ANIONS

Comments

Hach Test Kit for Ferrous Iron = 0.0 mg/L
This well is located on a baseball field, the field is heavily populated with Canadian Goose excriment. (may have some affect to the sample.)

Signature

3/10/04
Date

APPENDIX E

Data Validation Memos and Laboratory Analytical Results

GOSS COVE
MASTER DATA VALIDATION MEMORANDUM
MARCH 2004 SAMPLING ROUND 9

TO: ENGINEERING FIELD ACTIVITY NORTHEAST

FROM: JACKSON KIKER, ECC SENIOR CHEMIST, MARLBOROUGH, MA

SUBJECT: NEW LONDON NSB – IRP O&M MONITORING - SAMPLING ROUND 9

DATE: APRIL 12, 2004

Project data were validated using the following O&M Manual and Validation Functional Guideline, as modified for non-CLP methods.

1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluation of Environmental Analyses (Dec, 1996).

2. Operations and Maintenance Manual for Installation Restoration Program at Naval Submarine Base New London (Nov, 2002).

The validation guideline exceedences are assessed and documented on the method specific data validation worksheets. On the ECC modified USEPA Region I data validation worksheets, the data quality acceptance criteria are presented, analytes requiring qualification based on laboratory historical control limits and/or validation guidance criteria exceedences are listed, assigned qualifiers, qualifying rationale is documented, and any potential bias noted. The overall evaluation of the data generated is presented in the data validation worksheet.

As an exception to the USEPA Region I data validation guidance, non-target ketone VOC data with response factors (RFs) less than the 0.05 were not qualified, as the Tier guidance allows for exceptions to the RF guidance.

Presented in this Master Data Validation Memorandum are the data validation reports for the 5 Sample Data Groups (SDGs) presented in Table I. Data validation reports are presented for each SDG. The USEPA Region I Organic Regional Data Assessment (ORDA) sheet displays the summarized results of the data validation assessment for all analytical methods reported in the SDG.

Acronym and abbreviations used in the data validation reports are presented in Table II.

Standard EPA Region I data qualifiers are used to denote the assessment of data quality. Ancillary qualifiers are noted on the data validation worksheets. Data qualifiers are defined in Table III. The final and ranking assigned data qualifier for an analyte is presented in Table IV- Data Summary Table.

SAMPLE DATA GROUPS

The VOC, SVOC, PAH, metals (totals/dissolved), pesticide, and PCB data were validated according to USEPA Region I Tier II criteria. All QC parameters applicable to the method and Tier II criteria were validated and documented in the data worksheets.

Laboratory: The samples were analyzed by Alpha Laboratory of Westborough, MA.
Sample Matrix: Groundwater. Tripblank matrix: Deionized water.

The project's analytical samples were grouped in the SDGs and analyzed for the parameters listed in Table 1.

Table I Sample Data Groups

Sample Data Groups	Sample Name	VOCs 8260B	SVOCs 8270C	PAHs 8270C -SIM	Metals (total) 6010B 7470A	Metals (dissolved) 6010B/ 7470	Pesticide 8081	PCB 8082	Water Quality Parameters
L0402313-03	8-GW01-01	X	X	X	X	X	X	X	X
L0402219-02	8-GW02D-01	X	X	X	X	X	X	X	X
L0402277-01	8-GW02S-01	X	X	X	X	X	X	X	X
L0402277-05	8-GW03-01	X	X	X	X	X	X	X	X
L0402219-03	8-GW05S-01	X	X	X	X	X	X	X	X
L0402219-01	8-GW06D-01	X	X	X	X	X	X	X	X
L0402277-03	8-GW06S-01	X	X	X	X	X	X	X	X
L0402277-04	8-GW07S-01	X	X	X	X	X	X	X	X
L0402313-01	8-GW08D-01	X	X	X	X	X	X	X	X
L0402277-07	8-GW10S-01	X	X	X	X	X	X	X	X
L0402277-02	8-GWHNUS23-01	X	X	X	X	X	X	X	X
L0402219-04	8-TB01	X							
L0402277-08	8-TB02	X							
L0402313-04	8-TB03	X							
L0402277-06	FD-031004-01	X	X	X	X	X	X	X	X
L0402313-02	FD-031104-01	X	X	X	X	X	X	X	X

ACRONYMS AND ABBREVIATIONS

Following is a list of acronyms and abbreviations that may be used in the data validation reports.

Table II Acronyms and Abbreviations

Acronym / Abbreviation	Definition
%D	Percent difference
%R	Percent recovery
Ug/L	Microgram per liter
BEHP/2-BEHP	2-bis(ethylhexyl)phthalate
BFB	Bromofluorobenzene
CCB	Continuing calibration Blank
CCC	Continuing Check Compound
CCV	Continuing Calibration Verification
COC	Chain of custody
COPC	Contaminants of potential concern
CRI	standard at RL for ICP
CVAA	Cold vapor atomic absorption
DCB	Decachlorobiphenly
DFTPP	Decafluorotriphenylphosphine
DQO	Data quality objective
EB	Equipment blank
EPA	Environmental Protection Agency
FD	Field duplicate
GC	Gas Chromatography
GC/MS	Gas chromatography/mass spectrometry
HT	Holding time
ICAL	Initial calibration
ICS-A/AB	Interelement check standard A or AB
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standards
LCL	Lower control limit
LCS	Laboratory control sample
MDL	Method detection limit
MeCl	Methylene chloride
MS	Matrix spike
MSD	Matrix spike duplicate

Acronym / Abbreviation	Definition
MPC	Measurement performance criteria
NA	Not applicable
NC	Not calculated.
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyls
PQL	Practical quantitation limit
QAPP	Quality Assurance Project Plan
QC	Quality control
RF	Response Factor
RPD	Relative percent difference
RRF	Relative response factor
RSD	Relative standard deviation
RT	Retention time
SDG	Sample Delivery Group
SOP	Standard Operation Procedure
SVOC	Semi-volatile organic compound
SPCC	System performance check compound
SQL	Sample Quantitation Limit
TB	Tripblank
TMX	Tetrachloro-m-xylene
TCX	Tetrachloro-m-xylene
TIC	Tentatively identified compound
UCL	Upper control limit
VOC	Volatile organic compound

DATA QUALIFIER REFERENCE TABLE

Data validation reports will summarize the samples reviewed, elements reviewed, any nonconformances with the established criteria, validation actions (including data qualifiers). Data qualifiers will be consistent with EPA Region I – New England guidelines and will consist of the following qualifiers listed in Table III:

Table III Data Qualifiers

USEPA Region I – Data Qualifier	USEPA Region I – Qualifier Definition
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample
UJ	The analyte was not detected above the sample reporting limit; and the reporting limit is approximate
U	The sample was analyzed for, but was not detected above the sample reporting limit.
R	The sample result is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	FLUORANTHENE	0.48		ug/l	y	0.2	0.04	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	BENZO(GHI)PERYLENE		UJ	ug/l	n	0.25	0.025	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	PYRENE	0.26		ug/l	y	0.2	0.046	1
8-GW06D-01	8-Mar-04	L0402219-01	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW06D-01	8-Mar-04	L0402219-01	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW06D-01	8-Mar-04	L0402219-01	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW06D-01	8-Mar-04	L0402219-01	4500NO3-F	NITROGEN, NITRATE	0.035	J	mg/l	n	0.1	0.006	1
8-GW06D-01	8-Mar-04	L0402219-01	9038	SULFATE	1300		mg/l	y	500	71	1
8-GW06D-01	8-Mar-04	L0402219-01	2340B	HARDNESS	5500		mg CaCO3	y	130	0.66	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ALUMINUM, TOTAL	2.71		mg/l	y	0.05	0.0124	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ANTIMONY, TOTAL	0.00062	J	mg/l	n	0.001	0.00022	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ARSENIC, TOTAL	0.0154	J	mg/l	y	0.001	0.00034	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	BARIUM, TOTAL	0.1727		mg/l	y	0.002	0.00038	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	BERYLLIUM, TOTAL	0.00023	U	mg/l	n	0.001	0.00015	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CALCIUM, TOTAL	344		mg/l	y	20	20	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CHROMIUM, TOTAL	0.0057		mg/l	y	0.002	0.00031	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	COBALT, TOTAL	0.0155		mg/l	y	0.001	0.00017	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	COPPER, TOTAL	0.0162	J	mg/l	y	0.005	0.00172	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	IRON, TOTAL	4.8		mg/l	y	0.1	0.0191	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	LEAD, TOTAL	0.0071		mg/l	y	0.001	0.00028	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MAGNESIUM, TOTAL	1120		mg/l	y	20	0.356	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MANGANESE, TOTAL	5.516		mg/l	y	0.001	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MOLYBDENUM, TOTAL	0.0256		mg/l	y	0.005	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	NICKEL, TOTAL	0.01		mg/l	y	0.001	0.00024	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	POTASSIUM, TOTAL	333		mg/l	y	20	0.752	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SELENIUM, TOTAL	0.036		mg/l	y	0.01	0.00298	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SODIUM, TOTAL	9720		mg/l	y	200	1.81	1

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Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06D-01	8-Mar-04	L0402219-01	6020A	THALLIUM, TOTAL	0.00027	U	mg/l	n	0.001	0.00026	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	VANADIUM, TOTAL	0.0067		mg/l	y	0.001	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ZINC, TOTAL	0.2537		mg/l	y	0.01	0.00298	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ALUMINUM, DISSOLVED	0.0411	J	mg/l	n	0.05	0.0124	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ANTIMONY, DISSOLVED	0.00029	U	mg/l	n	0.001	0.00022	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ARSENIC, DISSOLVED	0.0129	J	mg/l	y	0.001	0.00034	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	BARIUM, DISSOLVED	0.144		mg/l	y	0.002	0.00038	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CALCIUM, DISSOLVED	300		mg/l	y	20	20	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	CHROMIUM, DISSOLVED	0.00055	J	mg/l	n	0.001	0.00031	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	COBALT, DISSOLVED	0.012		mg/l	y	0.001	0.00017	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	COPPER, DISSOLVED	0.0022	U	mg/l	n	0.005	0.00172	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	IRON, DISSOLVED	1.26		mg/l	y	0.1	0.0191	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	LEAD, DISSOLVED	0.00072	J	mg/l	n	0.001	0.00028	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MAGNESIUM, DISSOLVED	999		mg/l	y	20	0.356	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MANGANESE, DISSOLVED	4.816		mg/l	y	0.001	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	MOLYBDENUM, DISSOLVED	0.0223		mg/l	y	0.005	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	NICKEL, DISSOLVED	0.0059		mg/l	y	0.001	0.00024	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	POTASSIUM, DISSOLVED	295		mg/l	y	20	0.752	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SELENIUM, DISSOLVED	0.033		mg/l	y	0.01	0.00298	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SILVER, DISSOLVED	0.001		mg/l	y	0.001	0.00025	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	SODIUM, DISSOLVED	8510		mg/l	y	200	1.81	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	VANADIUM, DISSOLVED	0.00055	J	mg/l	n	0.001	0.0003	1
8-GW06D-01	8-Mar-04	L0402219-01	6020A	ZINC, DISSOLVED	0.0911		mg/l	y	0.01	0.00298	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	ETHYLBENZENE	11		ug/l	y	0.5	0.28	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TRICHLOROETHENE	0.46	J	ug/l	n	0.5	0.34	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06D-01	8-Mar-04	L0402219-01	8260B	O-XYLENE	12		ug/l	y	0.5	0.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-GW06D-01	8-Mar-04	L0402219-01	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-GW02D-01	8-Mar-04	L0402219-02	4500NO3-F	NITROGEN, NITRATE	0.025	J	mg/l	n	0.1	0.006	1
8-GW02D-01	8-Mar-04	L0402219-02	9038	SULFATE	250		mg/l	y	120	18	1
8-GW02D-01	8-Mar-04	L0402219-02	2340B	HARDNESS	1900		mg CaCO3	y	66	0.66	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ALUMINUM, TOTAL	0.019	J	mg/l	n	0.05	0.0124	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ANTIMONY, TOTAL		U	mg/l	n	0.001	0.00022	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ARSENIC, TOTAL	0.0265	J	mg/l	y	0.001	0.00034	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	BARIUM, TOTAL	0.0237		mg/l	y	0.002	0.00038	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CALCIUM, TOTAL	100		mg/l	y	10	10	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CHROMIUM, TOTAL	0.00057	U	mg/l	n	0.002	0.00031	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	COBALT, TOTAL	0.0004	J	mg/l	n	0.001	0.00017	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	COPPER, TOTAL		UJ	mg/l	n	0.005	0.00172	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	IRON, TOTAL	6.22		mg/l	y	0.1	0.0191	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	LEAD, TOTAL	0.0132		mg/l	y	0.001	0.00028	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MAGNESIUM, TOTAL	412		mg/l	y	10	0.178	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MANGANESE, TOTAL	0.713		mg/l	y	0.001	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MOLYBDENUM, TOTAL	0.0133		mg/l	y	0.005	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	NICKEL, TOTAL	0.0011		mg/l	y	0.001	0.00024	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	POTASSIUM, TOTAL	174		mg/l	y	10	0.376	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SELENIUM, TOTAL	0.014		mg/l	y	0.01	0.00298	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SODIUM, TOTAL	4180		mg/l	y	100	0.906	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	VANADIUM, TOTAL		U	mg/l	n	0.001	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ZINC, TOTAL	0.00325	U	mg/l	n	0.01	0.00298	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ALUMINUM, DISSOLVED	0.018	U	mg/l	n	0.05	0.0124	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ANTIMONY, DISSOLVED		U	mg/l	n	0.001	0.00022	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ARSENIC, DISSOLVED	0.0258	J	mg/l	y	0.001	0.00034	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	BARIUM, DISSOLVED	0.0227		mg/l	y	0.002	0.00038	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1

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Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CALCIUM, DISSOLVED	97.1		mg/l	y	10	10	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	CHROMIUM, DISSOLVED	0.00055	J	mg/l	n	0.002	0.00031	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	COBALT, DISSOLVED	0.00037	J	mg/l	n	0.001	0.00017	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	IRON, DISSOLVED	5.77		mg/l	y	0.1	0.0191	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	LEAD, DISSOLVED	0.0003	J	mg/l	n	0.001	0.00028	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MAGNESIUM, DISSOLVED	412		mg/l	y	10	0.178	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MANGANESE, DISSOLVED	0.7068		mg/l	y	0.001	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	MOLYBDENUM, DISSOLVED	0.0131		mg/l	y	0.005	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	NICKEL, DISSOLVED	0.0013		mg/l	y	0.001	0.00024	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	POTASSIUM, DISSOLVED	173		mg/l	y	10	0.376	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SELENIUM, DISSOLVED	0.013		mg/l	y	0.01	0.00298	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	SODIUM, DISSOLVED	4100		mg/l	y	100	0.906	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	VANADIUM, DISSOLVED		U	mg/l	n	0.001	0.0003	1
8-GW02D-01	8-Mar-04	L0402219-02	6020A	ZINC, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TETRACHLOROETHENE	0.54		ug/l	y	0.5	0.43	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	VINYL CHLORIDE	2.5		ug/l	y	1	0.27	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TRANS-1,2-DICHLOROETHENE	2.2		ug/l	y	0.75	0.34	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TRICHLOROETHENE	2.4		ug/l	y	0.5	0.34	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CIS-1,2-DICHLOROETHENE	10		ug/l	y	0.5	0.18	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02D-01	8-Mar-04	L0402219-02	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW02D-01	8-Mar-04	L0402219-02	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	1,2,4-TRICHLOROBENZENE		UJ	ug/l	n	5	1.3	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	HEXACHLOROBENZENE		UJ	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	1,2-DICHLOROBENZENE		UJ	ug/l	n	5	1.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	1,3-DICHLOROBENZENE		UJ	ug/l	n	5	1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	1,4-DICHLOROBENZENE		UJ	ug/l	n	5	0.96	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4-CHLOROPHENYL PHENYL ETHER		UJ	ug/l	n	5	0.96	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4-BROMOPHENYL PHENYL ETHER		UJ	ug/l	n	5	0.99	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	FLUORANTHENE	0.8		ug/l	y	0.2	0.04	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	ANTHRACENE	0.18	J	ug/l	n	0.2	0.049	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	BENZO(GHI)PERYLENE		UJ	ug/l	n	0.25	0.025	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	FLUORENE	0.29		ug/l	y	0.2	0.024	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	PHENANTHRENE	0.97		ug/l	y	0.2	0.031	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	PYRENE	0.59		ug/l	y	0.2	0.046	1
8-GW02D-01	8-Mar-04	L0402219-02	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW02D-01	8-Mar-04	L0402219-02	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW02D-01	8-Mar-04	L0402219-02	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ZINC, TOTAL	0.0524		mg/l	y	0.01	0.00298	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ALUMINUM, DISSOLVED	0.0178	U	mg/l	n	0.05	0.0124	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ANTIMONY, DISSOLVED	0.00077	J	mg/l	n	0.001	0.00022	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ARSENIC, DISSOLVED	0.0025	J	mg/l	y	0.001	0.00034	1

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8-GW05S-01	8-Mar-04	L0402219-03	6020A	BARIUM, DISSOLVED	0.022		mg/l	y	0.002	0.00038	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CALCIUM, DISSOLVED	132		mg/l	y	10	10	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CHROMIUM, DISSOLVED	0.00058	J	mg/l	n	0.002	0.00031	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	COBALT, DISSOLVED	0.00021	U	mg/l	n	0.001	0.00017	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	COPPER, DISSOLVED	0.00326	U	mg/l	n	0.005	0.00172	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	IRON, DISSOLVED	0.55		mg/l	y	0.1	0.0191	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	LEAD, DISSOLVED	0.00054	J	mg/l	n	0.001	0.00028	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MAGNESIUM, DISSOLVED	412		mg/l	y	10	0.178	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MANGANESE, DISSOLVED	0.0101		mg/l	y	0.001	0.0003	1
8-GW05S-01	8-Mar-04	L0402219-03	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MOLYBDENUM, DISSOLVED	0.00381	J	mg/l	n	0.005	0.0003	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	NICKEL, DISSOLVED	0.0032		mg/l	y	0.001	0.00024	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	POTASSIUM, DISSOLVED	129		mg/l	y	10	0.376	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SELENIUM, DISSOLVED	0.00818	J	mg/l	n	0.01	0.00298	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SODIUM, DISSOLVED	3260		mg/l	y	100	0.906	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	VANADIUM, DISSOLVED	0.00079	J	mg/l	n	0.001	0.0003	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ZINC, DISSOLVED	0.0384		mg/l	y	0.01	0.00298	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW05S-01	8-Mar-04	L0402219-03	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW05S-01	8-Mar-04	L0402219-03	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	BENZO(GHI)PERYLENE		UJ	ug/l	n	0.25	0.025	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
8-GW05S-01	8-Mar-04	L0402219-03	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW05S-01	8-Mar-04	L0402219-03	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW05S-01	8-Mar-04	L0402219-03	4500NO3-F	NITROGEN, NITRATE	0.42		mg/l	y	0.1	0.006	1
8-GW05S-01	8-Mar-04	L0402219-03	9038	SULFATE	710		mg/l	y	250	36	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW05S-01	8-Mar-04	L0402219-03	2340B	HARDNESS	2000		mg CaCO3	y	66	0.66	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ALUMINUM, TOTAL	0.0303	J	mg/l	n	0.05	0.0124	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ANTIMONY, TOTAL	0.00077	J	mg/l	n	0.001	0.00022	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	ARSENIC, TOTAL	0.002	J	mg/l	y	0.001	0.00034	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	BARIUM, TOTAL	0.0212		mg/l	y	0.002	0.00038	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CADMIUM, TOTAL	0.00048	J	mg/l	n	0.001	0.00034	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CALCIUM, TOTAL	130		mg/l	y	10	10	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	CHROMIUM, TOTAL	0.0023		mg/l	y	0.002	0.00031	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	COBALT, TOTAL	0.0003	U	mg/l	n	0.001	0.00017	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	COPPER, TOTAL	0.0201	J	mg/l	y	0.005	0.00172	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	IRON, TOTAL	0.578		mg/l	y	0.1	0.0191	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	LEAD, TOTAL	0.0031		mg/l	y	0.001	0.00028	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MAGNESIUM, TOTAL	395		mg/l	y	10	0.178	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MANGANESE, TOTAL	0.0102		mg/l	y	0.001	0.0003	1
8-GW05S-01	8-Mar-04	L0402219-03	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	MOLYBDENUM, TOTAL	0.00381	J	mg/l	n	0.005	0.0003	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	NICKEL, TOTAL	0.0045		mg/l	y	0.001	0.00024	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	POTASSIUM, TOTAL	123		mg/l	y	10	0.376	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SELENIUM, TOTAL	0.011		mg/l	y	0.01	0.00298	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	SODIUM, TOTAL	3250		mg/l	y	100	0.906	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW05S-01	8-Mar-04	L0402219-03	6020A	VANADIUM, TOTAL	0.0011		mg/l	y	0.001	0.0003	1
8-TB01	9-Mar-04	L0402219-04	8260B	METHYLENE CHLORIDE	0.58	J	ug/l	n	5	0.37	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-TB01	9-Mar-04	L0402219-04	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-TB01	9-Mar-04	L0402219-04	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-TB01	9-Mar-04	L0402219-04	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-TB01	9-Mar-04	L0402219-04	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-TB01	9-Mar-04	L0402219-04	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-TB01	9-Mar-04	L0402219-04	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-TB01	9-Mar-04	L0402219-04	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-TB01	9-Mar-04	L0402219-04	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-TB01	9-Mar-04	L0402219-04	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-TB01	9-Mar-04	L0402219-04	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-TB01	9-Mar-04	L0402219-04	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-TB01	9-Mar-04	L0402219-04	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-TB01	9-Mar-04	L0402219-04	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-TB01	9-Mar-04	L0402219-04	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-TB01	9-Mar-04	L0402219-04	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-TB01	9-Mar-04	L0402219-04	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-TB01	9-Mar-04	L0402219-04	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-TB01	9-Mar-04	L0402219-04	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-TB01	9-Mar-04	L0402219-04	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-TB01	9-Mar-04	L0402219-04	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-TB01	9-Mar-04	L0402219-04	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-TB01	9-Mar-04	L0402219-04	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-TB01	9-Mar-04	L0402219-04	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-TB01	9-Mar-04	L0402219-04	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1

Appendix E
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Round 9 - Groundwater Monitoring Report
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Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-TB01	9-Mar-04	L0402219-04	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-TB01	9-Mar-04	L0402219-04	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-TB01	9-Mar-04	L0402219-04	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-TB01	9-Mar-04	L0402219-04	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-TB01	9-Mar-04	L0402219-04	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-TB01	9-Mar-04	L0402219-04	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-TB01	9-Mar-04	L0402219-04	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-TB01	9-Mar-04	L0402219-04	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-TB01	9-Mar-04	L0402219-04	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-TB01	9-Mar-04	L0402219-04	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-TB01	9-Mar-04	L0402219-04	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-TB01	9-Mar-04	L0402219-04	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-TB01	9-Mar-04	L0402219-04	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-TB01	9-Mar-04	L0402219-04	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-TB01	9-Mar-04	L0402219-04	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB01	9-Mar-04	L0402219-04	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-TB01	9-Mar-04	L0402219-04	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-TB01	9-Mar-04	L0402219-04	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-TB01	9-Mar-04	L0402219-04	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-TB01	9-Mar-04	L0402219-04	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-TB01	9-Mar-04	L0402219-04	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-TB01	9-Mar-04	L0402219-04	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW02S-01	10-Mar-04	L0402277-01	4500NO3-F	NITROGEN, NITRATE	0.15		mg/l	y	0.1	0.006	1
8-GW02S-01	10-Mar-04	L0402277-01	9038	SULFATE	7.3	J	mg/l	n	10	1.4	1
8-GW02S-01	10-Mar-04	L0402277-01	2340B	HARDNESS	230		mg CaCO3	y	6.6	0.66	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ALUMINUM, TOTAL	0.049	J	mg/l	n	0.05	0.0124	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ANTIMONY, TOTAL	0.00038	J	mg/l	n	0.001	0.00022	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ARSENIC, TOTAL	0.00082	J	mg/l	n	0.001	0.00034	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	BARIUM, TOTAL	0.3472		mg/l	y	0.002	0.00038	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CALCIUM, TOTAL	37.6		mg/l	y	1	1	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CHROMIUM, TOTAL	0.00104	J	mg/l	n	0.002	0.00031	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	COBALT, TOTAL	0.00017	U	mg/l	n	0.001	0.00017	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	COPPER, TOTAL	0.00187	UJ	mg/l	n	0.005	0.00172	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	IRON, TOTAL	0.765		mg/l	y	0.1	0.0191	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	LEAD, TOTAL	0.002		mg/l	y	0.001	0.00028	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MAGNESIUM, TOTAL	32.7		mg/l	y	1	0.0178	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MANGANESE, TOTAL	0.1166		mg/l	y	0.001	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MOLYBDENUM, TOTAL	0.0076		mg/l	y	0.005	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	NICKEL, TOTAL	0.00074	J	mg/l	n	0.001	0.00024	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	POTASSIUM, TOTAL	22.5		mg/l	y	1	0.0376	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SODIUM, TOTAL	254		mg/l	y	10	0.0906	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	VANADIUM, TOTAL	0.0013		mg/l	y	0.001	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ZINC, TOTAL	0.018	J	mg/l	y	0.01	0.00298	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ALUMINUM, DISSOLVED	0.0353	J	mg/l	n	0.05	0.0124	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ANTIMONY, DISSOLVED	0.00059	J	mg/l	n	0.001	0.00022	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ARSENIC, DISSOLVED	0.0011	J	mg/l	y	0.001	0.00034	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	BARIUM, DISSOLVED	0.3961		mg/l	y	0.002	0.00038	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CALCIUM, DISSOLVED	37.3		mg/l	y	1	1	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	CHROMIUM, DISSOLVED	0.00048	J	mg/l	n	0.002	0.00031	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	COBALT, DISSOLVED	0.00035	J	mg/l	n	0.001	0.00017	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	IRON, DISSOLVED	0.172		mg/l	y	0.1	0.0191	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	LEAD, DISSOLVED	0.00046	J	mg/l	n	0.001	0.00028	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MAGNESIUM, DISSOLVED	33.7		mg/l	y	1	0.0178	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MANGANESE, DISSOLVED	0.1045		mg/l	y	0.001	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	MOLYBDENUM, DISSOLVED	0.0085		mg/l	y	0.005	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	NICKEL, DISSOLVED	0.00087	J	mg/l	n	0.001	0.00024	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	POTASSIUM, DISSOLVED	22.7		mg/l	y	1	0.0376	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	SODIUM, DISSOLVED	245		mg/l	y	10	0.0906	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	VANADIUM, DISSOLVED	0.00034	U	mg/l	n	0.001	0.0003	1
8-GW02S-01	10-Mar-04	L0402277-01	6020A	ZINC, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BENZENE	3.8		ug/l	y	0.5	0.29	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TOLUENE	2.5		ug/l	y	0.75	0.31	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	ETHYLBENZENE	76		ug/l	y	0.5	0.28	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	VINYL CHLORIDE	0.51	J	ug/l	n	1	0.27	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,4-DICHLOROBENZENE	0.66	J	ug/l	n	2.5	0.23	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	METHYL TERT BUTYL ETHER	0.49	J	ug/l	n	1	0.12	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	P/M-XYLENE	92		ug/l	y	0.5	0.39	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	O-XYLENE	55		ug/l	y	0.5	0.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CIS-1,2-DICHLOROETHENE	0.45	J	ug/l	n	0.5	0.18	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	DICHLORODIFLUOROMETHANE	3.8	J	ug/l	n	5	0.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	N-BUTYLBENZENE	4.1		ug/l	y	0.5	0.41	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	SEC-BUTYLBENZENE	3.1		ug/l	y	0.5	0.4	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	TERT-BUTYLBENZENE	1.2	U	ug/l	n	2.5	0.29	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	ISOPROPYLBENZENE	9		ug/l	y	0.5	0.26	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	P-ISOPROPYLTOLUENE	14		ug/l	y	0.5	0.33	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	NAPHTHALENE	28		ug/l	y	2.5	0.41	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	N-PROPYLBENZENE	8.4		ug/l	y	0.5	0.32	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,3,5-TRIMETHYLBENZENE	18		ug/l	y	2.5	0.27	1
8-GW02S-01	10-Mar-04	L0402277-01	8260B	1,2,4-TRIMETHYLBENZENE	66		ug/l	y	2.5	0.25	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02S-01	10-Mar-04	L0402277-01	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4-DIMETHYLPHENOL	21		ug/l	y	10	3.1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C	CARBAZOLE	7.4		ug/l	y	5	1.6	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	ACENAPHTHENE	5		ug/l	y	0.2	0.036	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	FLUORANTHENE	2.2		ug/l	y	0.2	0.04	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	NAPHTHALENE	10		ug/l	y	0.2	0.031	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	BENZO(A)ANTHRACENE	0.17	J	ug/l	n	0.2	0.038	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	BENZO(B)FLUORANTHENE	0.078	J	ug/l	n	0.2	0.05	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	BENZO(K)FLUORANTHENE	0.055	J	ug/l	n	0.2	0.036	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	CHRYSENE	0.17	J	ug/l	n	0.2	0.024	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	ANTHRACENE	1		ug/l	y	0.2	0.049	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	FLUORENE	2.4		ug/l	y	0.2	0.024	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	PHENANTHRENE	3.6		ug/l	y	0.2	0.031	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	PYRENE	1.5		ug/l	y	0.2	0.046	1
8-GW02S-01	10-Mar-04	L0402277-01	8270C-SIM	2-METHYLNAPHTHALENE	1.2		ug/l	y	0.2	0.036	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW02S-01	10-Mar-04	L0402277-01	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW02S-01	10-Mar-04	L0402277-01	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	HEXACHLOROBENZENE	0.197	J	ug/l	n	0.2	0.002	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW02S-01	10-Mar-04	L0402277-01	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	4500NO3-F	NITROGEN, NITRATE	11		mg/l	y	0.5	0.006	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	9038	SULFATE	15		mg/l	y	10	1.4	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	2340B	HARDNESS	160		mg CaCO3	y	6.6	0.66	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ALUMINUM, TOTAL	0.228		mg/l	y	0.05	0.0124	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ANTIMONY, TOTAL	0.00026	U	mg/l	n	0.001	0.00022	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ARSENIC, TOTAL	0.00046	J	mg/l	n	0.001	0.00034	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	BARIUM, TOTAL	0.0512		mg/l	y	0.002	0.00038	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	BERYLLIUM, TOTAL	0.00017	U	mg/l	n	0.001	0.00015	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CALCIUM, TOTAL	47.4		mg/l	y	1	1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CHROMIUM, TOTAL	0.00087	J	mg/l	n	0.002	0.00031	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	COBALT, TOTAL	0.00072	J	mg/l	n	0.001	0.00017	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	COPPER, TOTAL	0.00252	J	mg/l	n	0.005	0.00172	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	IRON, TOTAL	0.434		mg/l	y	0.1	0.0191	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	LEAD, TOTAL	0.00063	J	mg/l	n	0.001	0.00028	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MAGNESIUM, TOTAL	10.2		mg/l	y	1	0.0178	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MANGANESE, TOTAL	0.0715		mg/l	y	0.001	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MOLYBDENUM, TOTAL	0.0008	J	mg/l	n	0.005	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	NICKEL, TOTAL	0.002		mg/l	y	0.001	0.00024	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	POTASSIUM, TOTAL	3.78		mg/l	y	1	0.0376	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SODIUM, TOTAL	18.2		mg/l	y	10	0.0906	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	VANADIUM, TOTAL	0.0015		mg/l	y	0.001	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ZINC, TOTAL	0.0125	J	mg/l	y	0.01	0.00298	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ALUMINUM, DISSOLVED	0.0436	J	mg/l	n	0.05	0.0124	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ANTIMONY, DISSOLVED	0.00034	U	mg/l	n	0.001	0.00022	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ARSENIC, DISSOLVED		UJ	mg/l	n	0.001	0.00034	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	BARIUM, DISSOLVED	0.0502		mg/l	y	0.002	0.00038	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CALCIUM, DISSOLVED	49.1		mg/l	y	1	1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	CHROMIUM, DISSOLVED	0.00034	U	mg/l	n	0.002	0.00031	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	COBALT, DISSOLVED	0.00035	J	mg/l	n	0.001	0.00017	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	IRON, DISSOLVED	0.0851	J	mg/l	n	0.1	0.0191	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	LEAD, DISSOLVED	0.00051	J	mg/l	n	0.001	0.00028	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MAGNESIUM, DISSOLVED	10.2		mg/l	y	1	0.0178	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MANGANESE, DISSOLVED	0.0331		mg/l	y	0.001	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	MOLYBDENUM, DISSOLVED	0.00147	J	mg/l	n	0.005	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	NICKEL, DISSOLVED	0.0019		mg/l	y	0.001	0.00024	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	POTASSIUM, DISSOLVED	3.74		mg/l	y	1	0.0376	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	SODIUM, DISSOLVED	17.5		mg/l	y	10	0.0906	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	VANADIUM, DISSOLVED	0.00063	J	mg/l	n	0.001	0.0003	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	6020A	ZINC, DISSOLVED	0.00461	U	mg/l	n	0.01	0.00298	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1-DICHLOROETHANE	0.3	J	ug/l	n	0.75	0.19	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TETRACHLOROETHENE	0.51		ug/l	y	0.5	0.43	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	METHYL TERT BUTYL ETHER	2.9		ug/l	y	1	0.12	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GWHNUS23-01	10-Mar-04	L0402277-02	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GWHNUS23-01	10-Mar-04	L0402277-02	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	4500NO3-F	NITROGEN, NITRATE	0.032	J	mg/l	n	0.1	0.006	1
8-GW06S-01	10-Mar-04	L0402277-03	9038	SULFATE	1.6	J	mg/l	n	10	1.4	1
8-GW06S-01	10-Mar-04	L0402277-03	2340B	HARDNESS	190		mg CaCO3	y	6.6	0.66	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ALUMINUM, TOTAL	0.0345	J	mg/l	n	0.05	0.0124	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ANTIMONY, TOTAL	0.00043	J	mg/l	n	0.001	0.00022	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ARSENIC, TOTAL	0.0037	J	mg/l	y	0.001	0.00034	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	BARIUM, TOTAL	0.2692		mg/l	y	0.002	0.00038	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CALCIUM, TOTAL	25.6		mg/l	y	1	1	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CHROMIUM, TOTAL	0.00194	J	mg/l	n	0.002	0.00031	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	COBALT, TOTAL	0.00066	J	mg/l	n	0.001	0.00017	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	COPPER, TOTAL	0.00291	J	mg/l	n	0.005	0.00172	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	IRON, TOTAL	1.38		mg/l	y	0.1	0.0191	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	LEAD, TOTAL	0.0014		mg/l	y	0.001	0.00028	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MAGNESIUM, TOTAL	30.4		mg/l	y	1	0.0178	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MANGANESE, TOTAL	0.104		mg/l	y	0.001	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MOLYBDENUM, TOTAL	0.0644		mg/l	y	0.005	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	NICKEL, TOTAL	0.0031		mg/l	y	0.001	0.00024	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	POTASSIUM, TOTAL	22.7		mg/l	y	1	0.0376	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SODIUM, TOTAL	276		mg/l	y	10	0.0906	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	VANADIUM, TOTAL	0.00056	U	mg/l	n	0.001	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ZINC, TOTAL	0.0127	J	mg/l	y	0.01	0.00298	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ALUMINUM, DISSOLVED	0.0451	J	mg/l	n	0.05	0.0124	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ANTIMONY, DISSOLVED	0.00051	J	mg/l	n	0.001	0.00022	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ARSENIC, DISSOLVED	0.0039	J	mg/l	y	0.001	0.00034	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	BARIUM, DISSOLVED	0.274		mg/l	y	0.002	0.00038	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CALCIUM, DISSOLVED	25.8		mg/l	y	1	1	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	CHROMIUM, DISSOLVED		U	mg/l	n	0.002	0.00031	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06S-01	10-Mar-04	L0402277-03	6020A	COBALT, DISSOLVED	0.00071	J	mg/l	n	0.001	0.00017	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	IRON, DISSOLVED	1.29		mg/l	y	0.1	0.0191	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	LEAD, DISSOLVED	0.00037	J	mg/l	n	0.001	0.00028	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MAGNESIUM, DISSOLVED	31.3		mg/l	y	1	0.0178	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MANGANESE, DISSOLVED	0.1059		mg/l	y	0.001	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	MOLYBDENUM, DISSOLVED	0.0662		mg/l	y	0.005	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	NICKEL, DISSOLVED	0.0028		mg/l	y	0.001	0.00024	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	POTASSIUM, DISSOLVED	23.5		mg/l	y	1	0.0376	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	SODIUM, DISSOLVED	276		mg/l	y	10	0.0906	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	VANADIUM, DISSOLVED	0.00035	J	mg/l	n	0.001	0.0003	1
8-GW06S-01	10-Mar-04	L0402277-03	6020A	ZINC, DISSOLVED	0.00388	U	mg/l	n	0.01	0.00298	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BENZENE	1.1		ug/l	y	0.5	0.29	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	ETHYLBENZENE	6		ug/l	y	0.5	0.28	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,4-DICHLOROBENZENE	0.45	J	ug/l	n	2.5	0.23	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	P/M-XYLENE	1.3		ug/l	y	0.5	0.39	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	O-XYLENE	1.7	U	ug/l	y	0.5	0.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06S-01	10-Mar-04	L0402277-03	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	ISOPROPYLBENZENE	0.93	U	ug/l	y	0.5	0.26	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	NAPHTHALENE	6.1		ug/l	y	2.5	0.41	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	N-PROPYLBENZENE	0.39	J	ug/l	n	0.5	0.32	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW06S-01	10-Mar-04	L0402277-03	8260B	1,2,4-TRIMETHYLBENZENE	0.53	U	ug/l	n	2.5	0.25	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4-DIMETHYLPHENOL	6.2	J	ug/l	n	10	3.1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	ACENAPHTHENE	0.74		ug/l	y	0.2	0.036	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	FLUORANTHENE	0.17	J	ug/l	n	0.2	0.04	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	NAPHTHALENE	2.2		ug/l	y	0.2	0.031	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	BENZO(A)ANTHRACENE	0.07	J	ug/l	n	0.2	0.038	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	CHRYSENE	0.065	J	ug/l	n	0.2	0.024	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	ANTHRACENE	0.13	J	ug/l	n	0.2	0.049	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	PYRENE	0.15	J	ug/l	n	0.2	0.046	1
8-GW06S-01	10-Mar-04	L0402277-03	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW06S-01	10-Mar-04	L0402277-03	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW06S-01	10-Mar-04	L0402277-03	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	VANADIUM, DISSOLVED		U	mg/l	n	0.001	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ZINC, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CHLOROBENZENE	0.4	J	ug/l	n	0.5	0.32	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BENZENE	0.34	J	ug/l	n	0.5	0.29	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	ETHYLBENZENE	0.58		ug/l	y	0.5	0.28	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	P/M-XYLENE	2.2		ug/l	y	0.5	0.39	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	O-XYLENE	0.31	U	ug/l	n	0.5	0.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW07S-01	10-Mar-04	L0402277-04	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	ISOPROPYLBENZENE	0.46	U	ug/l	n	0.5	0.26	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	NAPHTHALENE	3.9		ug/l	y	2.5	0.41	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	N-PROPYLBENZENE	0.32	J	ug/l	n	0.5	0.32	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW07S-01	10-Mar-04	L0402277-04	8260B	1,2,4-TRIMETHYLBENZENE	0.91	U	ug/l	n	2.5	0.25	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	ACENAPHTHENE	3.4		ug/l	y	0.2	0.036	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	FLUORANTHENE	1.4		ug/l	y	0.2	0.04	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	NAPHTHALENE	0.88		ug/l	y	0.2	0.031	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	CHRYSENE	0.05	J	ug/l	n	0.2	0.024	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	ANTHRACENE	0.24		ug/l	y	0.2	0.049	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	FLUORENE	0.82		ug/l	y	0.2	0.024	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	PHENANTHRENE	0.57		ug/l	y	0.2	0.031	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	PYRENE	0.74		ug/l	y	0.2	0.046	1
8-GW07S-01	10-Mar-04	L0402277-04	8270C-SIM	2-METHYLNAPHTHALENE	0.13	J	ug/l	n	0.2	0.036	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW07S-01	10-Mar-04	L0402277-04	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW07S-01	10-Mar-04	L0402277-04	4500NO3-F	NITROGEN, NITRATE	0.066	J	mg/l	n	0.1	0.006	1
8-GW07S-01	10-Mar-04	L0402277-04	9038	SULFATE	1.8	J	mg/l	n	10	1.4	1
8-GW07S-01	10-Mar-04	L0402277-04	2340B	HARDNESS	180		mg CaCO3	y	6.6	0.66	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ALUMINUM, TOTAL	0.0291	J	mg/l	n	0.05	0.0124	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ANTIMONY, TOTAL		U	mg/l	n	0.001	0.00022	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ARSENIC, TOTAL	0.0014	J	mg/l	y	0.001	0.00034	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	BARIUM, TOTAL	0.2742		mg/l	y	0.001	0.00038	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CALCIUM, TOTAL	48.8		mg/l	y	1	1	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CHROMIUM, TOTAL	0.00036	U	mg/l	n	0.001	0.00031	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	COBALT, TOTAL	0.00019	U	mg/l	n	0.001	0.00017	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	COPPER, TOTAL	0.00492	J	mg/l	n	0.005	0.00172	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	IRON, TOTAL	8.97		mg/l	y	0.1	0.0191	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	LEAD, TOTAL	0.00045	J	mg/l	n	0.001	0.00028	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MAGNESIUM, TOTAL	14.8		mg/l	y	0.1	0.0178	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MANGANESE, TOTAL	0.4258		mg/l	y	0.001	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MOLYBDENUM, TOTAL	0.0018		mg/l	y	0.001	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	NICKEL, TOTAL	0.00045	J	mg/l	n	0.001	0.00024	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	POTASSIUM, TOTAL	13		mg/l	y	1	0.0376	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SODIUM, TOTAL	36.1		mg/l	y	1	0.0906	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	VANADIUM, TOTAL	0.00035	U	mg/l	n	0.001	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ZINC, TOTAL	0.00859	J	mg/l	n	0.01	0.00298	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ALUMINUM, DISSOLVED	0.0324	U	mg/l	n	0.05	0.0124	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ANTIMONY, DISSOLVED	0.00029	U	mg/l	n	0.001	0.00022	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	ARSENIC, DISSOLVED	0.00087	J	mg/l	n	0.001	0.00034	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	BARIUM, DISSOLVED	0.2858		mg/l	y	0.002	0.00038	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CALCIUM, DISSOLVED	50		mg/l	y	1	1	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	CHROMIUM, DISSOLVED		U	mg/l	n	0.002	0.00031	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	COBALT, DISSOLVED	0.00023	U	mg/l	n	0.001	0.00017	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	IRON, DISSOLVED	9.08		mg/l	y	0.1	0.0191	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	LEAD, DISSOLVED		U	mg/l	n	0.001	0.00028	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MAGNESIUM, DISSOLVED	15.5		mg/l	y	1	0.0178	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MANGANESE, DISSOLVED	0.4387		mg/l	y	0.001	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	MOLYBDENUM, DISSOLVED	0.00231	J	mg/l	n	0.005	0.0003	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	NICKEL, DISSOLVED	0.00045	J	mg/l	n	0.001	0.00024	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	POTASSIUM, DISSOLVED	13.7		mg/l	y	1	0.0376	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	SODIUM, DISSOLVED	37.1		mg/l	y	10	0.0906	1
8-GW07S-01	10-Mar-04	L0402277-04	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	PYRENE	0.81		ug/l	y	0.2	0.046	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	2-METHYLNAPHTHALENE	5.1		ug/l	y	0.2	0.036	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW03-01	10-Mar-04	L0402277-05	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW03-01	10-Mar-04	L0402277-05	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW03-01	10-Mar-04	L0402277-05	4500NO3-F	NITROGEN, NITRATE	0.0082	J	mg/l	n	0.1	0.006	1
8-GW03-01	10-Mar-04	L0402277-05	9038	SULFATE	2.1	J	mg/l	n	10	1.4	1
8-GW03-01	10-Mar-04	L0402277-05	2340B	HARDNESS	240		mg CaCO3	y	6.6	0.66	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ALUMINUM, TOTAL	0.0487	J	mg/l	n	0.05	0.0124	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ANTIMONY, TOTAL	0.00045	J	mg/l	n	0.001	0.00022	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ARSENIC, TOTAL	0.00087	J	mg/l	n	0.001	0.00034	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	BARIUM, TOTAL	0.6048		mg/l	y	0.002	0.00038	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	BERYLLIUM, TOTAL	0.00022	U	mg/l	n	0.001	0.00015	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CALCIUM, TOTAL	35.3		mg/l	y	1	1	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CHROMIUM, TOTAL	0.00073	J	mg/l	n	0.002	0.00031	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	COBALT, TOTAL	0.00032	U	mg/l	n	0.001	0.00017	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW03-01	10-Mar-04	L0402277-05	6020A	COPPER, TOTAL	0.0055	J	mg/l	y	0.005	0.00172	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	IRON, TOTAL	1.03		mg/l	y	0.1	0.0191	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	LEAD, TOTAL	0.0036		mg/l	y	0.001	0.00028	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MAGNESIUM, TOTAL	37.5		mg/l	y	1	0.0178	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MANGANESE, TOTAL	0.0775		mg/l	y	0.001	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MOLYBDENUM, TOTAL	0.0114		mg/l	y	0.005	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	NICKEL, TOTAL	0.00068	J	mg/l	n	0.001	0.00024	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	POTASSIUM, TOTAL	21.4		mg/l	y	1	0.0376	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SODIUM, TOTAL	304		mg/l	y	10	0.0906	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	VANADIUM, TOTAL	0.0009	U	mg/l	n	0.001	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ZINC, TOTAL	0.0086	J	mg/l	n	0.01	0.00298	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ALUMINUM, DISSOLVED	0.021	U	mg/l	n	0.05	0.0124	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ANTIMONY, DISSOLVED	0.00043	J	mg/l	n	0.001	0.00022	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ARSENIC, DISSOLVED	0.00082	J	mg/l	n	0.001	0.00034	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	BARIUM, DISSOLVED	0.5973		mg/l	y	0.002	0.00038	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	BERYLLIUM, DISSOLVED	0.00019	U	mg/l	n	0.001	0.00015	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CALCIUM, DISSOLVED	34.5		mg/l	y	1	1	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	CHROMIUM, DISSOLVED	0.00033	U	mg/l	n	0.002	0.00031	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	COBALT, DISSOLVED	0.00031	U	mg/l	n	0.001	0.00017	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	COPPER, DISSOLVED	0.0051		mg/l	y	0.005	0.00172	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	IRON, DISSOLVED	0.639		mg/l	y	0.1	0.0191	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	LEAD, DISSOLVED	0.00033	J	mg/l	n	0.001	0.00028	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MAGNESIUM, DISSOLVED	37.2		mg/l	y	1	0.0178	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MANGANESE, DISSOLVED	0.0727		mg/l	y	0.001	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	MOLYBDENUM, DISSOLVED	0.0117		mg/l	y	0.005	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	NICKEL, DISSOLVED	0.00075	J	mg/l	n	0.001	0.00024	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	POTASSIUM, DISSOLVED	21.2		mg/l	y	1	0.0376	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	SODIUM, DISSOLVED	302		mg/l	y	10	0.0906	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	VANADIUM, DISSOLVED	0.00035	J	mg/l	n	0.001	0.0003	1
8-GW03-01	10-Mar-04	L0402277-05	6020A	ZINC, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	METHYLENE CHLORIDE		U	ug/l	n	10	0.74	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1-DICHLOROETHANE		U	ug/l	n	1.5	0.38	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CHLOROFORM		U	ug/l	n	1.5	0.28	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CARBON TETRACHLORIDE		U	ug/l	n	1	0.76	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	3.5	0.48	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	1	0.38	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	1.5	0.32	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TETRACHLOROETHENE		U	ug/l	n	1	0.86	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CHLOROBENZENE	0.84	J	ug/l	n	1	0.64	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	5	0.58	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2-DICHLOROETHANE		U	ug/l	n	1	0.28	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	1	0.5	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BROMODICHLOROMETHANE		U	ug/l	n	1	0.48	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	1	0.48	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW03-01	10-Mar-04	L0402277-05	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	1	0.26	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	5	0.68	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BROMOFORM		U	ug/l	n	4	2.2	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	1	0.58	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BENZENE	1.7		ug/l	y	1	0.58	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TOLUENE	2.5		ug/l	y	1.5	0.62	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	ETHYLBENZENE	88		ug/l	y	1	0.56	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CHLOROMETHANE		U	ug/l	n	5	0.24	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BROMOMETHANE		U	ug/l	n	2	0.72	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	VINYL CHLORIDE	1.6	J	ug/l	n	2	0.54	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CHLOROETHANE		U	ug/l	n	2	0.72	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1-DICHLOROETHENE		U	ug/l	n	1	0.76	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	1.5	0.68	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TRICHLOROETHENE		U	ug/l	n	1	0.68	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	5	0.3	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	5	0.4	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,4-DICHLOROBENZENE	0.75	J	ug/l	n	5	0.46	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	2	0.24	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	P/M-XYLENE	88		ug/l	y	1	0.78	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	O-XYLENE	41		ug/l	y	1	0.6	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CIS-1,2-DICHLOROETHENE	1.3		ug/l	y	1	0.36	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	DIBROMOMETHANE		U	ug/l	n	10	0.38	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	10	0.46	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	STYRENE		U	ug/l	n	1	0.88	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	10	0.6	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	ACETONE		U	ug/l	n	10	3	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	CARBON DISULFIDE		U	ug/l	n	10	0.54	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	2-BUTANONE		U	ug/l	n	10	3.3	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	10	0.8	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	2-HEXANONE		U	ug/l	n	10	3.6	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BROMOCHLOROMETHANE		U	ug/l	n	5	0.38	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	5	1.3	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2-DIBROMOETHANE		U	ug/l	n	5	0.46	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	5	0.34	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	1	0.62	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	BROMOBENZENE		U	ug/l	n	5	0.3	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	N-BUTYLBENZENE	3.6		ug/l	y	1	0.82	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	SEC-BUTYLBENZENE	2.4		ug/l	y	1	0.8	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	TERT-BUTYLBENZENE	1	U	ug/l	n	5	0.58	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	O-CHLOROTOLUENE		U	ug/l	n	5	0.48	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	P-CHLOROTOLUENE		U	ug/l	n	5	0.48	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	5	3.2	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	2	0.86	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	ISOPROPYLBENZENE	7.5		ug/l	y	1	0.52	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	P-ISOPROPYLTOLUENE	8.3		ug/l	y	1	0.66	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	NAPHTHALENE	52		ug/l	y	5	0.82	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	N-PROPYLBENZENE	7		ug/l	y	1	0.64	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	5	0.76	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	0.56	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,3,5-TRIMETHYLBENZENE	19		ug/l	y	5	0.54	1
8-GW03-01	10-Mar-04	L0402277-05	8260B	1,2,4-TRIMETHYLBENZENE	68		ug/l	y	5	0.5	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW03-01	10-Mar-04	L0402277-05	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4-DIMETHYLPHENOL	40		ug/l	y	10	3.1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW03-01	10-Mar-04	L0402277-05	8270C	CARBAZOLE	7		ug/l	y	5	1.6	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	ACENAPHTHENE	5		ug/l	y	0.2	0.036	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	FLUORANTHENE	1.2		ug/l	y	0.2	0.04	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	NAPHTHALENE	32		ug/l	y	0.2	0.031	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	BENZO(A)ANTHRACENE	0.12	J	ug/l	n	0.2	0.038	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	BENZO(A)PYRENE	0.06	J	ug/l	n	0.2	0.04	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	BENZO(B)FLUORANTHENE	0.084	J	ug/l	n	0.2	0.05	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	BENZO(K)FLUORANTHENE	0.084	J	ug/l	n	0.2	0.036	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	CHRYSENE	0.15	J	ug/l	n	0.2	0.024	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	ANTHRACENE	1.2		ug/l	y	0.2	0.049	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	FLUORENE	5.2		ug/l	y	0.2	0.024	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	PHENANTHRENE	7.4		ug/l	y	0.2	0.031	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW03-01	10-Mar-04	L0402277-05	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
FD-031004-01	10-Mar-04	L0402277-06	4500NO3-F	NITROGEN, NITRATE	0.0073	J	mg/l	n	0.1	0.006	1
FD-031004-01	10-Mar-04	L0402277-06	9038	SULFATE	1.5	J	mg/l	n	10	1.4	1
FD-031004-01	10-Mar-04	L0402277-06	2340B	HARDNESS	180		mg CaCO3	y	6.6	0.66	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ALUMINUM, TOTAL	0.0187	J	mg/l	n	0.05	0.0124	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ANTIMONY, TOTAL	0.00027	U	mg/l	n	0.001	0.00022	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ARSENIC, TOTAL	0.0012	J	mg/l	y	0.001	0.00034	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	BARIUM, TOTAL	0.2744		mg/l	y	0.002	0.00038	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CALCIUM, TOTAL	48.2		mg/l	y	1	1	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CHROMIUM, TOTAL		U	mg/l	n	0.002	0.00031	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	COBALT, TOTAL	0.00027	U	mg/l	n	0.001	0.00017	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	COPPER, TOTAL		UJ	mg/l	n	0.005	0.00172	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	IRON, TOTAL	8.76		mg/l	y	0.1	0.0191	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	LEAD, TOTAL	0.00048	J	mg/l	n	0.001	0.00028	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MAGNESIUM, TOTAL	14.9		mg/l	y	1	0.0178	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MANGANESE, TOTAL	0.4095		mg/l	y	0.001	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MOLYBDENUM, TOTAL	0.00188	J	mg/l	n	0.005	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	NICKEL, TOTAL	0.00045	J	mg/l	n	0.001	0.00024	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	POTASSIUM, TOTAL	13		mg/l	y	1	0.0376	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	SODIUM, TOTAL	36.5		mg/l	y	10	0.0906	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	VANADIUM, TOTAL		U	mg/l	n	0.001	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ZINC, TOTAL	0.00449	U	mg/l	n	0.01	0.00298	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ALUMINUM, DISSOLVED	0.0157	U	mg/l	n	0.05	0.0124	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ANTIMONY, DISSOLVED	0.00029	U	mg/l	n	0.001	0.00022	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ARSENIC, DISSOLVED	0.0012	J	mg/l	y	0.001	0.00034	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	BARIUM, DISSOLVED	0.2695		mg/l	y	0.002	0.00038	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CALCIUM, DISSOLVED	48		mg/l	y	1	1	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	CHROMIUM, DISSOLVED	0.00034	U	mg/l	n	0.002	0.00031	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	COBALT, DISSOLVED	0.0003	U	mg/l	n	0.001	0.00017	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	IRON, DISSOLVED	8.7		mg/l	y	0.1	0.0191	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	LEAD, DISSOLVED		U	mg/l	n	0.001	0.00028	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MAGNESIUM, DISSOLVED	14.9		mg/l	y	1	0.0178	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MANGANESE, DISSOLVED	0.417		mg/l	y	0.001	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	MOLYBDENUM, DISSOLVED	0.00205	J	mg/l	n	0.005	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	NICKEL, DISSOLVED	0.00051	J	mg/l	n	0.001	0.00024	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	POTASSIUM, DISSOLVED	13.1		mg/l	y	1	0.0376	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031004-01	10-Mar-04	L0402277-06	6020A	SODIUM, DISSOLVED	35.8		mg/l	y	10	0.0906	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	VANADIUM, DISSOLVED		U	mg/l	n	0.001	0.0003	1
FD-031004-01	10-Mar-04	L0402277-06	6020A	ZINC, DISSOLVED		U	mg/l	n	0.01	0.00298	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	METHYLENE CHLORIDE	0.45	U	ug/l	n	5	0.37	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	ETHYLBENZENE	0.33	J	ug/l	n	0.5	0.28	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	P/M-XYLENE	1.2		ug/l	y	0.5	0.39	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	ACETONE		U	ug/l	n	5	1.5	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031004-01	10-Mar-04	L0402277-06	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	NAPHTHALENE	3.5		ug/l	y	2.5	0.41	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
FD-031004-01	10-Mar-04	L0402277-06	8260B	1,2,4-TRIMETHYLBENZENE	0.36	U	ug/l	n	2.5	0.25	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	PHENOL		U	ug/l	n	7	1.2	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
FD-031004-01	10-Mar-04	L0402277-06	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	ACENAPHTHENE	3.7		ug/l	y	0.2	0.036	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	FLUORANTHENE	1.3		ug/l	y	0.2	0.04	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	NAPHTHALENE	0.98		ug/l	y	0.2	0.031	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	CHRYSENE		UJ	ug/l	n	0.2	0.024	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	ANTHRACENE	0.26		ug/l	y	0.2	0.049	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	FLUORENE	0.82		ug/l	y	0.2	0.024	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	PHENANTHRENE	0.58		ug/l	y	0.2	0.031	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	PYRENE	0.71		ug/l	y	0.2	0.046	1
FD-031004-01	10-Mar-04	L0402277-06	8270C-SIM	2-METHYLNAPHTHALENE	0.17	J	ug/l	n	0.2	0.036	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
FD-031004-01	10-Mar-04	L0402277-06	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031004-01	10-Mar-04	L0402277-06	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
FD-031004-01	10-Mar-04	L0402277-06	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	10	6.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BROMOBENZENE		U	ug/l	n	50	3	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	N-BUTYLBENZENE		U	ug/l	n	10	8.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	SEC-BUTYLBENZENE		U	ug/l	n	10	8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TERT-BUTYLBENZENE		U	ug/l	n	50	5.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	O-CHLOROTOLUENE		U	ug/l	n	50	4.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	P-CHLOROTOLUENE		U	ug/l	n	50	4.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	50	32	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	20	8.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	ISOPROPYLBENZENE		U	ug/l	n	10	5.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	10	6.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	NAPHTHALENE		U	ug/l	n	50	8.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	N-PROPYLBENZENE		U	ug/l	n	10	6.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	50	7.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	50	5.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	50	5.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	50	5	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	3,3'-DICHLOROBENZIDINE		U	ug/l	n	50	2.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4-CHLOROANILINE		UJ	ug/l	n	5	1.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
8-GW10S-01	10-Mar-04	L0402277-07	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW10S-01	10-Mar-04	L0402277-07	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	DELTA-BHC		U	ug/l	n	0.02	0.002	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ALPHA-BHC		UJ	ug/l	n	0.02	0.003	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDRIN ALDEHYDE		U	ug/l	n	0.04	0.009	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	ENDOSULFAN SULFATE		U	ug/l	n	0.04	0.009	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW10S-01	10-Mar-04	L0402277-07	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW10S-01	10-Mar-04	L0402277-07	4500NO3-F	NITROGEN, NITRATE	0.41		mg/l	y	0.1	0.006	1
8-GW10S-01	10-Mar-04	L0402277-07	9038	SULFATE	9.4	J	mg/l	n	10	1.4	1
8-GW10S-01	10-Mar-04	L0402277-07	2340B	HARDNESS	38		mg CaCO3	y	6.6	0.66	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ALUMINUM, TOTAL	0.0489	J	mg/l	n	0.05	0.0124	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ANTIMONY, TOTAL		U	mg/l	n	0.001	0.00022	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ARSENIC, TOTAL		UJ	mg/l	n	0.001	0.00034	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	BARIUM, TOTAL	0.0272		mg/l	y	0.002	0.00038	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	BERYLLIUM, TOTAL	0.00016	U	mg/l	n	0.001	0.00015	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CALCIUM, TOTAL	11.4		mg/l	y	1	1	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CHROMIUM, TOTAL	0.00047	U	mg/l	n	0.002	0.00031	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	COBALT, TOTAL	0.0002	U	mg/l	n	0.001	0.00017	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	COPPER, TOTAL	0.00181	UJ	mg/l	n	0.005	0.00172	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	IRON, TOTAL	0.0324	U	mg/l	n	0.1	0.0191	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	LEAD, TOTAL		U	mg/l	n	0.001	0.00028	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MAGNESIUM, TOTAL	2.17		mg/l	y	1	0.0178	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MANGANESE, TOTAL	0.0082		mg/l	y	0.001	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MOLYBDENUM, TOTAL		U	mg/l	n	0.005	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	NICKEL, TOTAL	0.00088	J	mg/l	n	0.001	0.00024	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	POTASSIUM, TOTAL	2.39		mg/l	y	1	0.0376	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SODIUM, TOTAL	44.5		mg/l	y	10	0.0906	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	VANADIUM, TOTAL	0.00036	U	mg/l	n	0.001	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ZINC, TOTAL	0.0318	J	mg/l	y	0.01	0.00298	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ALUMINUM, DISSOLVED	0.0455	J	mg/l	n	0.05	0.0124	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ANTIMONY, DISSOLVED		U	mg/l	n	0.001	0.00022	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ARSENIC, DISSOLVED		UJ	mg/l	n	0.001	0.00034	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	BARIUM, DISSOLVED	0.0263		mg/l	y	0.002	0.00038	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CALCIUM, DISSOLVED	11.3		mg/l	y	1	1	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	CHROMIUM, DISSOLVED	0.00048	J	mg/l	n	0.002	0.00031	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	COBALT, DISSOLVED	0.00021	U	mg/l	n	0.001	0.00017	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	COPPER, DISSOLVED	0.00185	U	mg/l	n	0.005	0.00172	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	IRON, DISSOLVED	0.0342	U	mg/l	n	0.1	0.0191	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	LEAD, DISSOLVED	0.00037	J	mg/l	n	0.001	0.00028	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MAGNESIUM, DISSOLVED	2.21		mg/l	y	1	0.0178	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MANGANESE, DISSOLVED	0.0081		mg/l	y	0.001	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	MOLYBDENUM, DISSOLVED	0.00041	U	mg/l	n	0.005	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	NICKEL, DISSOLVED	0.00099	J	mg/l	n	0.001	0.00024	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	POTASSIUM, DISSOLVED	2.46		mg/l	y	1	0.0376	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	SODIUM, DISSOLVED	42.7		mg/l	y	10	0.0906	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW10S-01	10-Mar-04	L0402277-07	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	VANADIUM, DISSOLVED	0.00039	J	mg/l	n	0.001	0.0003	1
8-GW10S-01	10-Mar-04	L0402277-07	6020A	ZINC, DISSOLVED	0.0266		mg/l	y	0.01	0.00298	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	METHYLENE CHLORIDE	9.1	J	ug/l	n	100	7.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1-DICHLOROETHANE		U	ug/l	n	15	3.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CHLOROFORM		U	ug/l	n	15	2.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CARBON TETRACHLORIDE		U	ug/l	n	10	7.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	35	4.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	10	3.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	15	3.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TETRACHLOROETHENE	490		ug/l	y	10	8.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CHLOROBENZENE		U	ug/l	n	10	6.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	50	5.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2-DICHLOROETHANE		U	ug/l	n	10	2.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	10	5	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BROMODICHLOROMETHANE		U	ug/l	n	10	4.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	10	4.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	10	2.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	50	6.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BROMOFORM		U	ug/l	n	40	22	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	10	5.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BENZENE		U	ug/l	n	10	5.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TOLUENE		U	ug/l	n	15	6.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	ETHYLBENZENE		U	ug/l	n	10	5.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CHLOROMETHANE		U	ug/l	n	50	2.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BROMOMETHANE		U	ug/l	n	20	7.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	VINYL CHLORIDE		U	ug/l	n	20	5.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CHLOROETHANE		U	ug/l	n	20	7.2	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,1-DICHLOROETHENE		U	ug/l	n	10	7.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	15	6.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	TRICHLOROETHENE		U	ug/l	n	10	6.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	50	3	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	50	4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	50	4.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	20	2.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	P/M-XYLENE		U	ug/l	n	10	7.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	O-XYLENE		U	ug/l	n	10	6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	10	3.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	DIBROMOMETHANE		U	ug/l	n	100	3.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	100	4.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	STYRENE		U	ug/l	n	10	8.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	100	6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	ACETONE		U	ug/l	n	100	30	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	CARBON DISULFIDE		U	ug/l	n	100	5.4	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	2-BUTANONE		U	ug/l	n	100	33	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	100	8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	2-HEXANONE		U	ug/l	n	100	36	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	BROMOCHLOROMETHANE		U	ug/l	n	50	3.8	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	50	13	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,2-DIBROMOETHANE		U	ug/l	n	50	4.6	1
8-GW10S-01	10-Mar-04	L0402277-07	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	50	3.4	1
8-TB02	10-Mar-04	L0402277-08	8260B	METHYLENE CHLORIDE	0.4	U	ug/l	n	5	0.37	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-TB02	10-Mar-04	L0402277-08	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-TB02	10-Mar-04	L0402277-08	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-TB02	10-Mar-04	L0402277-08	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-TB02	10-Mar-04	L0402277-08	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-TB02	10-Mar-04	L0402277-08	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-TB02	10-Mar-04	L0402277-08	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-TB02	10-Mar-04	L0402277-08	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-TB02	10-Mar-04	L0402277-08	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-TB02	10-Mar-04	L0402277-08	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-TB02	10-Mar-04	L0402277-08	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-TB02	10-Mar-04	L0402277-08	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-TB02	10-Mar-04	L0402277-08	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-TB02	10-Mar-04	L0402277-08	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-TB02	10-Mar-04	L0402277-08	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-TB02	10-Mar-04	L0402277-08	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-TB02	10-Mar-04	L0402277-08	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-TB02	10-Mar-04	L0402277-08	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-TB02	10-Mar-04	L0402277-08	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-TB02	10-Mar-04	L0402277-08	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-TB02	10-Mar-04	L0402277-08	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-TB02	10-Mar-04	L0402277-08	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-TB02	10-Mar-04	L0402277-08	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-TB02	10-Mar-04	L0402277-08	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-TB02	10-Mar-04	L0402277-08	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-TB02	10-Mar-04	L0402277-08	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-TB02	10-Mar-04	L0402277-08	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-TB02	10-Mar-04	L0402277-08	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-TB02	10-Mar-04	L0402277-08	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-TB02	10-Mar-04	L0402277-08	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-TB02	10-Mar-04	L0402277-08	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-TB02	10-Mar-04	L0402277-08	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-TB02	10-Mar-04	L0402277-08	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-TB02	10-Mar-04	L0402277-08	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-TB02	10-Mar-04	L0402277-08	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-TB02	10-Mar-04	L0402277-08	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-TB02	10-Mar-04	L0402277-08	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB02	10-Mar-04	L0402277-08	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-TB02	10-Mar-04	L0402277-08	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-TB02	10-Mar-04	L0402277-08	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-TB02	10-Mar-04	L0402277-08	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-TB02	10-Mar-04	L0402277-08	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-TB02	10-Mar-04	L0402277-08	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-TB02	10-Mar-04	L0402277-08	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-TB02	10-Mar-04	L0402277-08	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-TB02	10-Mar-04	L0402277-08	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CARBON TETRACHLORIDE		U	ug/l	n	20	15	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	70	9.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	20	7.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	30	6.4	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TETRACHLOROETHENE	3200		ug/l	y	20	17	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CHLOROBENZENE		U	ug/l	n	20	13	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	100	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2-DICHLOROETHANE		U	ug/l	n	20	5.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	20	10	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BROMODICHLOROMETHANE		U	ug/l	n	20	9.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	20	9.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	20	5.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	100	14	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BROMOFORM		U	ug/l	n	80	44	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	20	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BENZENE		U	ug/l	n	20	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TOLUENE		U	ug/l	n	30	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	ETHYLBENZENE		U	ug/l	n	20	11	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CHLOROMETHANE		U	ug/l	n	100	4.8	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BROMOMETHANE		U	ug/l	n	40	14	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	VINYL CHLORIDE		U	ug/l	n	40	11	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CHLOROETHANE		U	ug/l	n	40	14	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1-DICHLOROETHENE		U	ug/l	n	20	15	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	30	14	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TRICHLOROETHENE		U	ug/l	n	20	14	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	100	6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	100	8	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	100	9.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	40	4.8	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	P/M-XYLENE		U	ug/l	n	20	16	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	O-XYLENE		U	ug/l	n	20	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	20	7.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	DIBROMOMETHANE		U	ug/l	n	200	7.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	200	9.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	STYRENE		U	ug/l	n	20	18	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	200	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	ACETONE		U	ug/l	n	200	59	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CARBON DISULFIDE		U	ug/l	n	200	11	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	2-BUTANONE		U	ug/l	n	200	66	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	200	16	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	2-HEXANONE		U	ug/l	n	200	72	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BROMOCHLOROMETHANE		U	ug/l	n	100	7.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	100	25	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2-DIBROMOETHANE		U	ug/l	n	100	9.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	100	6.8	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	20	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	BROMOBENZENE		U	ug/l	n	100	6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	N-BUTYLBENZENE		U	ug/l	n	20	16	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	SEC-BUTYLBENZENE		U	ug/l	n	20	16	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW08D-01	11-Mar-04	L0402313-01	8260B	TERT-BUTYLBENZENE		U	ug/l	n	100	12	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	O-CHLOROTOLUENE		U	ug/l	n	100	9.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	P-CHLOROTOLUENE		U	ug/l	n	100	9.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	100	63	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	40	17	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	ISOPROPYLBENZENE		U	ug/l	n	20	10	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	20	13	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	NAPHTHALENE		U	ug/l	n	100	16	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	N-PROPYLBENZENE		U	ug/l	n	20	13	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	100	15	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	100	11	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	100	11	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	100	10	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	3,3'-DICHLOROBENZIDINE		UJ	ug/l	n	50	2.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4-CHLOROANILINE		U	ug/l	n	5	1.4	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
8-GW08D-01	11-Mar-04	L0402313-01	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW08D-01	11-Mar-04	L0402313-01	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	DELTA-BHC		UJ	ug/l	n	0.02	0.002	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDRIN ALDEHYDE		UJ	ug/l	n	0.04	0.009	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	ENDOSULFAN SULFATE		UJ	ug/l	n	0.04	0.009	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW08D-01	11-Mar-04	L0402313-01	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW08D-01	11-Mar-04	L0402313-01	4500NO3-F	NITROGEN, NITRATE	0.26		mg/l	y	0.1	0.006	1
8-GW08D-01	11-Mar-04	L0402313-01	9038	SULFATE	11		mg/l	y	10	1.4	1
8-GW08D-01	11-Mar-04	L0402313-01	2340B	HARDNESS	46		mg CaCO3	y	6.6	0.66	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ALUMINUM, TOTAL	0.0425	J	mg/l	n	0.05	0.0124	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ANTIMONY, TOTAL		U	mg/l	n	0.001	0.00022	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ARSENIC, TOTAL		UJ	mg/l	n	0.001	0.00034	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	BARIUM, TOTAL	0.0119		mg/l	y	0.002	0.00038	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CALCIUM, TOTAL	14.8		mg/l	y	1	1	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CHROMIUM, TOTAL	0.00031	U	mg/l	n	0.002	0.00031	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	COBALT, TOTAL		U	mg/l	n	0.001	0.00017	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	COPPER, TOTAL		UJ	mg/l	n	0.005	0.00172	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	IRON, TOTAL	0.0529	J	mg/l	n	0.1	0.0191	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	LEAD, TOTAL	0.00028	U	mg/l	n	0.001	0.00028	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MAGNESIUM, TOTAL	2.32		mg/l	y	1	0.0178	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MANGANESE, TOTAL	0.0771		mg/l	y	0.001	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MOLYBDENUM, TOTAL	0.00084	J	mg/l	n	0.005	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	NICKEL, TOTAL	0.00035	U	mg/l	n	0.001	0.00024	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	POTASSIUM, TOTAL	2.94		mg/l	y	1	0.0376	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SODIUM, TOTAL	27.9		mg/l	y	10	0.0906	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	VANADIUM, TOTAL	0.00046	U	mg/l	n	0.001	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ZINC, TOTAL	0.00611	U	mg/l	n	0.01	0.00298	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ALUMINUM, DISSOLVED	0.023	U	mg/l	n	0.05	0.0124	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ANTIMONY, DISSOLVED	0.00024	U	mg/l	n	0.001	0.00022	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ARSENIC, DISSOLVED		UJ	mg/l	n	0.001	0.00034	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	BARIUM, DISSOLVED	0.0121		mg/l	y	0.002	0.00038	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CALCIUM, DISSOLVED	14.8		mg/l	y	1	1	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	CHROMIUM, DISSOLVED	0.00035	J	mg/l	n	0.002	0.00031	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	COBALT, DISSOLVED		U	mg/l	n	0.001	0.00017	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	IRON, DISSOLVED	0.0352	J	mg/l	n	0.1	0.0191	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	LEAD, DISSOLVED	0.00034	J	mg/l	n	0.001	0.00028	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MAGNESIUM, DISSOLVED	2.39		mg/l	y	1	0.0178	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MANGANESE, DISSOLVED	0.0701		mg/l	y	0.001	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	MOLYBDENUM, DISSOLVED	0.00105	J	mg/l	n	0.005	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	NICKEL, DISSOLVED	0.00048	J	mg/l	n	0.001	0.00024	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	POTASSIUM, DISSOLVED	3.04		mg/l	y	1	0.0376	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	SODIUM, DISSOLVED	27.4		mg/l	y	1	0.0906	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	VANADIUM, DISSOLVED	0.00052	J	mg/l	n	0.001	0.0003	1
8-GW08D-01	11-Mar-04	L0402313-01	6020A	ZINC, DISSOLVED	0.00924	U	mg/l	n	0.01	0.00298	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	METHYLENE CHLORIDE	17	U	ug/l	n	200	15	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	1,1-DICHLOROETHANE		U	ug/l	n	30	7.6	1
8-GW08D-01	11-Mar-04	L0402313-01	8260B	CHLOROFORM		U	ug/l	n	30	5.6	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
FD-031104-01	11-Mar-04	L0402313-02	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	DELTA-BHC		UJ	ug/l	n	0.02	0.002	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDRIN ALDEHYDE		UJ	ug/l	n	0.04	0.009	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	ENDOSULFAN SULFATE		UJ	ug/l	n	0.04	0.009	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
FD-031104-01	11-Mar-04	L0402313-02	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
FD-031104-01	11-Mar-04	L0402313-02	4500NO3-F	NITROGEN, NITRATE	0.26		mg/l	y	0.1	0.006	1
FD-031104-01	11-Mar-04	L0402313-02	9038	SULFATE	11		mg/l	y	10	1.4	1
FD-031104-01	11-Mar-04	L0402313-02	2340B	HARDNESS	48		mg CaCO3	y	6.6	0.66	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ALUMINUM, TOTAL	0.0499	J	mg/l	n	0.05	0.0124	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ANTIMONY, TOTAL	0.00022	U	mg/l	n	0.001	0.00022	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ARSENIC, TOTAL		UJ	mg/l	n	0.001	0.00034	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	BARIUM, TOTAL	0.012		mg/l	y	0.002	0.00038	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CALCIUM, TOTAL	15.4		mg/l	y	1	1	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CHROMIUM, TOTAL	0.00051	U	mg/l	n	0.002	0.00031	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	COBALT, TOTAL		U	mg/l	n	0.001	0.00017	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	COPPER, TOTAL		UJ	mg/l	n	0.005	0.00172	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	IRON, TOTAL	0.0558	J	mg/l	n	0.1	0.0191	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	LEAD, TOTAL		U	mg/l	n	0.001	0.00028	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MAGNESIUM, TOTAL	2.41		mg/l	y	1	0.0178	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MANGANESE, TOTAL	0.0802		mg/l	y	0.001	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MOLYBDENUM, TOTAL	0.00088	J	mg/l	n	0.005	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	NICKEL, TOTAL	0.00033	U	mg/l	n	0.001	0.00024	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	POTASSIUM, TOTAL	3.08		mg/l	y	1	0.0376	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SELENIUM, TOTAL		U	mg/l	n	0.01	0.00298	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SODIUM, TOTAL	28.9		mg/l	y	10	0.0906	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	VANADIUM, TOTAL	0.00055	U	mg/l	n	0.001	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ZINC, TOTAL	0.00674	J	mg/l	n	0.01	0.00298	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ALUMINUM, DISSOLVED	0.022	U	mg/l	n	0.05	0.0124	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ANTIMONY, DISSOLVED		U	mg/l	n	0.001	0.00022	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ARSENIC, DISSOLVED		UJ	mg/l	n	0.001	0.00034	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	BARIUM, DISSOLVED	0.0119		mg/l	y	0.002	0.00038	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CALCIUM, DISSOLVED	14.8		mg/l	y	1	1	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	CHROMIUM, DISSOLVED	0.00041	J	mg/l	n	0.002	0.00031	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	COBALT, DISSOLVED		U	mg/l	n	0.001	0.00017	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	COPPER, DISSOLVED		U	mg/l	n	0.005	0.00172	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	IRON, DISSOLVED	0.0352	J	mg/l	n	0.1	0.0191	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	LEAD, DISSOLVED		U	mg/l	n	0.001	0.00028	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MAGNESIUM, DISSOLVED	2.38		mg/l	y	1	0.0178	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MANGANESE, DISSOLVED	0.0691		mg/l	y	0.001	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	MOLYBDENUM, DISSOLVED	0.00108	J	mg/l	n	0.005	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	NICKEL, DISSOLVED	0.00037	J	mg/l	n	0.001	0.00024	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	POTASSIUM, DISSOLVED	3.05		mg/l	y	1	0.0376	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SELENIUM, DISSOLVED		U	mg/l	n	0.01	0.00298	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	SODIUM, DISSOLVED	27		mg/l	y	10	0.0906	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	VANADIUM, DISSOLVED	0.00044	J	mg/l	n	0.001	0.0003	1
FD-031104-01	11-Mar-04	L0402313-02	6020A	ZINC, DISSOLVED	0.00486	U	mg/l	n	0.01	0.00298	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	METHYLENE CHLORIDE	43	U	ug/l	n	500	37	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1-DICHLOROETHANE		U	ug/l	n	75	19	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CHLOROFORM		U	ug/l	n	75	14	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CARBON TETRACHLORIDE		U	ug/l	n	50	38	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	180	24	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	50	19	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	75	16	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TETRACHLOROETHENE	3200		ug/l	y	50	43	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CHLOROBENZENE		U	ug/l	n	50	32	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	250	29	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2-DICHLOROETHANE		U	ug/l	n	50	14	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	50	25	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BROMODICHLOROMETHANE		U	ug/l	n	50	24	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	50	24	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	50	13	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	250	34	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BROMOFORM		U	ug/l	n	200	110	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	50	29	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BENZENE		U	ug/l	n	50	29	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TOLUENE		U	ug/l	n	75	31	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	ETHYLBENZENE		U	ug/l	n	50	28	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CHLOROMETHANE		U	ug/l	n	250	12	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BROMOMETHANE		U	ug/l	n	100	36	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	VINYL CHLORIDE		U	ug/l	n	100	27	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CHLOROETHANE		U	ug/l	n	100	36	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1-DICHLOROETHENE		U	ug/l	n	50	38	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	75	34	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TRICHLOROETHENE		U	ug/l	n	50	34	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	250	15	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	250	20	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	250	23	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	100	12	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	P/M-XYLENE		U	ug/l	n	50	39	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	O-XYLENE		U	ug/l	n	50	30	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	50	18	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	DIBROMOMETHANE		U	ug/l	n	500	19	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	500	23	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	STYRENE		U	ug/l	n	50	44	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	500	30	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	ACETONE		U	ug/l	n	500	150	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	CARBON DISULFIDE		U	ug/l	n	500	27	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	2-BUTANONE		U	ug/l	n	500	170	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	500	40	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	2-HEXANONE		U	ug/l	n	500	180	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BROMOCHLOROMETHANE		U	ug/l	n	250	19	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	250	63	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2-DIBROMOETHANE		U	ug/l	n	250	23	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	250	17	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	50	31	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	BROMOBENZENE		U	ug/l	n	250	15	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	N-BUTYLBENZENE		U	ug/l	n	50	41	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	SEC-BUTYLBENZENE		U	ug/l	n	50	40	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	TERT-BUTYLBENZENE		U	ug/l	n	250	29	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	O-CHLOROTOLUENE		U	ug/l	n	250	24	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	P-CHLOROTOLUENE		U	ug/l	n	250	24	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	250	160	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	100	43	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	ISOPROPYLBENZENE		U	ug/l	n	50	26	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	50	33	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	NAPHTHALENE		U	ug/l	n	250	41	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	N-PROPYLBENZENE		U	ug/l	n	50	32	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	250	38	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	250	28	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	250	27	1
FD-031104-01	11-Mar-04	L0402313-02	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	250	25	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	3,3'-DICHLOROBENZIDINE		UJ	ug/l	n	50	2.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4-CHLOROANILINE		U	ug/l	n	5	1.4	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	PHENOL		U	ug/l	n	7	1.2	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
FD-031104-01	11-Mar-04	L0402313-02	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
FD-031104-01	11-Mar-04	L0402313-02	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW01-01	11-Mar-04	L0402313-03	4500NO3-F	NITROGEN, NITRATE	0.24		mg/l	y	0.1	0.006	1
8-GW01-01	11-Mar-04	L0402313-03	9038	SULFATE	810		mg/l	y	250	36	1
8-GW01-01	11-Mar-04	L0402313-03	2340B	HARDNESS	2300		mg CaCO3	y	66	0.66	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ALUMINUM, TOTAL	0.0266	J	mg/l	n	0.05	0.0124	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ANTIMONY, TOTAL	0.0011		mg/l	y	0.001	0.00022	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ARSENIC, TOTAL	0.0029	J	mg/l	y	0.001	0.00034	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	BARIUM, TOTAL	0.0422		mg/l	y	0.002	0.00038	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	BERYLLIUM, TOTAL		U	mg/l	n	0.001	0.00015	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CADMIUM, TOTAL		U	mg/l	n	0.001	0.00034	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CALCIUM, TOTAL	146		mg/l	y	10	10	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CHROMIUM, TOTAL	0.00041	U	mg/l	n	0.002	0.00031	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	COBALT, TOTAL	0.00031	U	mg/l	n	0.001	0.00017	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	COPPER, TOTAL	0.0122	J	mg/l	y	0.005	0.00172	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	IRON, TOTAL	0.23		mg/l	y	0.1	0.0191	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	LEAD, TOTAL	0.00046	J	mg/l	n	0.001	0.00028	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MAGNESIUM, TOTAL	476		mg/l	y	10	0.178	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MANGANESE, TOTAL	0.0298		mg/l	y	0.001	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	7470A	MERCURY, TOTAL		U	mg/l	n	0.0002	0.000012	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MOLYBDENUM, TOTAL	0.0052		mg/l	y	0.005	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	NICKEL, TOTAL	0.004		mg/l	y	0.001	0.00024	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	POTASSIUM, TOTAL	145		mg/l	y	10	0.376	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SELENIUM, TOTAL	0.013		mg/l	y	0.01	0.00298	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SILVER, TOTAL		U	mg/l	n	0.001	0.00025	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SODIUM, TOTAL	3720		mg/l	y	100	0.906	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	THALLIUM, TOTAL		U	mg/l	n	0.001	0.00026	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	VANADIUM, TOTAL	0.0003	U	mg/l	n	0.001	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ZINC, TOTAL	0.0328		mg/l	y	0.01	0.00298	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ALUMINUM, DISSOLVED	0.0218	U	mg/l	n	0.05	0.0124	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ANTIMONY, DISSOLVED	0.0011		mg/l	y	0.001	0.00022	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ARSENIC, DISSOLVED	0.0017	J	mg/l	y	0.001	0.00034	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	BARIUM, DISSOLVED	0.0408		mg/l	y	0.002	0.00038	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	BERYLLIUM, DISSOLVED		U	mg/l	n	0.001	0.00015	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CADMIUM, DISSOLVED		U	mg/l	n	0.001	0.00034	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CALCIUM, DISSOLVED	138		mg/l	y	10	10	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	CHROMIUM, DISSOLVED	0.0004	J	mg/l	n	0.002	0.00031	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	COBALT, DISSOLVED	0.00028	U	mg/l	n	0.001	0.00017	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	COPPER, DISSOLVED	0.0076		mg/l	y	0.005	0.00172	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	IRON, DISSOLVED	0.195		mg/l	y	0.1	0.0191	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	LEAD, DISSOLVED	0.00039	J	mg/l	n	0.001	0.00028	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MAGNESIUM, DISSOLVED	455		mg/l	y	10	0.178	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MANGANESE, DISSOLVED	0.0284		mg/l	y	0.001	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	7470A	MERCURY, DISSOLVED		U	mg/l	n	0.0002	0.000012	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	MOLYBDENUM, DISSOLVED	0.0051		mg/l	y	0.005	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	NICKEL, DISSOLVED	0.004		mg/l	y	0.001	0.00024	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	POTASSIUM, DISSOLVED	140		mg/l	y	10	0.376	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SELENIUM, DISSOLVED	0.011		mg/l	y	0.01	0.00298	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SILVER, DISSOLVED		U	mg/l	n	0.001	0.00025	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	SODIUM, DISSOLVED	3560		mg/l	y	100	0.906	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	THALLIUM, DISSOLVED		U	mg/l	n	0.001	0.00026	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	VANADIUM, DISSOLVED		U	mg/l	n	0.001	0.0003	1
8-GW01-01	11-Mar-04	L0402313-03	6020A	ZINC, DISSOLVED	0.0296		mg/l	y	0.01	0.00298	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW01-01	11-Mar-04	L0402313-03	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-GW01-01	11-Mar-04	L0402313-03	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	1,2,4-TRICHLOROBENZENE		U	ug/l	n	5	1.3	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	HEXACHLOROBENZENE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	BIS(2-CHLOROETHYL)ETHER		U	ug/l	n	5	1.3	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	1,2-DICHLOROBENZENE		U	ug/l	n	5	1.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	1,3-DICHLOROBENZENE		U	ug/l	n	5	1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	1,4-DICHLOROBENZENE		U	ug/l	n	5	0.96	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	3,3'-DICHLOROBENZIDINE		UJ	ug/l	n	50	2.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4-DINITROTOLUENE		U	ug/l	n	6	0.48	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,6-DINITROTOLUENE		U	ug/l	n	5	0.96	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4-CHLOROPHENYL PHENYL ETHER		U	ug/l	n	5	0.96	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4-BROMOPHENYL PHENYL ETHER		U	ug/l	n	5	0.99	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	BIS(2-CHLOROISOPROPYL)ETHER		U	ug/l	n	5	2.2	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	BIS(2-CHLOROETHOXY)METHANE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	HEXACHLOROBUTADIENE		U	ug/l	n	10	2.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	HEXACHLOROETHANE		U	ug/l	n	5	0.97	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	ISOPHORONE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	NITROBENZENE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	NITROSODIPHENYLAMINE(NDPA)/DPA		U	ug/l	n	15	4.2	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	N-NITROSODI-N-PROPYLAMINE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	BIS(2-ETHYLHEXYL)PHTHALATE		U	ug/l	n	10	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	BUTYL BENZYL PHTHALATE		U	ug/l	n	5	0.67	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	DI-N-BUTYLPHTHALATE		U	ug/l	n	5	0.5	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	DI-N-OCTYLPHTHALATE		U	ug/l	n	5	0.54	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	DIETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	DIMETHYL PHTHALATE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4-CHLOROANILINE		U	ug/l	n	5	1.4	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	3-NITROANILINE		U	ug/l	n	5	1.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4-NITROANILINE		U	ug/l	n	7	1.3	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	DIBENZOFURAN		U	ug/l	n	5	0.92	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4,6-TRICHLOROPHENOL		U	ug/l	n	5	1.2	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	P-CHLORO-M-CRESOL		U	ug/l	n	5	1.5	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2-CHLOROPHENOL		U	ug/l	n	6	1.8	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4-DICHLOROPHENOL		U	ug/l	n	10	2.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4-DIMETHYLPHENOL		U	ug/l	n	10	3.1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2-NITROPHENOL		U	ug/l	n	20	2.3	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4-NITROPHENOL		U	ug/l	n	10	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4-DINITROPHENOL		U	ug/l	n	20	1	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	4,6-DINITRO-O-CRESOL		U	ug/l	n	20	1.4	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	PENTACHLOROPHENOL		U	ug/l	n	20	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	PHENOL		U	ug/l	n	7	1.2	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2-METHYLPHENOL		U	ug/l	n	6	1.5	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	3-METHYLPHENOL/4-METHYLPHENOL		U	ug/l	n	6	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	2,4,5-TRICHLOROPHENOL		U	ug/l	n	5	0.96	1
8-GW01-01	11-Mar-04	L0402313-03	8270C	CARBAZOLE		U	ug/l	n	5	1.6	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	ACENAPHTHENE		U	ug/l	n	0.2	0.036	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	2-CHLORONAPHTHALENE		U	ug/l	n	0.2	0.042	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	FLUORANTHENE		U	ug/l	n	0.2	0.04	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	NAPHTHALENE		U	ug/l	n	0.2	0.031	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	BENZO(A)ANTHRACENE		U	ug/l	n	0.2	0.038	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	BENZO(A)PYRENE		U	ug/l	n	0.2	0.04	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	BENZO(B)FLUORANTHENE		U	ug/l	n	0.2	0.05	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	BENZO(K)FLUORANTHENE		U	ug/l	n	0.2	0.036	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	CHRYSENE		U	ug/l	n	0.2	0.024	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	ACENAPHTHYLENE		U	ug/l	n	0.2	0.03	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	ANTHRACENE		U	ug/l	n	0.2	0.049	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	BENZO(GHI)PERYLENE		U	ug/l	n	0.25	0.025	1

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	FLUORENE		U	ug/l	n	0.2	0.024	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	PHENANTHRENE		U	ug/l	n	0.2	0.031	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	DIBENZO(A,H)ANTHRACENE		U	ug/l	n	0.2	0.017	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	INDENO(1,2,3-CD)PYRENE		U	ug/l	n	0.2	0.026	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	PYRENE		U	ug/l	n	0.2	0.046	1
8-GW01-01	11-Mar-04	L0402313-03	8270C-SIM	2-METHYLNAPHTHALENE		U	ug/l	n	0.2	0.036	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1221		U	ug/l	n	0.5	0.07	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1232		U	ug/l	n	0.5	0.15	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1242/1016		U	ug/l	n	0.5	0.05	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1248		U	ug/l	n	0.5	0.12	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1254		U	ug/l	n	0.5	0.06	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1260		U	ug/l	n	0.5	0.02	1
8-GW01-01	11-Mar-04	L0402313-03	8082	AROCLOR 1268		U	ug/l	n	0.5	0.05	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	DELTA-BHC		UJ	ug/l	n	0.02	0.002	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	LINDANE		U	ug/l	n	0.02	0.003	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ALPHA-BHC		U	ug/l	n	0.02	0.003	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	BETA-BHC		U	ug/l	n	0.02	0.005	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	HEPTACHLOR		U	ug/l	n	0.02	0.004	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ALDRIN		U	ug/l	n	0.02	0.004	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	HEPTACHLOR EPOXIDE		U	ug/l	n	0.02	0.004	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDRIN		U	ug/l	n	0.04	0.01	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDRIN ALDEHYDE		UJ	ug/l	n	0.04	0.009	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDRIN KETONE		UJ	ug/l	n	0.04	0.007	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	DIELDRIN		U	ug/l	n	0.04	0.008	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	4,4'-DDE		U	ug/l	n	0.04	0.007	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	4,4'-DDD		U	ug/l	n	0.04	0.014	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	4,4'-DDT		U	ug/l	n	0.04	0.007	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDOSULFAN I		U	ug/l	n	0.02	0.005	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDOSULFAN II		U	ug/l	n	0.04	0.014	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	ENDOSULFAN SULFATE		UJ	ug/l	n	0.04	0.009	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	METHOXYCHLOR		U	ug/l	n	0.2	0.04	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	TOXAPHENE		U	ug/l	n	0.5	0.075	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	HEXACHLOROBENZENE		UJ	ug/l	n	0.2	0.002	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	CIS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-GW01-01	11-Mar-04	L0402313-03	8081A	TRANS-CHLORDANE		U	ug/l	n	0.02	0.004	1
8-TB03	3-Mar-04	L0402313-04	8260B	METHYLENE CHLORIDE		U	ug/l	n	5	0.37	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1-DICHLOROETHANE		U	ug/l	n	0.75	0.19	1
8-TB03	3-Mar-04	L0402313-04	8260B	CHLOROFORM		U	ug/l	n	0.75	0.14	1
8-TB03	3-Mar-04	L0402313-04	8260B	CARBON TETRACHLORIDE		U	ug/l	n	0.5	0.38	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2-DICHLOROPROPANE		U	ug/l	n	1.8	0.24	1
8-TB03	3-Mar-04	L0402313-04	8260B	DIBROMOCHLOROMETHANE		U	ug/l	n	0.5	0.19	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1,2-TRICHLOROETHANE		U	ug/l	n	0.75	0.16	1
8-TB03	3-Mar-04	L0402313-04	8260B	TETRACHLOROETHENE		U	ug/l	n	0.5	0.43	1
8-TB03	3-Mar-04	L0402313-04	8260B	CHLOROBENZENE		U	ug/l	n	0.5	0.32	1
8-TB03	3-Mar-04	L0402313-04	8260B	TRICHLOROFLUOROMETHANE		U	ug/l	n	2.5	0.29	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2-DICHLOROETHANE		U	ug/l	n	0.5	0.14	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1,1-TRICHLOROETHANE		U	ug/l	n	0.5	0.25	1
8-TB03	3-Mar-04	L0402313-04	8260B	BROMODICHLOROMETHANE		U	ug/l	n	0.5	0.24	1
8-TB03	3-Mar-04	L0402313-04	8260B	TRANS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.24	1
8-TB03	3-Mar-04	L0402313-04	8260B	CIS-1,3-DICHLOROPROPENE		U	ug/l	n	0.5	0.13	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1-DICHLOROPROPENE		U	ug/l	n	2.5	0.34	1
8-TB03	3-Mar-04	L0402313-04	8260B	BROMOFORM		U	ug/l	n	2	1.1	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1,2,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.29	1
8-TB03	3-Mar-04	L0402313-04	8260B	BENZENE		U	ug/l	n	0.5	0.29	1
8-TB03	3-Mar-04	L0402313-04	8260B	TOLUENE		U	ug/l	n	0.75	0.31	1
8-TB03	3-Mar-04	L0402313-04	8260B	ETHYLBENZENE		U	ug/l	n	0.5	0.28	1
8-TB03	3-Mar-04	L0402313-04	8260B	CHLOROMETHANE		U	ug/l	n	2.5	0.12	1
8-TB03	3-Mar-04	L0402313-04	8260B	BROMOMETHANE		U	ug/l	n	1	0.36	1
8-TB03	3-Mar-04	L0402313-04	8260B	VINYL CHLORIDE		U	ug/l	n	1	0.27	1
8-TB03	3-Mar-04	L0402313-04	8260B	CHLOROETHANE		U	ug/l	n	1	0.36	1

Appendix E
Data Summary Table
Round 9 - Groundwater Monitoring Report
Goss Cove Landfill, NSB-NLON, Groton, Connecticut

Sample name	Sample Date	Lab Sample Name	Analytical Method	Analyte Name	Result Value	Data Qualifier	Units	Detect Flag	Reporting Limit	Method Detection Limit	Dilution Factor
8-TB03	3-Mar-04	L0402313-04	8260B	1,1-DICHLOROETHENE		U	ug/l	n	0.5	0.38	1
8-TB03	3-Mar-04	L0402313-04	8260B	TRANS-1,2-DICHLOROETHENE		U	ug/l	n	0.75	0.34	1
8-TB03	3-Mar-04	L0402313-04	8260B	TRICHLOROETHENE		U	ug/l	n	0.5	0.34	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2-DICHLOROBENZENE		U	ug/l	n	2.5	0.15	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,3-DICHLOROBENZENE		U	ug/l	n	2.5	0.2	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,4-DICHLOROBENZENE		U	ug/l	n	2.5	0.23	1
8-TB03	3-Mar-04	L0402313-04	8260B	METHYL TERT BUTYL ETHER		U	ug/l	n	1	0.12	1
8-TB03	3-Mar-04	L0402313-04	8260B	P/M-XYLENE		U	ug/l	n	0.5	0.39	1
8-TB03	3-Mar-04	L0402313-04	8260B	O-XYLENE		U	ug/l	n	0.5	0.3	1
8-TB03	3-Mar-04	L0402313-04	8260B	CIS-1,2-DICHLOROETHENE		U	ug/l	n	0.5	0.18	1
8-TB03	3-Mar-04	L0402313-04	8260B	DIBROMOMETHANE		U	ug/l	n	5	0.19	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2,3-TRICHLOROPROPANE		U	ug/l	n	5	0.23	1
8-TB03	3-Mar-04	L0402313-04	8260B	STYRENE		U	ug/l	n	0.5	0.44	1
8-TB03	3-Mar-04	L0402313-04	8260B	DICHLORODIFLUOROMETHANE		U	ug/l	n	5	0.3	1
8-TB03	3-Mar-04	L0402313-04	8260B	ACETONE		U	ug/l	n	5	1.5	1
8-TB03	3-Mar-04	L0402313-04	8260B	CARBON DISULFIDE		U	ug/l	n	5	0.27	1
8-TB03	3-Mar-04	L0402313-04	8260B	2-BUTANONE		U	ug/l	n	5	1.7	1
8-TB03	3-Mar-04	L0402313-04	8260B	4-METHYL-2-PENTANONE		U	ug/l	n	5	0.4	1
8-TB03	3-Mar-04	L0402313-04	8260B	2-HEXANONE		U	ug/l	n	5	1.8	1
8-TB03	3-Mar-04	L0402313-04	8260B	BROMOCHLOROMETHANE		U	ug/l	n	2.5	0.19	1
8-TB03	3-Mar-04	L0402313-04	8260B	2,2-DICHLOROPROPANE		U	ug/l	n	2.5	0.63	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2-DIBROMOETHANE		U	ug/l	n	2.5	0.23	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,3-DICHLOROPROPANE		U	ug/l	n	2.5	0.17	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,1,1,2-TETRACHLOROETHANE		U	ug/l	n	0.5	0.31	1
8-TB03	3-Mar-04	L0402313-04	8260B	BROMOBENZENE		U	ug/l	n	2.5	0.15	1
8-TB03	3-Mar-04	L0402313-04	8260B	N-BUTYLBENZENE		U	ug/l	n	0.5	0.41	1
8-TB03	3-Mar-04	L0402313-04	8260B	SEC-BUTYLBENZENE		U	ug/l	n	0.5	0.4	1
8-TB03	3-Mar-04	L0402313-04	8260B	TERT-BUTYLBENZENE		U	ug/l	n	2.5	0.29	1
8-TB03	3-Mar-04	L0402313-04	8260B	O-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB03	3-Mar-04	L0402313-04	8260B	P-CHLOROTOLUENE		U	ug/l	n	2.5	0.24	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2-DIBROMO-3-CHLOROPROPANE		U	ug/l	n	2.5	1.6	1
8-TB03	3-Mar-04	L0402313-04	8260B	HEXACHLOROBUTADIENE		U	ug/l	n	1	0.43	1
8-TB03	3-Mar-04	L0402313-04	8260B	ISOPROPYLBENZENE		U	ug/l	n	0.5	0.26	1
8-TB03	3-Mar-04	L0402313-04	8260B	P-ISOPROPYLTOLUENE		U	ug/l	n	0.5	0.33	1
8-TB03	3-Mar-04	L0402313-04	8260B	NAPHTHALENE		U	ug/l	n	2.5	0.41	1
8-TB03	3-Mar-04	L0402313-04	8260B	N-PROPYLBENZENE		U	ug/l	n	0.5	0.32	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2,3-TRICHLOROBENZENE		U	ug/l	n	2.5	0.38	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2,4-TRICHLOROBENZENE		U	ug/l	n	2.5	0.28	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,3,5-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.27	1
8-TB03	3-Mar-04	L0402313-04	8260B	1,2,4-TRIMETHYLBENZENE		U	ug/l	n	2.5	0.25	1

DATA VALIDATION MEMORANDUM
O&M MONITORING SITES – NEW LONDON NSB
MARCH 2004 SAMPLING ROUND 9 (SDG 0402219 ALPHA LAB)

TO: ENGINEERING FIELD ACTIVITY NORTHEAST

FROM: JACKSON KIKER, ECC SENIOR CHEMIST, MARLBOROUGH, MA.

SUBJECT: NEW LONDON NSB – IRP O&M MONITORING SITES - SAMPLING ROUND-9, MARCH '04

DATE: 5/20/2004

Project data were validated using the following Validation Functional Guideline, as modified for non-CLP methods.

1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluation of Environmental Analyses (Dec, 1996).

2. Operations and Maintenance Manual for Installation Restoration Program at Naval Submarine Base New London (Nov, 2002).

The validation guideline exceedences are assessed and documented on the method specific data validation worksheet. On the data validation worksheet, the data quality acceptance criteria are presented, analytes requiring qualification based on laboratory historical control limits and/or validation guidance criteria exceedences are listed, assigned qualifiers, qualifying rationale is documented, and any potential bias noted. The overall evaluation of the data generated is presented in the data validation worksheet.

Standard EPA Region I data qualifiers are used to denote the assessment of data quality. The final and ranking assigned data qualifier for an analyte is presented in the data summary table. Ancillary qualifiers are noted on the data validation worksheets.

As an exception to the USEPA Region I data validation guidance, non-target ketone VOC data with response factors (RFs) less than the 0.05 were not qualified, as the Tier guidance allows for exceptions to the RF guidance.

The USEPA Region I Organic Regional Data Assessment (ORDA) sheet displays the summarized results of the data validation assessment for all analytical methods reported in the SDG.

Region I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT

LAB NAME: Alpha Lab
SDG #:__0402219_____
EPA-NE DV TIER LEVEL:___II___
SITE NAME: New London NSB – O&M

# of SAMPLES/MATRIX:___3-GW & 1-TB(VOC)__
VALIDATION CONTRACTOR:__ECC
VALIDATOR'S NAME: Jackson Kiker
DV Completion Date:_May 15, 2004
Date Sampled__08 & 09 March 2004 _____

ANALYTICAL DATA QUALITY SUMMARY

		VOC	SVOC	PAH	Pesticide	PCB	Metals
1	Preservation and HT	O	O	O	O	O	O
2	Instrument Performance Check	O	O	O	O	-	O
3	Initial Calibration:	O	O	O	O	O	O
4	Continuing Calibration:	O	M	M	M	O	O
5	Blanks:	O	O	O	O	O	M
6	Surrogate Compounds:	O	M	O	O	O	-
7	Internal Standards	O	O	O	O	O	-
8	Matrix Spike/Matrix Spike Duplicate:	O	O	O	M	O	M
9	Sensitivity Check:	O	O	O	O	O	O
10	PE Samples- Accuracy Check	O	O	O	M	O	O
11	Target Compound Identification:	O	O	O	O	O	O
12	Compound Quantitation and Reported QLs	O	O	O	O	O	O
13	Tentatively Identified Compounds:	-	-	-	-	-	-
14	Semivolatile/Pesticide/PCB Cleanup:	-	-	-	-	-	-
15	Data Completeness	O	O	O	O	O	O
16	Overall Evaluation of Data:	O	O	O	O	O	O

O = Data had no problems or were qualified due to minor contractual problems; M = Data were qualified due to major/systemic MPC exceedences: Z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (Z items): _

AREAS OF CONCERN: (M items): _.

VOC: None

SVOC: Sample 02 results for 1, 2, 4-trichlorobenzene, 1, 2-dichlorobenzene, 1, 3-dichlorobenzene, 1, 4-dichlorobenzene, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether and hexachlorobenzene results – all non-detects – are qualified UJ due to low surrogate recovery for FBP. CCV: High %D for 4-chloroaniline.

PAH: High %D for benzo(ghi)perylene in CCV.

Pesticide Endrin ketone and hexachlorobenzene had low LCS recovery. Alpha-BHC had low MS/MSD recoveries. Pesticide CCV: %D> 15% for heptachlor.

PCB: None.

Metals: Sample results were qualified due to ICB and Preparation blank contaminations - please refer to the data review worksheets for the results that were qualified. Total & dissolved As and total Cu results were qualified J for detects and UJ for non-detects due to MS/MSD RPD (same as lab duplicate) being out of MPC limits.

ECC Region I Data Review Worksheet (rv 2) **VOCs 8260B**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temp Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HCl**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification and Laboratory Number of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03
8-TB03	L0402313-04

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inventory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 14 Days to analysis, if preserved 2) J –detects, UJ or R –nondetects (function of time) 3) *transcription errors	Sent on: 03/11/04. Analyzed on: 03/17/04. All samples analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made. 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable (NA)	X	-	
Trip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules apply to raw data) 4) MeCl & Acetone < 5 5) >RL report sample level U 6) <RL report PQL as U	8-TB03 (Lab sample 04) is the associated tripblank. Tripblank is non-detect for all reported analytes. No samples qualified.	X	-	
Equip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules don't apply) 3) MeCl & Acetone < 5 *Check IS area (10% of them) * recalculate surrogate (%R – 10 % of them)	Not collected/analyzed with this SDG. Equipment is dedicated.	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated) listed on data summary sheet.	Results < RDL but >MDL were qualified J. No such results - no samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
*TICs (if reported)	1) *verify library search for samples and blanks 2) verify TICs were not misreported compounds (different fraction or miss in search) 3) All TICs – J estimated 4) * verify blanks do not contain TIC peaks 5) * check TIC assignment spectra to STD spectra 6) *review blank and Samples for common lab contaminants	None Reported/not evaluated	-	-	
Surrogates	1,2-Dichloroethane-d4 70-120% Toluene-d8 75%-120% 4-BFB 75%-120% *check raw data for surrogated (recalculate 10% of them). *Transcription errors Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <70% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants for aq samples- 3) TGT analytes <Lab QL 4) MeCl & Acetone, 2-butanone, 4M-2Pentaone, and 2-hexanone < 5 (25 ml purge) 5) if linear range is exceeded, verify if a instrument blank was performed 6) *verify accurate transcription of times, Ids, are reported on forms 7) *verify from the raw data if the instrument blank was performed in the same vessel 8) *verify IS, RRT, and surrogate %R *check 10% of raw chromotgrams for false +/-, check for transcription errors	Method blank sample WG165502-6 analyzed on 17th March, 2004 – applies to all samples. Methylene chloride detected at 0.4 (<2.0) in WG165502-6 – samples 01 & 02 which had dilution factors of 40 & 100 respectively, were qualified U due to method blank contamination.	X	Mecl results for samples 01 & 02 are qualified U.	
LCS Recovery	1) benzene 79-119%, toluene 75-123%, chlorobenzene 81-123%, 1,1 DCE 69-126%, TCE 79-118%. 2) 10% and <LCL% J detec ts, UJ –Nods 3) >UCL% J detects <10% R NDs, J-detects 7) *Recalculate the concentrations for one compound in the LCS 8) * Recalucate the %R (within 10% of lab) Note: Tier guidance as a zero blind	All LCS %R's are within lab limits. No samples qualified. (LCS Batch Id - WG165502-3,5).	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
MS/MSD Recovery	1) benzene 80-120%, toluene 75-120%, chlorobenzene 80-120%, 1,1 DCE 70-130%, TCE 70-1258%. 2) 80-120% (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL% J detects 3) *Recalculate the concentrations for one compound in the MS/MSD 4) * Recalucate the %R (within 10% of lab)	Native sample; 8-GW05S-01 – lab sample 0402219-03 (part of another SDG). All MS/MSD recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% (aq) J –detects in MS sample UJ-non detects * recalculate RPD	Native sample; 8-GW05S-01 – lab sample 0402219-03 (part of another SDG). All RPDs within MPC limits. Laboratory precision is acceptable for all VOCs. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 30%, <40% gaseous VOCs water; = 50 soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one >PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 4) Determine RPD for detects only. *Recalculate the concentrations for one compound and the PQL	Sample-duplicate pair consists of samples 01 & 02. Tetrachloroethene is the only detected result in both – RPD is zero. No samples qualified.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 5) * performed annually 6) *MDL is at least ½ of PQL 7) *tgt and surrogate 80-120% R 8) *VOA/SV-X11 (recalcuate %RSD and %R for three compounds (10% of them).	NA	-	-	
Internal Stds	1) IS are –50% to 200% of last Ical, or CCV 3) RRT<0.06 (30 sec) 4) IS>100% J-detects 5) IS<20%CCV NDs – R 6) IS>20%CCV <50%CCV NDs – UJ 7) *check for IS transcription errors	All IS areas and RTs are within Method limits.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %in control limits. 3) %R <10 ND- (R) , J- detects 4) 10%> but <LCL% , judgement 5) %R>UCL% J-detects 5) QC, IS, RRT meet criteria, 6) %RSD < 20% 7) MDL< MQL (3x less ideal) 8) Lab fortitied blank (see VOA/SV Part II – section X). 9) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Samples 01 (40X) and 02 (100X) were analyzed after dilution. Undiluted results not reported. The reporting limits for site constituents of concern are well below primary monitoring criteria. Tetrachloroethene MDLs for samples 01 & 02 above the secondary criteria. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
	10) Dilution factors for samples – impacts to sensitivity				
*Compound Quantitation (completed as part of other steps)	1) Check sensitivy (MDL< 1/3 PQL) 2) *Recalculate one detection and quantitation limit 3) *verify concentrations have been adjusted to account for DW, DF, 4) *verifiy correct IS and RRF were used	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 9) *Matrix effects- MS/MSD, surrogated, PDS. 10) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 11) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * compare sample Mass spectra to standard spectra; a) all ions in std spectra (with 10% rel intensity) presnent in sample spectra. B) sample ion abundance within 20% of standard spectra. 3) *chromatogram: all peaks greater than 10% of nearest IS identified.	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 12) PES > acceptance criteria – Detects in samples J, 13) PES<acceptance criteria – Detects J, NDs –R 14) VOA/SV-XI14 other criteria 15) *% of PES sample above and below criteria 16) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Tune check	1) ion abundance with method limits 2) *check for co-elution /proper background subtratction 3) *compare reported data to raw data	All tunes passed method criteria.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) within 12 hours of the tune check 3) CCCs %RSD: <30% (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC (J –detects, R or UJ NDs all samples associated with Ical) 4) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0.3, 1122TCA>0..3 (J –detects, R NDs) 5) RRF>0.05 all compounds 6) RRT < 0.06 units (all stds within 30 sec) *7)* *<u>RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./</u>* 8) *verify that instrument parameters met method and that Ical and analysis used the same parameters 9) *recalculate RRF one tgt compound associated with each IS. Recalculated values within 10% of lab values. 10) *recalculate one tgt compound associated with each IS. Recalculated values within 10% 11) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 12) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument: Elaine. ICAL: March 16, 2004 at 13:38 (end time) RRF>0.05, %RSD<15% and/or COD>0.99 for all compounds.	X	-	
Initial Cal (Linearity)	%RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte Qualification for compounds with %RSD>30% (see VOA/SVIII-5)	All %RSDs within MPC limits. Acceptable linearity. No samples qualified.	X	-	
2nd Source ICV	**%D<25%.** %R (between ICV and Ical) analytes 80%--120% (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Performed on March 16, 2004 at 15:51. Instrument: Elaine - %D<25% for all reported VOCs of potential concern.	X	-	
CCV	1) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0..3, 1122TCA>0..3 2) RRF all compounds > 0.05 *3)* CCC: (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC) %**D<20% (or** all analytes if no CCCs reported). *4)* Lab method limits for non SPCC/CCC's. *5)* *<u>RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./</u>*	Instrument Elaine - CCVs on 17 & 19 March 2004. All %Ds within MPC limits. No samples qiualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
	6) Qualification-J detects, R or UJ NDs 7) *verify same instrument and parameters 8) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 9) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 10) *IS RRT<0.06 units (30 sec) 11) * IS area -50 % to 100 % of last ICAL 12) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 13) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)				
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory precision and accuracy acceptable and no apparent sample bias for site constituents of concern. Sample results usable for project decisions, as qualified. Surrogate, MS/MSD and LCS recoveries within MPC limits. Calibration: ICAL linear. ICV's - I Cal confirmed. CCV: within MPC limits. Sampling error: Field duplicate pair – samples 01 & 02. Tetrachloroethene is the only detected result in both – RPD is zero. Acceptable sampling precision. Tripblanks non-detect for all VOCs of concern. Method blank showed detection of methylene chloride – results for samples 01 & 02 qualified U due to method blank contamination.	X	-	

* Tier III review items only.

Completeness Check: Inventory Check Sheet_____X__. Sample Quantitation Calculations (TIER III only):

ECC Region I Data Review Worksheet (rv 2) **SVOCs 8270C**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days aqueous – 14 days soil (extract 40 days) 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/11/04. Extracted on: 03/18/04. Analysed by: 03/23/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Data reported between the MDL and the MRL is qualified as estimated (J). No such results – no samples qualified.	X	-	
TICs (if reported)	1) *verify library search for samples and blanks	None Reported	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Dedicated equipment – hence not collected/analyzed with this SDG	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIA S
Surrogates	Within historical laboratory limits Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <LCL% J-detects, UJ NDs	Surrogate phenol-d6 lab criterion is low (15%), but there is no Navy criteria for this surrogate in aqueous SVOCs. No action taken based upon this surrogate. Recoveries for other surrogates within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab) 3) no phthalates >5X QL (QAPP)	Lab blank is non-detect for all reported SVOCs. No samples qualified.	X	-	
LCS Recovery	1) Within historical laboratory limits listed in (QAPP) 10% and <LCL% J detects, UJ –NDs >UCL% J detects <10% R NDs, J-detects	LCS recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD Recovery	1) Within historical laboratory limits (QAPP) (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample is 01. All MS/MSD recoveries within limits except 2, 4-dinitrotoluene in MS sample which had %R > UCL. All results for this compounds are non-detects. No samples qualified.	X	-	
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants. Good surrogate recovery, GPC blank check – no carryover.(VOA/SV-IX-I6). Sulfur and High MW compounds removed. Symetrical peaks for all compounds,	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
MS/MSD RPD	RPD =30% aq, <50% (S) J –detects in MS sample UJ-non detects	All MS/MSD RPDs within MPC limits. Acceptable laboratory precision. No samples qualified.	X	-	
Tune Check	Tune check within method parameters for DFTPP	The raw data sheets were used for validation. CCV tune check within limits.	X	-	
DDT degradation Instrument performance check	1) Breakdown <20% DDT 2) benzidine and pentachlorophenol at normal response - no peak trailing (<3.0 benz. , <5.0 penta.) Detections – J	Degradation checks performed with associated tune checks are all within MPC limits.	X	-	
Field Dup RPD	1) RPD = 100% water; = 100% soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	Field sample – sample 01; field duplicate – sample 02. All results are non-detects in both these samples. Acceptable sampling precision. No samples qualified.	X	-	
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte 1) CCCs %RSD: <30% (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) J –detects, R or UJ NDs all samples associated with Ical)	Instrument: Buffy Date: 17 January 2004 at 08:39 (end time). RRF>0.05 all SVOCs. RSD<15% and/or COD>0.99 criteria used for linearity of SVOC Ical. No samples qualified based on ICAL.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Instrument: Buffy Date: 17 January 2004 at 10:02 (inj. time). All %D values within MPC limits. No samples qualified.	X		

ECC Region I Data Review Worksheet (rv 2) **SVOCs 8270C**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
CCV	1) SPCCs Average RRF: SPCCs n-nitroso-di-n-propylamine, hexachlorcyclopentdiene, 2,4 dinitrophenol, 4-nitrophenol. 2) RRF all compounds > 0.05 3) CCC: (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) 4) %D<20%. CCCs (QAPP -except surrogates). 5) Qualification-J detects, R or UJ Nods 6) %D<25% all compounds (Tier I). 7) RRF exclusions: surrogates, 8) *verify same instrument and parameters 9) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 10) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 11) *IS RRT<0.06 units (30 sec) 12) * IS area -50 % to 100 % of last ICAL 13) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 14) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	CCV on 23 March 2004. %D exceeded MPC limits for 3, 3'-dichlorobenzidine. Results for this compound – all non-detects – qualified UJ.	X	3, 3'-dichlorobenzidine results qualified UJ.	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP)	For target SVOCs the MDL< ½ PQL. Analytical sensitivity is adequate. MDLs are greater than the monitoring criteria for all compounds. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable and no apparent sample bias for all compounds except those mentioned above. Results are usable for making project decisions as qualified.. Method blank; non-detect for all SVOCs. BEHP main SVOC COC was non-detect in the MB and samples. MS/MSD recoveries were > UCL for 2, 4–Dinitrotoluene, but all results are non-detects – no qualifications. All other MS/MSD recoveries within MPC limits. All LCS and surrogate recoveries within MPC limits. ICAL; linear. ICV: within MPC limits for all SVOCs. CCV: in limits except 3, 3'-dichlorobenzidine. Sampling error – all results are non-detects in both field sample (01) and its field duplicate (02). Acceptable sampling precision.	X	-	

*Tier III criteria.

Completeness Check: Inventory Check Sheet_____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/11/04. Extracted on: 03/18/04. Analysed by: 03/23/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	All results <RDL but >MDL are qualified J. No such results in this SDG – no samples qualified.	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit 4) *verify concentrations have been adjusted to account for DW, DF, 5) *verify correct RRFs were used	%D<25% between columns with detection criteria met. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Lab Blanks	1) < 5x contaminants – U	No COCs detected in the MB. No samples	X	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
(method blanks)	2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	qualified.			
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Not collected/analyzed with this SDG.	-	-	
Surrogates	Surrogate acceptance limits DCB & TCX – Lab limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
LCS Recovery	1) arochlors 1016/1260 2) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's outside MPC limits for delta-BHC, endrin aldehyde and hexachlorobenzene. Sample results for these compounds – all non-detects – qualified UJ.	X	Delta-BHC, endrin aldehyde and hexachloro benzene results qualified UJ.	
MS/MSD Recovery	1) Lab limits –(30-150%); (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	Native sample – sample 038. MS %R's within MPCs except hexachlorobenzene, for which the MSD recovery < LCL. For this compound, LCS recovery is < LCL. So bias attributable to instrument performance rather than matrix issues. No samples qualified.	X	-	
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	Native sample – sample 03. All MS/MSD RPDs <30%. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 2) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 8) *Recalculate the concentrations for one compound and the PQL	FD pair – samples 01 & 02. All results non-detects for these samples. Sampling precision acceptable – no samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
*MDL Study	6) *In accordance with 40CFR – seven replicates %RSD < 20% 7) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 3) %R <10 ND- (R) , J- detects 4) 10%> but <80% , judgement 5) %R>120% J-detects 6) QC, RRT meet criteria, 7) %RSD < 20% 8) MDL< MQL (3x less ideal) 9) Lab fortitied blank (see VOA/SV Part II – section X). 10) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Sensitivity acceptable, as this is the best available technology. Groundwater criterion and O&M RL are achieved.	X	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	RPDs between two columns for detections within limits. No samples qualified.	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria 10) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab	Instrument Id: Pest2 Date: 26 March 2004 at 15:24 (end time). . %RSD criteria met for both columns. No samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	(option if information is in data package)				
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument Id: Pest2 Date: 25 March 2004 at 20:19 (end time). . %RSD criteria met for both columns. Linearity acceptable. No samples qualified.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument Id: Pest2 Date: 26 March 2004 at 07:30 (inj. time). . %D criteria met for both columns. Calibration confirmed. No samples qualified.	X	-	
Degradation Check	<20% DDT breakdown.	Breakdown within limits. No samples qualified.	X	-	
CCV	1) 15% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest2 Date: 26 March 2004 All %Ds within limits except delta-BHC, endosulfan sulfate and endrin ketone in both columns. The results for these compounds are qualified UJ.	X	Delta-BHC, endosulfan sulfate and endrin ketone results qualified UJ.	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory precision and accuracy is acceptable except Delta-BHC, endrin aldehyde and hexachlorobenzene whose LCS %R <LCL. No additional qualifications assigned due to MS/MSD %R failures. All surrogate recoveries within MPC limits. The sample results are usable for making project decisions as qualified. No apparent matrix bias. ICAL: within MPC limits CCV: Within MPC limits, except for delta-BHC, endosulfan sulfate and endrin ketone. ICV: confirms ICAL. Sampling error – all results are non-detects in both the sample and it field duplicate – acceptable sampling precision.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X

Sample Quantitation Calculations on attached sheet (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **PCB 8082**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/11/04. Extracted on: 03/18/04. Analysed by: 03/23/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Not analyzed, as MS/MSD was analyzed.	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	All results were non-detects. No results exceeded calibration range.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) QC, RRT meet criteria, 5) %RSD < 20% 6) MDL< MQL (3x less ideal) 7) Lab fortified blank (see VOA/SV Part II – section X). 8) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	The MDL is less than the Project Reporting Limit but still greater than the groundwater criterion for Aroclor 1248 & 1254. No samples qualified.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit	All aroclors non-detect on both columns. MDL< 1/3 PQL - acceptable sensitivity. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	4) *verify concentrations have been adjusted to account for DW, DF, 5) *verify correct RRFs were used				
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	X	-	
Lab Blanks (method blanks)	1) < 5x contaminants – U 2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	No COCs detected in the method blank. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not analyzed/collected with this SDG.	-		
Surrogates	Surrogate acceptance limits DCB –Navy limits. 40% -135% DCB (aq) TCX 40-135% Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	Surrogate %R's are within method limits. No samples qualified.	X	-	
Internal Standards	Meet method criteria.	All internal standards are within method limits. No samples qualified.	X	-	
LCS Recovery	9) arochlors 1016/1260 10) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's with MPC limits. No samples qualified.	X	-	
MS/MSD Recovery	1) Lab limits- 30-150%; (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	MS/MSD native sample – sample 02. MS/MSD %R within laboratory limits. No samples qualified.	X	-	
*MS/MSD/un spiked sample RSD	1)For unspiked compounds if reported, Non- MS spike compounds <50% RSD calculated from MS/MSD/Unspiked Qualification: >50% RSD J-detects 2)*recalculate the RPD (within 10% of lab)	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	MS/MSD RPDs within MPC limits. Laboratory precision is acceptable.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 2) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 8) *Recalculate the concentrations for one compound and the PQL	FD pair consists of samples 01 & 02. All results non-detects in both samples. Sampling precision acceptable. No samples qualified.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest8 Calibration Date: 25 March 2004 at 15:57 (start time). Acceptable calibration standards for both columns. No samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **PCB 8082**
New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument Id: Pest8 Calibration Date: 25 March 2004 at 15:57 (start time). Instrument calibrations for both columns are linear. All %RSD values within MPC limits. No samples qualified. .	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument Id: Pest8 Date: 26 March 2004 at 11:54. All average %D values within MPC limits. ICV confirms ICAL.	X	-	
CCV	1) QAPP: 15% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest8 Date: 27 March 2004. Sporadic instances where %D > 15. All average %D values < 15%. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy is acceptable Laboratory precision is acceptable. The sample results are usable for making project decisions. No apparent sample bias. All surrogate, LCS and MS/MSD recoveries within MPC limits. ICAL: Linear. ICV: within MPC limits CCV: Within MPC limits. Sampling error: All results are non-detects. Sampling precision acceptable. Method blank non-detect for all PCBs.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X
Sample Quantitation Calculations on attached sheet (TIER III ONLY).

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days water, 40 to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/11/04. Extracted on: 03/18/04. Analysed by: 03/23/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	All results <RDL but > MDL are qualified J. No such results – no samples qualified.	-	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not collected/analyzed with this SDG.	-	-	
Surrogates	1) Surrogate acceptance limits Carbazole & p-Terphenly-d14 within QAPP limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab)	All method blanks were non-detects for PAHs. No samples qualified.	X	-	
LCS Recovery	1) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects	LCS %R within MPC limits. No samples qualified	X	-	
MS/MSD Recovery	1) QAPP limits (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample – sample 01 (part of this SDG). MS/MSD %R's within MPC limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% solid, 30%. J –detects in MS sample UJ-non detects	All MS/MSD RPDs within MPC limits. No samples qualified. Laboratory precision acceptable.	X	-	
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants.	NA	-	-	
Retention times	Within 3X standard deviation for each analyte from 72-hour study Exceeds: R qualify data	Retention times within MPC limits.	X	-	
Field Dup RPD	1) RPD = 100% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	FD pair analyzed with this SDG consists of samples 01 & 02. All results are non-detects in these samples. Acceptable sampling precision. No samples qualified.	X		
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20% for all target analytes, with no analyte %RSD>40% Resolution check mix –valley 60% hgt of shortest peak (CLP criteria only) Performance check mix - >90% (PEM) (CLP criteria only) SW-846 PEM –endirn/DDT breakdown evaluation. Blank and Performance Evaluation Mix (PEM) at start, and blank and midpoint Individual Standard Mix A (ISMA) and ISMB at end or samples(CLP only)	07 January 2004 at 23:57 (end time). Instrument – Mindy Average %RSD < 15% ICAL linear. No samples qualified RRF>0.05	X	-	

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
2nd Source ICV	%R (between ICV and Ical) analytes %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Date: 08 January 2004 at 00:43. Instrument: Mindy ICV within MPC limits for all compounds. No samples qualified.	X	-	
Tune Check	Tune check within method parameters for DFTPP	All tunes within method limits. No samples qualified.	X	-	
CCV	1) 15% of initial calib. Curve (85%-115%) If low re-calibrate per method. If high no recalibration needed. J qualify data. 2) 15% D 3) Qualification-J detects, R or UJ NDs	Date: 23 March 2004 at 12:01. %D<15% for all PAHs. No samples qualified.	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 2) %R <10 ND- (R) , J- detects 3) 10%> but <80% , judgement 4) %R>120% J-detects 5) QC, RRT meet criteria, 6) %RSD < 20% 7) MDL< MQL (3x less ideal) 8) Lab fortified blank (see VOA/SV Part II –section X). 9) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Reporting detection limits are less than the primary monitoring criteria for all compounds.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP	MDL< 1/3 RDL for all compounds – RDLs are slightly above PRL but MDLs are below PRLs.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable. No apparent sample bias. Data are usable for project decisions. Method blanks are non-detects for all PAHs. All LCS, surrogate and MS/MSD recoveries within MPC limits. ICAL is linear. ICV: within MPC limits. CCV; within MPC limits. Sampling error- within MPC limits.	X	-	

(*Tier III criteria)

Completeness Check: Inventory Check Sheet_____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Metals 6010B/7000**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HNO3**	**3-coolers 3.0, 1.5 & 1.5 °C**	**Alpha Laboratory Westborough, MA**	**0402313**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW08D-01	L0402313-01
FD-031104-01	L0402313-02
8-GW01-01	L0402313-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody . No samples qualified.	X	-	
Holding Time	1) 180 days (6010), Hg 28 Days to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: March 11, 2004. Analyzed March 22, 2004. Samples analyzed within holding time. No samples qualified.	X	-	
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Native sample – sample 0402277-04 for total metals and dissolved metals . Totals: RPDs>20% for As & Cu. Dissolved metals: As had RPD > 20. Lab duplicate RPDs<MPC limits for all other total and dissolved metals. Laboratory precision adequate. No other samples qualified.	X	Total and dissolved As and total Cu results – detects qualified J and non-detects qualified UJ.	
LCS Recovery	1) once per sample batch 2) 75-125% water, soil, QAPP limits. 3) <LCL% Reject 4) >UCL% detects J	LCS %R's acceptable. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Field Dup RPD	1) RPD = 50% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect	Field duplicate pair consists of samples 01 & 02. All RPDs within MPC limits except for total Zn and dissolved Pb, for which one of the samples in the pair is a detected result and the other is a non-detect. These results are qualified J for detects and UJ for non-detects in the sample-duplicate pair.	X	Total Zn and dissolved Pb detections in samples 01 & 02 qualified J and the non-detects for above results are qualified UJ.	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Results less than the method reporting limits and greater than the method detection limit are qualified J. No results exceeding the upper calibration range. See data summary table.	X	Results <MRL but > MDL are qualified J.	
Lab Blanks (method blank or p reparation blank)	1) Once per sample batch 2) Results> QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Al – 0.00696 (<0.0348 qualified U – all sample results) Ba – 0.00004 (< 0.0002 qualified U – none qualified) Be – 0.00002 (<0.0001 qualified U – none qualified) Cr – 0.00005 (<0.00025 qualified U – none qualified) Co – 0.00002 (<0.0001 qualified U – none qualified) Cu – 0.00072 (<0.0036 qualified U – none qualified) Fe – 0.00647 (<0.03235 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00661 (<0.03305 qualified U – none qualified) Mn – 0.00008 (<0.0004 qualified U – none qualified) Mo – 0.00012 (<0.0006 qualified U – none qualified) Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.0108 (<0.054 qualified U – none qualified) Na – 0.00966 (<0.0483 qualified U – none qualified) Zn – 0.00193 (<0.00965 qualified U – samples 01 & 02)	X	Dissolved metals: All samples in Al and samples 01 & 02 in Zn qualified U. Total metals: All samples in Cr, samples 01 & 02 in Ni, all samples in V and sample 01 in Zn are qualified U.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		Total metals: Al – 0.00369 (<0.01845 qualified U – none qualified) Ba – 0.00037 (< 0.00185 qualified U – none qualified) Cr – 0.00012 (<0.00060 qualified U – all samples) Cu – 0.0004 (<0.002 qualified U – none qualified) Fe – 0.00304 (<0.0152 qualified U – none qualified) Pb – 0.00005 (<0.0002 qualified U – none qualified) Mg – 0.00242 (<0.0121 qualified U – none qualified) Mn – 0.00033 (<0.00165 qualified U – none qualified) Mo – 0.00007 (<0.00035 qualified U – none qualified) Ni – 0.00008 (<0.0004 qualified U – samples 01 & 02) Na – 0.0195(<0.0975 qualified U – none qualified) V – 0.00022 (<0.0011 qualified U – all samples) Zn – 0.00124 (<0.0062 qualified U – sample 01 qualified)			
MS Recovery	1) 75-125% GFAA/ICP if MS > 4X native levels) Qualification of MS sample: 2) <30% J detects, R NDs 3) 30%--74%, detects J, NDs UJ 4) >125% J detects	Native sample – sample 0402277-04 for total metals and dissolved metals. MS %R's within limits for total and dissolved analyses. No samples qualified.	X	-	
Sensitivity*	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) %RSD < 20% 5) MDL< MQL (3x less ideal) 6) Lab fortitied blank (see VOA/SV Part II – section X). 7) *Check and recalculate %RSDs and %R fir three compounds (with 10% of lab)	MDL> OM RL for Be & Zn. Lab RL >OM RL for all metals but less than lowest groundwater criterion.	X	-	
Equip Blank	< 5x contaminants for aq samples – for soil indicate EB (X rules don't apply)	Equipment blank not collected/analyzed with this SDG.	-	-	
Negative blanks	If negative values are reported for an analyte with absolute value >DL and sample value is <5X the absolute value of the blank or is nondetect Qualify detects as estimated (J) Nondetects as estimated (UJ	No analyte detections for target metals All negative blanks<DL. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Initial Cal Multipoint	1) 6010: 1 std and blank and low-level check at MQL – check std 20% 2) 3 stds and a blank- R = 0.995	ICAL performed according to method. Two point calibration and check standards. The pre-analysis check standard was within limits.	X	-	
Initial Calibration Blanks	1) Ical blank after Ical 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Sb – 0.00007 (<0.00035 qualified U – sample 01) As – 0.00008 (< 0.0004 qualified U – none qualified) Ba – 0.00007 (< 0.00035 qualified U – none qualified) Be – 0.00007 (< 0.00035 qualified U – none qualified) Cd – 0.00007 (< 0.00035 qualified U – none qualified) Cr – 0.00007 (< 0.00035 qualified U – none qualified) Co – 0.00007 (< 0.00035 qualified U – sample 03) Fe – 0.00696 (<0.0348 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00675 (<0.03375 qualified U – none qualified) Mn – 0.00007 (<0.00035 qualified U – none qualified) Mo – 0.0001 (<0.0005 qualified U – none qualified) Ni – 0.00007 (<0.00035 qualified U – none qualified) K – 0.00981 (<0.04905 qualified U – none qualified Tl – 0.00007 (<0.00035 qualified U – none qualified) V – 0.00007 (<0.00035 qualified U – none qualified) Total metals: Sb – 0.00006 (<0.0003 qualified U – sample 02) As – 0.00006 (<0.0003 qualified U – none qualified) Ba – 0.00006 (<0.0003 qualified U – none qualified) Be - 0.00006 (<0.0003 qualified U – none qualified) Cd - 0.00008 (<0.0004 qualified U – none qualified) Cr – 0.0001 (<0.0005 qualified U – already qualified due to prep blank contamination) Co – 0.00007 (<0.00035 qualified U – sample 03) Fe – 0.00675 (<0.03375 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – sample 01) Mg – 0.00613 (<0.03065 qualified U – none qualified)	X	Dissolved metals: Sample 01 in Sb and sample 03 in Co are qualified U. Total metals: Sample 02 in Sb, sample 03 in Co and sample 01 in Pb are qualified U.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		Mn – 0.00006 (<0.0003 qualified U – none qualified) Mo – 0.00009 (<0.00045 qualified U – none qualified) Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.00408 (<0.0204 qualified U – none qualified) Na – 0.02836 (<0.1418 qualified U – none qualified) Tl – 0.00006 (<0.0003 qualified U – none qualified) V – 0.00005 (<0.00025 qualified U – none qualified)			
Continuing Calibration Blanks	1) CCB every 10 samples end of run 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	Runs 2, 3 & 4 of the 6 CCBs applied to the field samples. The detections in the CCBs and the resulting qualifications are listed below (all the results are in mg/L). Dissolved metals: Mn (0.00005) had detections lower than prep blank contamination and therefore had no further qualifications. Sb (0.00003), Ba (0.00004), Be (0.00003), Cd (0.00003), Cr (0.00004), Co (0.00002) and Ni (0.00003) had detections lower than ICB contamination levels and therefore had no further qualifications. Fe (0.00724), Mg (0.01106), Mo (0.00019), K (0.01046) & Na (0.1431) had no results < 5X detection levels and had no further qualifications. Total metals: Ba (0.00005), Cr (0.00004), and Ni (0.00003) have detection levels lower than prep blank contamination levels. No further qualifications. Sb (0.00003), Be (0.00003), Cd (0.00004), Co (0.00003), Fe (0.00382), Pb (0.00003), Mg (0.00581), Mo (0.00009), V (0.00003) and Mn (0.00006) had detections less than ICB contamination levels and therefore had no further qualifications. Ca (0.00593), K (0.00678) and Na (0.05366) had no results < 5X detection levels in the associated samples and therefore no qualifications.	X	-	
Serial Dilution	1) once per digestion batch 2) Meets method limits (RPD 10%). 3) Metal results >50X MDL levels.	SD on native sample 0402277-04. %D's within limits for Site COCs. No apparent matrix bias.	X	-	
Interelement checks ICS-A, ICS-AB Instrument performance check	1) start of sequence 2) 80-120% target analytes 3) >120% ; detects J (ICS-AB) 4) 50%-79% R ICS-AB; detects J, NDs – UJ 5) <50% R – reject data 6) ICS-A response > DL and samples have <5X ICS-A response: detects J	ICS's %R's within limits for COC elements. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
2nd Source ICV	1) following calibration 2) 90- 110% Recovery (6010/7000) 3) 75%-89% R – detects J, NDs – UJ 4) 111-125% R – detects J 5) outside 75-125% R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
CCV	1) every 10 samples and end of run 2) 90- 110% Recovery (6010) Hg; 80-120% 3) 6010: 75%-89% R Hg, 65-79% R; – detects J, NDs – UJ. 4) 6010: 111-125%, Hg: 121-135% detects J 5) 6010: outside 75-125%, Hg; outside 65-135%; R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
Post Digestion Spike	1) 75- 125% R	All MS %R's within MPC limits. No PDS performed.	-	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 3) * performed annually 4) *MDL is at least ½ of PQL *tgt and surrogate 80-120% R	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 5) PES > acceptance criteria – Detects in samples J, 6) PES<acceptance criteria – Detects J, NDs –R 7) VOA/SV-XI14 other criteria 8) *% of PES sample above and below criteria 9) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy and precision is acceptable. Accuracy is shown by the LCS being within limits. The ICS-A, and ICS-AB were within limits for all elements. ICAL; 2-point calibration - linear. ICV: within MPC limits. CCV: within MPC limits.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		Serial dilution: within MPC limits. Matrix spike within MPC limits. No apparent matrix bias. Lab duplicate RPDs outside MPC limits for total & dissolved As and total Cu. Blanks: Prep blank: Dissolved metals: All samples in Al and samples 01 & 02 in Zn qualified U. Total metals: All samples in Cr, samples 01 & 02 in Ni, all samples in V and sample 01 in Zn are qualified U. ICB: Dissolved metals: Sample 01 in Sb and sample 03 in Co are qualified U. Total metals: Sample 02 in Sb, sample 03 in Co and sample 01 in Pb are qualified U. Sampling error- FD pair – samples 01 & 02. Please see attached field duplicate worksheet for the RPDs and qualifications. Total Zn and dissolved Pb results – qualified J for detects and Uj for non-detects in samples 01 & 02. Sampling precision acceptable for all other results. Sample results are usable for project decision making.			

*TIER III DATA VALIDATION ONLY Completeness Check: Inventory Check Sheet___X_Sample Quantitation Calculations (TIER III DATA VALIDATION ONLY):

Field Duplicate Worksheet - Round 9 - March 2004 - Goss Cove - SDG 0402313

Field Sample	Analyte	Analytical Method	Result	Units	Qualifier	Field Duplicate	Analyte	Result	Units	Qualifier	Field Duplicate RPD
8-GW08D-01	TETRACHLOROETHENE	8260B	3200	ug/l		FD-031104-01	TETRACHLOROETHENE	3200	ug/l		0.0
8-GW08D-01	ALUMINUM, TOTAL	6020A	0.0425	mg/l	J	FD-031104-01	ALUMINUM, TOTAL	0.0499	mg/l	J	16.0
8-GW08D-01	IRON, TOTAL	6020A	0.0529	mg/l	J	FD-031104-01	IRON, TOTAL	0.0558	mg/l	J	5.3
8-GW08D-01	MOLYBDENUM, TOTAL	6020A	0.00084	mg/l	J	FD-031104-01	MOLYBDENUM, TOTAL	0.00088	mg/l	J	4.7
8-GW08D-01	ZINC, TOTAL	6020A	0.00611	mg/l	U	FD-031104-01	ZINC, TOTAL	0.00674	mg/l	J	NC
8-GW08D-01	IRON, DISSOLVED	6020A	0.0352	mg/l	J	FD-031104-01	IRON, DISSOLVED	0.0352	mg/l	J	0.0
8-GW08D-01	CHROMIUM, DISSOLVED	6020A	0.00035	mg/l	J	FD-031104-01	CHROMIUM, DISSOLVED	0.00041	mg/l	J	15.8
8-GW08D-01	LEAD, DISSOLVED	6020A	0.00034	mg/l	J	FD-031104-01	LEAD, DISSOLVED		mg/l	UJ	NC
8-GW08D-01	MOLYBDENUM, DISSOLVED	6020A	0.00105	mg/l	J	FD-031104-01	MOLYBDENUM, DISSOLVED	0.00108	mg/l	J	2.8
8-GW08D-01	NICKEL, DISSOLVED	6020A	0.00048	mg/l	J	FD-031104-01	NICKEL, DISSOLVED	0.00037	mg/l	J	25.9
8-GW08D-01	VANADIUM, DISSOLVED	6020A	0.00052	mg/l	J	FD-031104-01	VANADIUM, DISSOLVED	0.00044	mg/l	J	16.7
8-GW08D-01	BARIUM, TOTAL	6020A	0.0119	mg/l		FD-031104-01	BARIUM, TOTAL	0.012	mg/l		0.8
8-GW08D-01	CALCIUM, TOTAL	6020A	14.8	mg/l		FD-031104-01	CALCIUM, TOTAL	15.4	mg/l		4.0
8-GW08D-01	MAGNESIUM, TOTAL	6020A	2.32	mg/l		FD-031104-01	MAGNESIUM, TOTAL	2.41	mg/l		3.8
8-GW08D-01	MANGANESE, TOTAL	6020A	0.0771	mg/l		FD-031104-01	MANGANESE, TOTAL	0.0802	mg/l		3.9
8-GW08D-01	POTASSIUM, TOTAL	6020A	2.94	mg/l		FD-031104-01	POTASSIUM, TOTAL	3.08	mg/l		4.7
8-GW08D-01	SODIUM, TOTAL	6020A	27.9	mg/l		FD-031104-01	SODIUM, TOTAL	28.9	mg/l		3.5
8-GW08D-01	BARIUM, DISSOLVED	6020A	0.0121	mg/l		FD-031104-01	BARIUM, DISSOLVED	0.0119	mg/l		1.7
8-GW08D-01	CALCIUM, DISSOLVED	6020A	14.8	mg/l		FD-031104-01	CALCIUM, DISSOLVED	14.8	mg/l		0.0
8-GW08D-01	MAGNESIUM, DISSOLVED	6020A	2.39	mg/l		FD-031104-01	MAGNESIUM, DISSOLVED	2.38	mg/l		0.4
8-GW08D-01	MANGANESE, DISSOLVED	6020A	0.0701	mg/l		FD-031104-01	MANGANESE, DISSOLVED	0.0691	mg/l		1.4
8-GW08D-01	POTASSIUM, DISSOLVED	6020A	3.04	mg/l		FD-031104-01	POTASSIUM, DISSOLVED	3.05	mg/l		0.3
8-GW08D-01	SODIUM, DISSOLVED	6020A	27.4	mg/l		FD-031104-01	SODIUM, DISSOLVED	27	mg/l		1.5

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab:

ALPHA Job #:

Client Information

Client: ECL
Address: 50 D'Angelo Drive, Marlborough, MA
Phone: 508 229 2270
Fax:
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Goss Cove
Project Location: New London, CT
Project #:
Project Manager: Darren Gainey
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
NAVY	

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are Drinking Water Samples Submitted?
☐ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:
* Field Filtered

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	SVOC	PAH	Pest	PCB	Total metals	Hardness	* Dissolved metals	Anions (Sulfate)				Sample Specific Comments	TOTAL # BOTTLES
	8-GW08D-01	3/11/04	0709	GW	SW	X	X	X	X	X	X	X	X	X					13
	FD-031104-01	3/11/04	0000	GW	SW	X	X	X	X	X	X	X	X	X					13
	8-GW01-01	3/11/04	0711	GW	MM	X	X	X	X	X	X	X	X	X					13
	8-TB03	3/11/04	1200	W		X													2

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/11/04 1315	[signature]	3/11/04 1315

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO: 07-03 rev

DATA VALIDATION MEMORANDUM
O&M MONITORING SITES – NEW LONDON NSB
MARCH 2004 SAMPLING ROUND 9 (SDG 0402277 ALPHA LAB)

TO: ENGINEERING FIELD ACTIVITY NORTHEAST

FROM: JACKSON KIKER, ECC SENIOR CHEMIST, MARLBOROUGH, MA.

SUBJECT: NEW LONDON NSB – IRP O&M MONITORING SITES - SAMPLING ROUND-9, MARCH '04

DATE: 5/20/2004

Project data were validated using the following Validation Functional Guideline, as modified for non-CLP methods.

1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluation of Environmental Analyses (Dec, 1996).

2. Operations and Maintenance Manual for Installation Restoration Program at Naval Submarine Base New London (Nov, 2002).

The validation guideline exceedences are assessed and documented on the method specific data validation worksheet. On the data validation worksheet, the data quality acceptance criteria are presented, analytes requiring qualification based on laboratory historical control limits and/or validation guidance criteria exceedences are listed, assigned qualifiers, qualifying rationale is documented, and any potential bias noted. The overall evaluation of the data generated is presented in the data validation worksheet.

Standard EPA Region I data qualifiers are used to denote the assessment of data quality. The final and ranking assigned data qualifier for an analyte is presented in the data summary table. Ancillary qualifiers are noted on the data validation worksheets.

As an exception to the USEPA Region I data validation guidance, non-target ketone VOC data with response factors (RFs) less than the 0.05 were not qualified, as the Tier guidance allows for exceptions to the RF guidance.

The USEPA Region I Organic Regional Data Assessment (ORDA) sheet displays the summarized results of the data validation assessment for all analytical methods reported in the SDG.

Region I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT

LAB NAME: Alpha Lab
SDG #:__0402277_____
EPA-NE DV TIER LEVEL:___II___
SITE NAME: New London NSB – O&M

# of SAMPLES/MATRIX:___6-GW, 1-FD & 1-TB(VOC)__
VALIDATION CONTRACTOR:__ECC
VALIDATOR'S NAME: Jackson Kiker
DV Completion Date:_May 17, 2004
Date Sampled__10 March 2004 _____

ANALYTICAL DATA QUALITY SUMMARY

		VOC	SVOC	PAH	Pesticide	PCB	Metals
1	Preservation and HT	O	O	O	O	O	O
2	Instrument Performance Check	O	O	O	O	O	O
3	Initial Calibration:	O	O	O	O	O	O
4	Continuing Calibration:	O	M	O	O	O	O
5	Blanks:	M	O	O	O	O	M
6	Surrogate Compounds:	O	O	O	O	O	-
7	Internal Standards	O	O	O	O	O	-
8	Matrix Spike/Matrix Spike Duplicate:	O	O	O	M	O	M
9	Sensitivity Check:	O	O	O	O	O	O
10	PE Samples- Accuracy Check	O	O	O	M	O	O
11	Target Compound Identification:	O	O	O	O	O	O
12	Compound Quantitation and Reported QLs	O	O	O	O	O	O
13	Tentatively Identified Compounds:	-	-	-	-	-	-
14	Semivolatile/Pesticide/PCB Cleanup:	-	-	-	-	_	-
15	Data Completeness	O	O	O	O	O	O
16	Overall Evaluation of Data:	O	O	O	O	O	O

O = Data had no problems or were qualified due to minor contractual problems; M = Data were qualified due to major/systemic MPC exceedences: Z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (Z items): _

AREAS OF CONCERN: (M items): _.

VOC: Due to method blank contamination tert-butylbenzene in samples 01 & 05, isopropyl benzene in samples 03 & 04, 1,2,4-trimethyl benzene in samples 03, 04 & 06, methylene chloride in samples 06 & 08 and o-xylene in samples 03 & 04 are qualified U.

SVOC: CCV %D > CL for 4-chloroaniline

Pesticide: Pesticide MS/MSD %R<LCL for alpha-BHC. Low LCS recovery for hexachlorobenzene & endrin ketone.

Metals: Please refer to the data review worksheets for the results that were qualified due to ICB and preparation blank contaminations. Total & dissolved As and total Cu results were qualified J for detects and UJ for non-detects due to MS/MSD RPD (same as lab duplicate) being out of MPC limits.

ECC Region I Data Review Worksheet (rv 2) **VOCs 8260B**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temp Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HCl**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough, MA**	**0402277**

Field Identification and Laboratory Number of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07
8-TB02	L0402277-08

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inventory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 14 Days to analysis, if preserved 2) J –detects, UJ or R –nondetects (function of time) 3) *transcription errors	Sent on: 03/10/04. Analyzed on: 16, 17 & 19 March, 2004. All samples analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made. 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable (NA)	X	-	
Trip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules apply to raw data) 4) MeCl & Acetone < 5 5) >RL report sample level U 6) <RL report PQL as U	8-TB02 (Lab sample 08) is the associated tripblank. Tripblank is non-detect for all reported analytes except methylene chloride – at 0.4 µg/L. This result is qualified U due to method blank contamination – no samples qualified.	X	-	
Equip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules don't apply) 3) MeCl & Acetone < 5 *Check IS area (10% of them) * recalculate surrogate (%R – 10 % of them)	Not collected/analyzed with this SDG. Equipment is dedicated.	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated) listed on data summary sheet.	The compounds that were reported with results <PQL but >MDL are qualified J. No results above upper calibration range. Please see attached data summary table for all such results.	X	Results < RDL but >MRL are qualified J.	
*TICs (if reported)	1) *verify library search for samples and blanks 2) verify TICs were not misreported compounds (different fraction or miss in search) 3) All TICs – J estimated 4) * verify blanks do not contain TIC peaks 5) * check TIC assignment spectra to STD spectra 6) *review blank and Samples for common lab contaminants	None Reported/not evaluated	-	-	
Surrogates	1,2-Dichloroethane-d4 70-120% Toluene-d8 75%-120% 4-BFB 75%-120% *check raw data for surrogated (recalculate 10% of them). *Transcription errors Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <70% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants for aq samples- 3) TGT analytes <Lab QL 4) MeCl & Acetone, 2-butanone, 4M-2Pentaone, and 2-hexanone < 5 (25 ml purge) 5) if linear range is exceeded, verify if a instrument blank was performed 6) *verify accurate transcription of times, Ids, are reported on forms 7) *verify from the raw data if the instrument blank was performed in the same vessel 8) *verify IS, RRT, and surrogate %R 9) *check 10% of raw chromotgrams for false +/-, check for transcription errors	2 method blank samples analyzed – WG165502-4 (applies to samples 01, 03, 04 & 05) & WG165502-6 (applies to samples 02, 06, 07 & 08). WG165502-4 has the following detections (all results in µg/L): Tert-butylbenzene – 0.4 (< 2.0) – 01 & 05. o-chlorotoluene – 0.37 (< 1.85) p-chlorotoluene – 0.41 (< 2.05) isopropyl benzene – 0.36 (< 1.8) – 03 & 04. 1,2,3-trichlorobenzene – 0.73 (< 3.65) 1,2,4-trichlorobenzene – 0.8 (< 4.0) 1,3,5-trimethylbenzene – 0.4 (<2.0) 1,2,4-trimethylbenzene – 0.36 (<1.8) - 03 & 04. Methylene chloride - 0.44 (< 2.2) Trichlorofluoromethane – 0.48 (<2.4) 1,1-dichloropropene – 0.38 (< 1.9) trichloroethene – 0.34 (<1.7) 1,2-dichlorobenzene – 0.35 (<1.75) 1,3-dichlorobenzene – 0.46 (<2.3) 1,4-dichlorobenzene – 0.48 (<2.4) o-xylene – 0.4 (< 2.0) – 03 & 04. Dichlorodifluoromethane – 0.63 (< 3.15) Carbon disulfide – 0.3 (< 1.5) Methylene chloride detected at 0.4 (<2.0) in WG165502-6 (06 & 08 qualified U). No detections of the above compounds in the field samples – no samples qualified.	X	Tert-butylbenzene in samples 01 & 05, isopropyl benzene in samples 03 & 04, 1,2,4-trimethyl benzene in samples 03, 04 & 06, methylene chloride in samples 06 & 08 and o-xylene in samples 03 & 04 are qualified U.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
LCS Recovery	1) benzene 79-119%, toluene 75-123%, chlorobenzene 81-123%, 1,1 DCE 69-126%, TCE 79-118%. 2) 10% and <LCL% J detec ts, UJ –Nods 3) >UCL% J detects <10% R NDs, J-detects 7) *Recalculate the concentrations for one compound in the LCS 8) * Recalucate the %R (within 10% of lab) Note: Tier guidance as a zero blind	All LCS %R's are within lab limits. No samples qualified. (LCS Batch Id - WG165502-3,5).	X	-	
MS/MSD Recovery	1) benzene 80-120%, toluene 75-120%, chlorobenzene 80-120%, 1,1 DCE 70-130%, TCE 70-1258%. 2) 80-120% (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL% J detects 3) *Recalculate the concentrations for one compound in the MS/MSD 4) * Recalucate the %R (within 10% of lab)	Native sample; 8-GW05S-01 – lab sample 0402219-03 (part of another SDG). All MS/MSD recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% (aq) J –detects in MS sample UJ-non detects * recalculate RPD	Native sample; 8-GW05S-01 – lab sample 0402219-03 (part of another SDG). All RPDs within MPC limits. Laboratory precision is acceptable for all VOCs. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 30%, <40% gaseous VOCs water; = 50 soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one >PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 4) Determine RPD for detects only. 5) *Recalculate the concentrations for one compound and the PQL	FD pair analyzed with this SDG consists of samples 04 & 06. For RPDs see attached Field Duplicate Worksheet. RPDs outside MPC limits for the following compounds: Chlorobenzene, benzene & n-propyl benzene (detected in 04 but not in 06) Ethyl benzene & p/m –xylene (RPD > 30%).	X	Detects qualified J and non-detects qualified UJ for chlorobenzene, benzene, n-propyl benzene, ethyl benzene and p/m-xylene results in samples 04 & 06.	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 5) * performed annually 6) *MDL is at least ½ of PQL 7) *tgt and surrogate 80-120% R 8) *VOA/SV-X11 (recalcuate %RSD and %R for three compounds (10% of them).	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
Internal Stds	1) IS are –50% to 200% of last Ical, or CCV 3) RRT<0.06 (30 sec) 4) IS>100% J-detects 5) IS<20%CCV NDs – R 6) IS>20%CCV <50%CCV NDs – UJ 7) *check for IS transcription errors	All IS %R and RTs are within Method limits.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %in control limits. 3) %R <10 ND- (R) , J- detects 4) 10%> but <LCL% , judgement 5) %R>UCL% J-detects 6) QC, IS, RRT meet criteria, 7) %RSD < 20% 8) MDL< MQL (3x less ideal) 9) Lab fortitied blank (see VOA/SV Part II – section X). 10) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab) 11) <u>Dilution factors for samples – impacts to sensitivity</u>	The following samples were diluted – 05 (2X) and 07 (20X). The reporting limits for site constituents of concern are below primary monitoring criteria. No samples qualified.	X	-	
*Compound Quantitation (completed as part of other steps)	1) Check sensitivy (MDL< 1/3 PQL) 2) *Recalculate one detection and quantitation limit 3) *verify concentrations have been adjusted to account for DW, DF, 4) *verifiy correct IS and RRF were used	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 10) *Matrix effects- MS/MSD, surrogated, PDS. 11) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 12) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * compare sample Mass spectra to standard spectra; a) all ions in std spectra (with 10% rel intensity) presnent in sample spectra. B) sample ion abundance within 20% of standard spectra. 3) *chromatogram: all peaks greater than 10% of nearest IS identified.	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 13) PES > acceptance criteria – Detects in samples J, 14) PES<acceptance criteria – Detects J, NDs –R 15) VOA/SV-XI14 other criteria	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
	16) *% of PES sample above and below criteria 17) *Recalculate concentrations for one tgt compound per PES (10% of lab)				
Tune check	1) ion abundance with method limits 2) *check for co-elution /proper background subtratction 3) *compare reported data to raw data	All tunes passed method criteria.	X	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) within 12 hours of the tune check 3) CCCs %RSD: <30% (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC (J –detects, R or UJ NDs all samples associated with Ical) 4) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0.3, 1122TCA>0..3 (J –detects, R NDs) 5) RRF>0.05 all compounds 6) RRT < 0.06 units (all stds within 30 sec) *7) RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./* 8) *verify that instrument parameters met method and that Ical and analysis used the same parameters 9) *recalculate RRF one tgt compound associated with each IS. Recalculated values within 10% of lab values. 10) *recalculate one tgt compound associated with each IS. Recalculated values within 10% 11) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 12) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument: Elaine.i ICAL: March 16, 2004 RRF>0.05, %RSD<15% and/or COD>0.99 for all compounds.	X	-	
Initial Cal (Linearity)	%RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte Qualification for compounds with %RSD>30% (see VOA/SVIII-5)	Instrument: Elaine.i ICAL: March 16, 2004 Ical acceptable per method requirements. Calibration for all compounds are linear. No samples qualified.	X	-	
2nd Source ICV	**%D<25%.** %R (between ICV and Ical) analytes 80%--120% (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	ICV performed on March 16, 2004. Instrument: Elaine - %D<25% for all reported VOCs of potential concern.	X	-	
CCV	1) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0..3, 1122TCA>0..3	Instrument Elaine - CCVs on 17 & 19 March, 2004. All %Ds within MPC limits. No samples	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
	2) RRF all compounds > 0.05 *3)* CCC: (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC) %**D<20% (or** all analytes if no CCCs reported). *4)* Lab method limits for non SPCC/CCC's. *5)* *RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./* 6) Qualification-J detects, R or UJ NDs 7) *verify same instrument and parameters 8) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 9) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 10) *IS RRT<0.06 units (30 sec) 11) * IS area -50 % to 100 % of last ICAL 12) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 13) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	qualified.			
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory precision and accuracy acceptable and no apparent sample bias for site constituents of concern. Sample results usable for project decisions, as qualified. Surrogates, LCS and MS/MSD recoveries within MPC limits. Calibration: ICAL linear. ICV's - I Cal confirmed. CCV: within MPC limits. Sampling error – Field duplicate pair analyzed with this SDG – 04 & 06. Qualifications for Chlorobenzene, benzene & n-propyl benzene, ethyl benzene & p/m –xylene. See field duplicate worksheet for the qualifications and RPDs. Tripblanks non-detect for all VOCs except methylene chloride – a compound qualified U due to method blank contamination. Method blank showed many detections - tert-butylbenzene in samples 01 & 05, isopropyl benzene in samples 03 & 04, 1,2,4-trimethyl benzene in samples 03, 04 & 06, methylene chloride in samples 06 & 08 and o-xylene in samples 03 & 04 are qualified U due to method blank contamination. Results <PQL but >MDL are qualified J – please see data summary tables for such results.	X	-	

* Tier III review items only.

Completeness Check: Inventory Check Sheet_____X__. Sample Quantitation Calculations (TIER III only):

ECC Region I Data Review Worksheet (rv 2) **SVOCs 8270C**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough , MA**	**0402277**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days aqueous – 14 days soil (extract 40 days) 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/10/04 Extracted on: 03/11/04 Analysed on: 03/19/04 & 03/20/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Data reported between the MDL and the MRL is qualified as estimated (J). 2,4-dimethylphenol result for sample 03 has result between MDL and MRL and is qualified J. No result above upper calibration range.	X	2,4-dimethylphenol result for sample 03 qualified J.	
TICs (if reported)	1) *verify library search for samples and blanks	None Reported	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Dedicated equipment – hence not collected/analyzed with this SDG	X	-	
Surrogates	Within historical laboratory limits Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <LCL% J-detects, UJ NDs	Surrogate phenol-d6 lab criterion is low (15%), but there is no Navy criteria for this surrogate in aqueous SVOCs. No action taken based upon this surrogate. All surrogate recoveries within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab) 3) no phthalates >5X QL (QAPP)	Lab blank is non-detect for all reported SVOCs. No samples qualified.	X	-	
LCS Recovery	1) Within historical laboratory limits listed in (QAPP) 10% and <LCL% J detects, UJ –NDs >UCL% J detects <10% R NDs, J-detects	All LCS recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD Recovery	1) Within historical laboratory limits (QAPP) (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample ID – sample 04. All MS/MSD recoveries within limits except for 2, 4-dinitrotoluene, for which the MS/MSD %R > UCL. For this compound, all results are non-detects – no samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants. Good surrogate recovery, GPC blank check – no carryover.(VOA/SV-IX-I6). Sulfur and High MW compounds removed. Symetrical peaks for all compounds,	NA	-	-	
MS/MSD RPD	RPD =30% aq, <50% (S) J –detects in MS sample UJ-non detects	MS/MSD RPDs within MPC limits for all SVOCs. No samples qualified.	X	-	
Tune Check	Tune check within method parameters for DFTPP	The raw data sheets were used for validation. CCV tune check within method limits.	X	-	
DDT degradation Instrument performance check	1) Breakdown <20% DDT 2) benzidine and pentachlorophenol at normal response - no peak trailing (<3.0 benz. , <5.0 penta.) Detections – J	Degradation checks performed with associated tune checks are all within limits.	X	-	
Field Dup RPD	1) RPD = 100% water; = 100% soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	Sample-field duplicate pair for this SDG – samples 04 & 06. All results non-detects for all SVOCs in the 2 samples of the pair. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte 1) CCCs %RSD: <30% (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) J –detects, R or UJ NDs all samples associated with Ical)	Instrument: Buffy Date: 17 January, 2004 at 08:39 (end time). RRF>0.05 all SVOCs. RSD<15% and/or COD>0.99 criteria used for linearity of SVOC Ical. No samples qualified based on ICAL.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	ICV for instrument Buffy. Date: 17 January 2004 at 10:02. All %Ds within MPC limits for all compounds.	X		
CCV	1) SPCCs Average RRF: SPCCs n-nitroso-di-n-propylamine, hexachlorcyclopentdiene, 2,4 dinitrophenol, 4-nitrophenol. 2) RRF all compounds > 0.05 3) CCC: (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) 4) %D<20%. CCCs (QAPP -except surrogates). 5) Qualification-J detects, R or UJ Nods 6) %D<25% all compounds (Tier I). 7) RRF exclusions: surrogates, 8) *verify same instrument and parameters 9) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 10) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 11) *IS RRT<0.06 units (30 sec) 12) * IS area -50 % to 100 % of last ICAL 13) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 14) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	CCV on 19 & 20 March 2004. %D exceeded MPC limits for 4-chloroaniline in all samples – all non-detects for this compound - qualified UJ.	X	4-chloroaniline qualified UJ in all samples.	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP)	For target SVOCs the MDL< ½ RDL. MDL < 1/3 RDL for most of the compounds. Analytical sensitivity is adequate.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIA S
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable and no apparent sample bias for all compounds except those mentioned above. Results are usable for making project decisions as qualified Method blank; non-detect for all SVOCs. MS/MSD recovery were > UCL 2, 4-dinitrotoluene . No qualifications as all results are non-detects. MS/MSD RPDs, surrogates and LCS recoveries within MPC limits. ICAL; linear. ICV: within limits for all SVOCs. CCV: within MPC limits except 4-chloroaniline. 2,4-dimethylphenol result for sample 03 qualified J as sample result < MRL. Sampling error- FD pair consists of samples 04 & 06. All results are non-detects in both samples. Similar results - sampling precision acceptable.	X	-	

*Tier III criteria.

Completeness Check: Inventory Check Sheet____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough, MA**	**0402277**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/10/04 Extracted on: 03/11/04 Analyzed on: 03/19/04 All samples analyzed within holding time. No samples analyzed.	X	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Hexachlorobenzene result in sample 01 was below the RDL & > MDL. All other results are within calibration range.	X	J qualifier for Hexachloro benzene result in sample 01.	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit 4) *verify concentrations have been adjusted	%D<25% between columns with detection criteria met. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	to account for DW, DF, 5) *verify correct RRFs were used				
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Lab Blanks (method blanks)	1) < 5x contaminants – U 2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	No COCs detected in the MB. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Not collected/analyzed with this SDG.	-	-	
Surrogates	Surrogate acceptance limits DCB & TCX – Lab limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	All surrogate recoveries within MPC limits for all compounds in both columns. No samples qualified.	X	-	
LCS Recovery	1) arochlors 1016/1260 2) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's for all compounds within MPC limits except endrin ketone and hexachlorobenzene. All hexachlorobenzene and endrin ketone results qualified J for detects and UJ for non-detects.	X	Hexachloro benzene results qualified J for sample 01 and qualified UJ for all other samples. Endrin ketone results qualified UJ for all samples.	
MS/MSD Recovery	1) Lab limits –(30-150%); (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	Native sample – sample 04. MS/MSD %R's within MPC limits except alpha-BHC and hexachlorobenzene (<LCL) No apparent matrix bias for all other compounds. Hexachlorobenzene has LCS recovery <LCL – so the low %R can be attributed to instrument performance rather than matrix interference for	X	All alpha-BHC results qualified UJ.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		hexachlorobenzene. In case of alpha-BHC, the low recovery is attributable to matrix bias. All alpha-BHC results (all non-detects) qualified UJ.			
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	Native sample – sample 04. All MS/MSD RPDs < 30%. Acceptable laboroatory precision. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 2) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 8) *Recalculate the concentrations for one compound and the PQL	FD pairs in this SDG – samples 04 & 06. All results non-detects for these samples. Sampling precision acceptable – no samples qualified.	X	-	
*MDL Study	6) *In accordance with 40CFR – seven replicates %RSD < 20% 7) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 3) %R <10 ND- (R) , J- detects 4) 10%> but <80% , judgement 5) %R>120% J-detects 6) QC, RRT meet criteria, 7) %RSD < 20% 8) MDL< MQL (3x less ideal) 9) Lab fortitied blank (see VOA/SV Part II – section X). 10) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Sensitivity acceptable, as this is the best available technology. Groundwater criterion and O&M RL are achieved.	x	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	RPDs between two columns for detections within limits. No samples qualified.	-	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria 10) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest2 Date: 14 Nov 2003 at 16:51 (end time). %RSD criteria met for both columns. No samples qualified.	X	-	
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument Id: Pest2 Date: 14 Nov 2003 at 16:51 (end time). Internal Standard Calibration; Calibration linear. %RSD criteria met for both columns.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 75%--125% (USACE) %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument; Pest 2, 14 Nov 2003 at 18:16. All compounds meet the MPC criteria for both channels A & B. No samples qualified.	X	-	
Degradation Check	<20% DDT breakdown.	Breakdown within limits. No samples qualified.	X	-	
CCV	1) 20% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest2 Date: 19 March 2004. All %Ds within MPC limits for all compounds in both columns. No samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy is acceptable except alpha-BHC, endrin ketone and hexachlorobenzene. Laboratory precision is acceptable for all other pesticides. The sample results are usable for making project decisions as qualified. No apparent matrix bias except for alpha-BHC. All surrogate recoveries within MPC limits. Low LCS %R for endrin ketone and hexachlorobenzene The result for hexachlorobenzene in sample 01 is below MRL and qualified as estimated (J). Low MS/MSD %R for alpha-BHC. ICAL: within MPC limits. CCV: Within MPC limits. ICV: within MPC limits. Method blank non-detect for all pesticides. Sampling error - all results non-detects in both samples of the sample-field duplicate pair. Sampling precision acceptable.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X

Sample Quantitation Calculations on attached sheet (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **PCB 8082**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough, MA**	**0402277**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/10/04 Extracted on: 03/11/04 Analyzed on: 03/17/04 All samples analyzed within holding time, no samples qualified.	X	-	
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Not analyzed, as MS/MSD was analyzed.	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	All results were non-detects. No results exceeded calibration range.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) QC, RRT meet criteria, 5) %RSD < 20% 6) MDL< MQL (3x less ideal) 7) Lab fortified blank (see VOA/SV Part II – section X). 8) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	The MDL is less than the Project Reporting Limit for all compounds but still greater than the groundwater criterion for Aroclor 1254. No samples qualified.	X	-	

ECC Region I Data Review Worksheet (rv 2) **PCB 8082**
New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit 4) *verify concentrations have been adjusted to account for DW, DF, 5) *verify correct RRFs were used	All aroclors non-detect on both columns. MDL < 1/3 RDL. Acceptable sensitivity. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	X	-	
Lab Blanks (method blanks)	1) < 5x contaminants – U 2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	No COCs detected in the method blank. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not analyzed/collected with this SDG.	-		
Surrogates	Surrogate acceptance limits DCB –Navy limits. 40% -135% DCB (aq) TCX 40-135% Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	Surrogate %R's are within method limits for all field samples. No samples qualified.	X	-	
Internal Standards	Meet method criteria.	All internal standards are within limits. No samples qualified.	X	-	
LCS Recovery	9) arochlors 1016/1260 10) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's with MPC. No samples qualified.	X	-	
MS/MSD Recovery	1) Lab limits- 30-150%; (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	MS/MSD native sample – sample 04. MS/MSD %R within laboratory limits. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
*MS/MSD/un spiked sample RSD	1)For unspiked compounds if reported, Non- MS spike compounds <50% RSD calculated from MS/MSD/Unspiked Qualification: >50% RSD J-detects 2)*recalculate the RPD (within 10% of lab)	NA	-	-	
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	MS/MSD RPD within MPC limits. Laboratory precision is acceptable.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 2) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 8) *Recalculate the concentrations for one compound and the PQL	Sample – field duplicate pair consists of samples 04 & 06. All results non-detects in these 2 samples – acceptable sampling precision.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria 10) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest8 Calibration End Date: 27 February 2004 at 11:02 (end time). Acceptable calibration standards. No samples qualified.	X	-	
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument Id: Pest8 Calibration End Date: 27 February 2004 at 11:02 (end time). Instrument calibrations for both columns are linear. Average %RSD within MPC limits fro all compounds in both columns. No samples qualified. .	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument Id: Pest8 Date: 27 February 2004. ICV within method limits. No samples qualified.	X	-	
CCV	1) QAPP: 15% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest8 Date: 17 March 2004. Average %D within MPC limits for all compounds in both columns. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy is acceptable Laboratory precision is acceptable. The sample results are usable for making project decisions. No apparent sample bias. All surrogate, LCS & MS/MSD recoveries within MPC limits. ICAL: Linear. ICV: within MPC limits. CCV: within MPC limits. Method blank non-detect for all COCs. Sampling error - FD pair - samples 04 & 06. All results are non-detects. Sampling precision acceptable.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X
Sample Quantitation Calculations on attached sheet (TIER III ONLY).

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough, MA**	**0402277**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days water, 40 to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/10/04 Extracted on: 03/11/04 Analyzed on: 03/17/04 All samples analyzed within holding time, no samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	The following results were > MDL but < RDL and were qualified J: 2-methyl naphthalene in samples 04 & 06, anthracene in sample 03, benzo(a)anthracene in samples 01, 03 & 05, benzo(a)pyrene in sample 05, benzo(b)fluoranthene in samples 01 & 05, benzo(k)fluoranthene in samples 01 & 05, chrysene in samples 01, 03, 04 & 05, fluoranthene in sample 03 and pyrene in sample 03. No results that exceed upper calibration range.	-	The results listed before are qualified J.	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not collected/analyzed with this SDG.	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
Surrogates	1) Surrogate acceptance limits Carbazole & p-Terphenly-d14 within QAPP limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab)	All method blanks were non-detects for PAHs. No samples qualified.	X	-	
LCS Recovery	1) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects	LCS %R within method limits. No samples qualified.	X	-	
MS/MSD Recovery	1) QAPP limits (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample – sample 04 (part of this SDG). MS/MSD %R's within limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% solid, 30%. J –detects in MS sample UJ-non detects	MS/MSD RPD within MPC limits for all compounds. No samples qualified. Laboratory precision acceptable.	X		
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants.	NA	-	-	
Retention times	Within 3X standard deviation for each analyte from 72-hour study Exceeds: R qualify data	Retention times within limits.	X	-	
Field Dup RPD	1) RPD = 100% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	One FD pair was analyzed with this SDG - samples 04-06. See Field Duplicate Worksheet for detected compounds and RPDs. All results well within MPC limits except for Chrysene for which sample 04 shows a detection and sample 06 is a non-detect. Chrysene result for sample 06 qualified UJ.	X	Chrysene result for sample 06 qualified UJ.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% Resolution check mix –valley 60% hgt of shortest peak (CLP criteria only) Performance check mix - >90% (PEM) (CLP criteria only) SW-846 PEM –endirn/DDT breakdown evaluation. Blank and Performance Evaluation Mix (PEM) at start, and blank and midpoint Individual Standard Mix A (ISMA) and ISMB at end or samples(CLP only)	07 January 2004 at 23:57 (end time). Instrument – Mindy Average %RSD < 15% ICAL linear. No samples qualified RRF>0.05	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Date: 08 January 2004 at 00:43. Instrument: Mindy ICV within MPC limits for all compounds. No samples qualified.	X	-	
CCV	1) 20% of initial calib. Curve (80%-120%) If low re-calibrate per method. If high no recalibration needed. J qualify data. 2) 20% D 3) Qualification-J detects, R or UJ NDs	Date: 19 March 2004 at 11:18. %D<20% for all PAHs. No samples qualified.	X	-	
Tune Check	Tune check within method parameters for DFTPP	Ical tune check within limits. And CCV tune check within limits. No samples qualified. Degradation checks associated with sample analysis and ICAL tune checks with limits.	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC. No samples qualified.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 2) %R <10 ND- (R) , J- detects 3) 10%> but <80% , judgement 4) %R>120% J-detects 5) QC, RRT meet criteria, 6) %RSD < 20% 7) MDL< MQL (3x less ideal) 8) Lab fortified blank (see VOA/SV Part II –section X). 9) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Reporting limit is less than the primary monitoring criteria for all compounds. MDL < 1/3 RDL – acceptable sensitivity.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP	MDL < 1/3 RDL. Acceptable sensitivity for all compounds. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable. No apparent sample bias. Data are usable for project decisions. ICAL is linear. ICV: %D within MPC limits. CCV; %D within MPClimits. Results that are < MRL but >MDL are qualified J. Please see attached data summary sheet for such results. No results that exceed upper calibration range. Sampling error - RPDs within MPC limits except for Chrysene. For RPD values please see attached Field Duplicate Worksheet.	X	-	

(*Tier III criteria)

Completeness Check: Inventory Check Sheet_____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Metals 6010B/7000**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HNO3**	**8-coolers 2.6, 1.0, 3.0, 2.6, 1.8, 1.6, 1.9 & 2.3 °C**	**Alpha Laboratory Westborough , MA**	**0402277**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02S-01	L0402277-01
8-GWHNUS23-01	L0402277-02
8-GW06S-01	L0402277-03
8-GW07S-01	L0402277-04
8-GW03-01	L0402277-05
FD-031004-01	L0402277-06
8-GW10S-01	L0402277-07

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all 8 coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 180 days (6010), Hg 28 Days to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/10/04 Extracted on: 03/15/04 Analyzed on: 03/22/04 & 03/23/04 Hg extracted on 19 March & analyzed on 22 March 2004. Samples analyzed within holding time. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Native sample – sample 0402277-04 for total metals and dissolved metals. Totals: RPDs>20% for As & Cu. Dissolved metals: As had RPD > 20. Lab duplicate RPDs<MPC limits for all other total and dissolved metals. Laboratory precision adequate. No other samples qualified.	X	Total & dissolved As and total Cu results – detects qualified J and non-detects qualified UJ.	
LCS Recovery	1) once per sample batch 2) 75-125% water, soil, QAPP limits. 3) <LCL% Reject 4) >UCL% detects J	LCS %R's acceptable. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 50% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect	FD pair consists of samples 04 & 06. All RPDs within MPC limits except total Cu and total Zn, for which the field samples showed detections and field duplicates were non-detects.	X	Total Cu result for sample 04 qualified J & for 06 qualified UJ. All total Zn results qualified J for detects and UJ for non-detects.	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Results less than the method reporting limits and greater than the method detection limit are qualified J. See data summary table.	X	Results < MRL but > MDL are qualified J.	
Lab Blanks (method blank or p reparation blank)	1) Once per sample batch 2) Results> QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Al – 0.00696 (<0.0348 qualified U – samples 04, 05 & 06)	X	Total metals: Samples 04 & 07 in Cr, samples 01	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		Ba – 0.00004 (< 0.0002 qualified U – none qualified) Be – 0.00002 (<0.0001 qualified U – none qualified) Cr – 0.00005 (<0.00025 qualified U – none qualified) Co – 0.00002 (<0.0001 qualified U – none qualified) Cu – 0.00072 (<0.0036 qualified U – sample 07) Fe – 0.00647 (<0.03235 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00661 (<0.03305 qualified U – none qualified) Mn – 0.00008 (<0.0004 qualified U – none qualified) Mo – 0.00012 (<0.0006 qualified U – sample 07) Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.0108 (<0.054 qualified U – none qualified) Na – 0.00966 (<0.0483 qualified U – none qualified) Zn – 0.00193 (<0.00965 qualified U – samples 02 & 03) Total metals: Al – 0.00369 (<0.01845 qualified U – none qualified) Ba – 0.00037 (< 0.00185 qualified U – none qualified) Cr – 0.00012 (<0.00060 qualified U – samples 04 & 07) Cu – 0.0004 (<0.002 qualified U – samples 01 & 07) Fe – 0.00304 (<0.0152 qualified U – none qualified) Pb – 0.00005 (<0.0002 qualified U – none qualified) Mg – 0.00242 (<0.0121 qualified U – none qualified) Mn – 0.00033 (<0.00165 qualified U – none qualified) Mo – 0.00007 (<0.00035 qualified U – none qualified) Ni – 0.00008 (<0.0004 qualified U – none qualified) Na – 0.0195(<0.0975 qualified U – none qualified) V – 0.00022 (<0.0011 qualified U – samples 03, 04, 05 & 07) Zn – 0.00124 (<0.0062 qualified U – sample 06 qualified)		& 07 in Cu, samples 03, 04, 05 & 07 in V and sample 06 in Zn qualified U. Dissolved metals: Samples 04, 05 & 06 in Al, sample 07 in Cu, sample 07 in Mo and samples 02 & 03 in Zn are qualified U.	
MS Recovery	1) 75-125% GFAA/ICP if MS > 4X native levels) Qualification of MS sample: 2) <30% J detects, R NDs 3) 30%--74%, detects J, NDs UJ	Native sample – sample 04 for total metals and dissolved metals. MS %R's within limits for total and dissolved analyses. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	>125% J detects				
Sensitivity*	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) %RSD < 20% 5) MDL< MQL (3x less ideal) 6) Lab fortitied blank (see VOA/SV Part II – section X). 7) *Check and recalculate %RSDs and %R fir three compounds (with 10% of lab)	MDL> OM RL for Zn. Lab RL >OM RL for all metals but less than lowest groundwater criterion.	X	-	
Equip Blank	< 5x contaminants for aq samples – for soil indicate EB (X rules don't apply)	Equipment blank not collected/analyzed with this SDG.	-	-	
Negative blanks	If negative values are reported for an analyte with absolute value >DL and sample value is <5X the absolute value of the blank or is nondetect Qualify detects as estimated (J) Nondetects as estimated (UJ	No analyte detections for target metals All negative blanks<DL. No samples qualified.	X	-	
Initial Cal Multipoint	1) 6010: 1 std and blank and low-level check at MQL – check std 20% 2) 3 stds and a blank- R = 0.995	ICAL performed according to method. Two point calibration and check standards. The pre-analysis check standard was within limits.	X	-	
Initial Calibration Blanks	1) Ical blank after Ical 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Sb – 0.00007 (<0.00035 qualified U – samples 02, 04 & 06) As – 0.00008 (< 0.0004 qualified U – none qualified) Ba – 0.00007 (< 0.00035 qualified U – none qualified) Be – 0.00007 (< 0.00035 qualified U – sample 05) Cd – 0.00007 (< 0.00035 qualified U – none qualified) Cr – 0.00007 (< 0.00035 qualified U – samples 02, 05 & 06) Co – 0.00007 (< 0.00035 qualified U – samples 04, 05, 06 & 07) Fe – 0.00696 (<0.0348 qualified U – sample 07) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00675 (<0.03375 qualified U – none qualified) Mn – 0.00007 (<0.00035 qualified U – none qualified) Mo – 0.0001 (<0.0005 qualified U – already qualified due to prep blank contamination) Ni – 0.00007 (<0.00035 qualified U – none	X	Dissolved metals: Samples 02, 04 & 06 in Sb, sample 05 in Be, samples 02, 05 & 06 in Cr, samples 04, 05, 06 & 07 in Co, sample 07 in Fe and sample 01 in V are qualified U. Total metals: Sb in samples 02 & 06, Be in samples 02, 05 & 07, Co in 01, 04, 05, 06 & 07 and	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		qualified) K – 0.00981 (<0.04905 qualified U – none qualified Tl – 0.00007 (<0.00035 qualified U – none qualified) V – 0.00007 (<0.00035 qualified U – sample 01) Total metals: Sb – 0.00006 (<0.0003 qualified U – samples 02 & 06) As – 0.00006 (<0.0003 qualified U – none qualified) Ba – 0.00006 (<0.0003 qualified U – none qualified) Be - 0.00006 (<0.0003 qualified U – samples 02, 05 & 07 qualified) Cd - 0.00008 (<0.0004 qualified U – none qualified) Cr – 0.0001 (<0.0005 qualified U – already qualified due to prep blank contamination) Co – 0.00007 (<0.00035 qualified U – samples 01, 04, 05, 06 & 07 qualified) Fe – 0.00675 (<0.03375 qualified U – sample 07) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00613 (<0.03065 qualified U – none qualified) Mn – 0.00006 (<0.0003 qualified U – none qualified) Mo – 0.00009 (<0.00045 qualified U – none qualified) Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.00408 (<0.0204 qualified U – none qualified) Na – 0.02836 (<0.1418 qualified U – none qualified) Tl – 0.00006 (<0.0003 qualified U – none qualified) V – 0.00005 (<0.00025 qualified U – none qualified)		Fe in sample 07 are qualified U.	
Continuing Calibration Blanks	1) CCB every 10 samples end of run 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	Only first 3 of the 6 CCBs applied to the field samples. The detections in the CCBs and the resulting qualifications are listed below (all the results are in mg/L). Dissolved metals: Al (0.00514) & Mn (0.00005) had detections lower than prep blank contamination and therefore had no further qualifications. Sb (0.00003), As (0.00005), Ba (0.00004), Be (0.00003), Cd (0.00003), Cr (0.00004), Co (0.00002), Ni (0.00003) and Tl (0.00003) had detections lower than ICB contamination levels and therefore had no further qualifications. Fe (0.00724), Mg (0.01106), Mo (0.00019),	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		K (0.01456) & Na (0.08027) had no results < 5X detection levels and had no further qualifications. Total metals: Ba (0.00011), Cr (0.00005), and Ni (0.00003) have detection levels lower than prep blank contamination levels. No further qualifications. Sb (0.00003), Be (0.00003), Cd (0.00004), Co (0.00003), Fe (0.00544), Pb (0.00003), Mg (0.00588) and Mn (0.00006) had detections less than ICB contamination levels and therefore had no further qualifications. Al (0.00392), Ca (0.01507), Mo (0.00017), K (0.00678), Na (0.05366) and V (0.00007) had no results < 5X detection levels in the associated samples and therefore no qualifications.			
Serial Dilution	1) once per digestion batch 2) Meets method limits (RPD 10%). 3) Metal results >50X MDL levels.	SD on native sample 04. %D's within limits for site COCs. No apparent matrix bias.	X	-	
Interelement checks ICS-A, ICS-AB Instrument performance check	1) start of sequence 2) 80-120% target analytes 3) >120% ; detects J (ICS-AB) 4) 50%-79% R ICS-AB; detects J, NDs – UJ 5) <50% R – reject data 6) ICS-A response > DL and samples have <5X ICS-A response: detects J	ICS's %R's within limits for COC elements. No samples qualified.	X	-	
2nd Source ICV	1) following calibration 2) 90- 110% Recovery (6010/7000) 3) 75%-89% R – detects J, NDs – UJ 4) 111-125% R – detects J 5) outside 75-125% R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
CCV	1) every 10 samples and end of run 2) 90- 110% Recovery (6010) Hg; 80-120% 3) 6010: 75%-89% R Hg, 65-79% R; – detects J, NDs – UJ. 4) 6010: 111-125%, Hg: 121-135% detects J 5) 6010: outside 75-125%, Hg; outside 65-135%; R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
Post Digestion Spike	1) 75- 125% R	PDS not performed as MS %R's within limits for Site COCs.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 3) * performed annually 4) *MDL is at least ½ of PQL *tgt and surrogate 80-120% R	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 5) PES > acceptance criteria – Detects in samples J, 6) PES<acceptance criteria – Detects J, NDs –R 7) VOA/SV-XI14 other criteria 8) *% of PES sample above and below criteria 9) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy and precision is acceptable. Accuracy is shown by the LCS being within limits. The ICS-A, and ICS-AB were within limits for all elements. Total & dissolved As and total Cu results – detects qualified J and non-detects qualified UJ due to MS/MSD RPDs being out of MPC limits. Prep blank and ICB detections resulted in U qualifiers being assigned for many results. Please see above for the list of results qualified. ICAL; 2-point calibration – within MPC limits. ICV: within MPC limits. CCV: within MPC limits. Serial dilution: within MPC limits. Matrix spike within MPC limits. No apparent matrix bias. Sampling error- FD pair – samples 04 & 06. Total Cu results for samples 04 & 06 were qualified. Sampling precision acceptable for all other results. Please see attached field duplicate worksheet for the RPDs. Total Zn results for all samples qualified and the qualifiers assigned. Sample results are usable for project decision making as qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS

*TIER III DATA VALIDATION ONLY Completeness Check: Inventory Check Sheet___X_Sample Quantitation Calculations (TIER III DATA VALIDATION ONLY):

Field Duplicate Worksheet - Round 8 - November 2003 - Goss Cove - SDG 0311210

Field Sample	Analyte	Analytical Method	Result	Units	Qualifier	Field Duplicate	Analyte	Result	Units	Qualifier	Field Duplicate RPD
8-GW07S-01	CHLOROBENZENE	8260B	0.4	ug/l	J	FD-031004-01	CHLOROBENZENE	0.5	ug/l	UJ	NC
8-GW07S-01	BENZENE	8260B	0.34	ug/l	J	FD-031004-01	BENZENE	0.5	ug/l	UJ	NC
8-GW07S-01	N-PROPYLBENZENE	8260B	0.32	ug/l	J	FD-031004-01	N-PROPYLBENZENE	0.5	ug/l	UJ	NC
8-GW07S-01	ETHYLBENZENE	8260B	0.58	ug/l	J	FD-031004-01	ETHYLBENZENE	0.33	ug/l	J	54.9
8-GW07S-01	P/M-XYLENE	8260B	2.2	ug/l	J	FD-031004-01	P/M-XYLENE	1.2	ug/l	J	58.8
8-GW07S-01	NAPHTHALENE	8260B	3.9	ug/l	J	FD-031004-01	NAPHTHALENE	3.5		J	10.8
8-GW07S-01	CHRYSENE	8270C-SIM	0.05	ug/l	J	FD-031004-01	CHRYSENE	0.2	ug/l	UJ	NC
8-GW07S-01	2-METHYLNAPHTHALENE	8270C-SIM	0.13	ug/l	J	FD-031004-01	2-METHYLNAPHTHALENE	0.17	ug/l	J	26.7
8-GW07S-01	ACENAPHTHENE	8270C-SIM	3.4	ug/l	J	FD-031004-01	ACENAPHTHENE	3.7	ug/l		8.5
8-GW07S-01	FLUORANTHENE	8270C-SIM	1.4	ug/l		FD-031004-01	FLUORANTHENE	1.3	ug/l		7.4
8-GW07S-01	NAPHTHALENE	8270C-SIM	0.88	ug/l		FD-031004-01	NAPHTHALENE	0.98	ug/l		10.8
8-GW07S-01	ANTHRACENE	8270C-SIM	0.24	ug/l		FD-031004-01	ANTHRACENE	0.26	ug/l		8.0
8-GW07S-01	FLUORENE	8270C-SIM	0.82	ug/l		FD-031004-01	FLUORENE	0.82	ug/l		0.0
8-GW07S-01	PHENANTHRENE	8270C-SIM	0.57	ug/l		FD-031004-01	PHENANTHRENE	0.58	ug/l		1.7
8-GW07S-01	PYRENE	8270C-SIM	0.74	ug/l		FD-031004-01	PYRENE	0.71	ug/l		4.1
8-GW07S-01	ALUMINUM, TOTAL	6020A	0.0291	mg/l	J	FD-031004-01	ALUMINUM, TOTAL	0.0187	mg/l	J	43.5
8-GW07S-01	ARSENIC, TOTAL	6020A	0.0014	mg/l	J	FD-031004-01	ARSENIC, TOTAL	0.0012	mg/l	J	15.4
8-GW07S-01	COPPER, TOTAL	6020A	0.00492	mg/l	J	FD-031004-01	COPPER, TOTAL		mg/l	UJ	NC
8-GW07S-01	LEAD, TOTAL	6020A	0.00045	mg/l	J	FD-031004-01	LEAD, TOTAL	0.00048	mg/l	J	6.5
8-GW07S-01	NICKEL, TOTAL	6020A	0.00045	mg/l	J	FD-031004-01	NICKEL, TOTAL	0.00045	mg/l	J	0.0
8-GW07S-01	ZINC, TOTAL	6020A	0.00859	mg/l	J	FD-031004-01	ZINC, TOTAL	0.00449	mg/l	U	NC
8-GW07S-01	ARSENIC, DISSOLVED	6020A	0.00087	mg/l	J	FD-031004-01	ARSENIC, DISSOLVED	0.0012	mg/l	J	31.9
8-GW07S-01	MOLYBDENUM, DISSOLVED	6020A	0.00231	mg/l	J	FD-031004-01	MOLYBDENUM, DISSOLVED	0.00205	mg/l	J	11.9
8-GW07S-01	NICKEL, DISSOLVED	6020A	0.00045	mg/l	J	FD-031004-01	NICKEL, DISSOLVED	0.00051	mg/l	J	12.5
8-GW07S-01	BARIUM, TOTAL	6020A	0.2742	mg/l		FD-031004-01	BARIUM, TOTAL	0.2744	mg/l		0.1
8-GW07S-01	CALCIUM, TOTAL	6020A	48.8	mg/l		FD-031004-01	CALCIUM, TOTAL	48.2	mg/l		1.2
8-GW07S-01	IRON, TOTAL	6020A	8.97	mg/l		FD-031004-01	IRON, TOTAL	8.76	mg/l		2.4
8-GW07S-01	MAGNESIUM, TOTAL	6020A	14.8	mg/l		FD-031004-01	MAGNESIUM, TOTAL	14.9	mg/l		0.7
8-GW07S-01	MANGANESE, TOTAL	6020A	0.4258	mg/l		FD-031004-01	MANGANESE, TOTAL	0.4095	mg/l		3.9
8-GW07S-01	MOLYBDENUM, TOTAL	6020A	0.0018	mg/l		FD-031004-01	MOLYBDENUM, TOTAL	0.00188	mg/l	J	4.3
8-GW07S-01	POTASSIUM, TOTAL	6020A	13	mg/l		FD-031004-01	POTASSIUM, TOTAL	13	mg/l		0.0
8-GW07S-01	SODIUM, TOTAL	6020A	36.1	mg/l		FD-031004-01	SODIUM, TOTAL	36.5	mg/l		1.1
8-GW07S-01	BARIUM, DISSOLVED	6020A	0.2858	mg/l		FD-031004-01	BARIUM, DISSOLVED	0.2695	mg/l		5.9
8-GW07S-01	CALCIUM, DISSOLVED	6020A	50	mg/l		FD-031004-01	CALCIUM, DISSOLVED	48	mg/l		4.1
8-GW07S-01	IRON, DISSOLVED	6020A	9.08	mg/l		FD-031004-01	IRON, DISSOLVED	8.7	mg/l		4.3
8-GW07S-01	MAGNESIUM, DISSOLVED	6020A	15.5	mg/l		FD-031004-01	MAGNESIUM, DISSOLVED	14.9	mg/l		3.9
8-GW07S-01	MANGANESE, DISSOLVED	6020A	0.4387	mg/l		FD-031004-01	MANGANESE, DISSOLVED	0.417	mg/l		5.1
8-GW07S-01	POTASSIUM, DISSOLVED	6020A	13.7	mg/l		FD-031004-01	POTASSIUM, DISSOLVED	13.1	mg/l		4.5
8-GW07S-01	SODIUM, DISSOLVED	6020A	37.1	mg/l		FD-031004-01	SODIUM, DISSOLVED	35.8	mg/l		3.6

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab:

ALPHA Job #:

Client Information

Client: ECC
Address: 50 D'Angelo Drive, Marlborough, MA 01752
Phone: 508 229 2270
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Goss Cove
Project Location: New London, CT
Project #:
Project Manager: Darren Gainer
ALPHA Quote #:

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
NAVY	

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are Drinking Water Samples Submitted?
☐ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:
* Field Filtered Dissolved metals
All VOC's are in a cooler with a Trip Blank

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	SVOC	PAH	Pest	PCB	Total Metals	Hardness	Dissolved Metals *	Anions (SO4+NH3)			Sample Specific Comments	TOTAL # BOTTLES
	8-GW02S-01	3/10/04	0702	GW	SW	X	X	X	X	X	X	X	X	X				13
	8-GWHNUS23-01	3/10/04	1430	GW	DC	X	X	X	X	X	X	X	X	X				13
	8-GW06S-01	3/10/04	1448	GW	SW	X	X	X	X	X	X	X	X	X				13
	8-GW07S-01	3/10/04	0924	GW	MM	X	X	X	X	X	X	X	X	X			MS/MSD	39
	8-GW03-01	3/10/04	0704	GW	MM	X	X	X	X	X	X	X	X	X				13
	FD-031004-01	3/10/04	0000	GW	MM	X	X	X	X	X	X	X	X	X				13
	8-GW10S-01	3/10/04	1012	GW	SW	X	X	X	X	X	X	X	X	X				13
	8-TB02	3/10/04	1200	W		X												

Container Type
Preservative

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	3/10/04 1630	S Wolcott	3/10/04 1630

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM NO. 07-03 (rev)

DATA VALIDATION MEMORANDUM
O&M MONITORING SITES – NEW LONDON NSB
MARCH 2004 SAMPLING ROUND 9 (SDG 0402313 ALPHA LAB)

TO: ENGINEERING FIELD ACTIVITY NORTHEAST

FROM: JACKSON KIKER, ECC SENIOR CHEMIST, MARLBOROUGH, MA.

SUBJECT: NEW LONDON NSB – IRP O&M MONITORING SITES - SAMPLING ROUND-9, MARCH '04

DATE: 5/20/2004

Project data were validated using the following Validation Functional Guideline, as modified for non-CLP methods.

1. Region I, EPA-NE Data Validation Functional Guidelines for Evaluation of Environmental Analyses (Dec, 1996).

2. Operations and Maintenance Manual for Installation Restoration Program at Naval Submarine Base New London (Nov, 2002).

The validation guideline exceedences are assessed and documented on the method specific data validation worksheet. On the data validation worksheet, the data quality acceptance criteria are presented, analytes requiring qualification based on laboratory historical control limits and/or validation guidance criteria exceedences are listed, assigned qualifiers, qualifying rationale is documented, and any potential bias noted. The overall evaluation of the data generated is presented in the data validation worksheet.

Standard EPA Region I data qualifiers are used to denote the assessment of data quality. The final and ranking assigned data qualifier for an analyte is presented in the data summary table. Ancillary qualifiers are noted on the data validation worksheets.

As an exception to the USEPA Region I data validation guidance, non-target ketone VOC data with response factors (RFs) less than the 0.05 were not qualified, as the Tier guidance allows for exceptions to the RF guidance.

The USEPA Region I Organic Regional Data Assessment (ORDA) sheet displays the summarized results of the data validation assessment for all analytical methods reported in the SDG.

Region I, EPA-NE ORGANIC REGIONAL DATA ASSESSMENT

LAB NAME: Alpha Lab
SDG #:__0402313_____
EPA-NE DV TIER LEVEL:___II___
SITE NAME: New London NSB – O&M

# of SAMPLES/MATRIX:___3-GW & 1-TB(VOC)__
VALIDATION CONTRACTOR:__ECC
VALIDATOR'S NAME: Jackson Kiker
DV Completion Date:_May 17, 2004
Date Sampled__11 March 2004 _____

ANALYTICAL DATA QUALITY SUMMARY

		VOC	SVOC	PAH	Pesticide	PCB	Metals
1	Preservation and HT	O	O	O	O	O	O
2	Instrument Performance Check	O	O	O	O	-	O
3	Initial Calibration:	O	O	O	O	O	O
4	Continuing Calibration:	O	M	O	M	O	O
5	Blanks:	M	O	O	O	O	M
6	Surrogate Compounds:	O	O	O	O	O	-
7	Internal Standards	O	O	O	O	O	-
8	Matrix Spike/Matrix Spike Duplicate:	O	O	O	O	O	M
9	Sensitivity Check:	O	O	O	O	O	O
10	PE Samples- Accuracy Check	O	O	O	M	O	O
11	Target Compound Identification:	O	O	O	O	O	O
12	Compound Quantitation and Reported QLs	O	O	O	O	O	O
13	Tentatively Identified Compounds:	-	-	-	-	-	-
14	Semivolatile/Pesticide/PCB Cleanup:	-	-	-	-	-	-
15	Data Completeness	O	O	O	O	O	O
16	Overall Evaluation of Data:	O	O	O	O	O	O

O = Data had no problems or were qualified due to minor contractual problems; M = Data were qualified due to major/systemic MPC exceedences: Z = Data were rejected as unusable due to major contractual problems.

ACTION ITEMS: (Z items): _

AREAS OF CONCERN: (M items): _.

VOC: Samples 01 & 02 qualified U for methylene chloride due to method blank contamination.

SVOC: 3, 3'-dichlorobenzidine results qualified UJ due to high %D in CCV.

PAH: None

Pesticide: Delta-BHC, endrin aldehyde and hexachlorobenzene results qualified UJ.due to low LCS recoveries. CCV: Delta-BHC, endosulfan sulfate and endrin ketone results qualified UJ because of high %D.

PCB: None.

Metals: Please refer to the data review worksheets for the results that were qualified due to ICB, CCB and Preparation blank contaminations. Total & dissolved As and total Cu results – detects qualified J and non-detects qualified UJ due to MS/MSD RPDs being out of MPC limits.

ECC Region I Data Review Worksheet (rv 2) **VOCs 8260B**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temp Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HCl**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification and Laboratory Number of Samples Evaluated:

Field ID	Lab Sample Number
8-GW06D-01	L0402219-01
8-GW02D-01	L0402219-02
8-GW05S-01	L0402219-03
8-TB01	L0402219-04

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inventory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 14 Days to analysis, if preserved 2) J –detects, UJ or R –nondetects (function of time) 3) *transcription errors	Sent on: 08 & 09 March, 2004 Analyzed on: 16 & 17 March, 2004 All samples analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made. 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable (NA)	X	-	
Trip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules apply to raw data) 4) MeCl & Acetone < 5 5) >RL report sample level U 6) <RL report PQL as U	8-TB01 (Lab sample 04) is the associated tripblank. Tripblank is non-detect for all reported analytes except methylene chloride detected at 0.58 µg/L. All Mecl results are non-detects – no samples qualified.	X	-	
Equip Blank	1) < 5x (<10x common) contaminants for aq samples- 2) TGT analytes <Lab QL (contact lab) -for soils indicate TB (X rules don't apply) 3) MeCl & Acetone < 5 *Check IS area (10% of them) * recalculate surrogate (%R – 10 % of them)	Not collected/analyzed with this SDG. Equipment is dedicated.	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated) listed on data summary sheet.	The following compounds were reported with results <PQL but >MDL(All values in µg/L. PQLs listed in parantheses): Trichloroethene in sample 01 – 0.46 (0.5) Mecl in sample 04 (trip blank) – 0.58 (5.0)	X	The list of samples affected has been provided.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
		The above compounds are J qualified.		They are J qualified.	
*TICs (if reported)	1) *verify library search for samples and blanks 2) verify TICs were not misreported compounds (different fraction or miss in search) 3) All TICs – J estimated 4) * verify blanks do not contain TIC peaks 5) * check TIC assignment spectra to STD spectra 6) *review blank and Samples for common lab contaminants	None Reported/not evaluated	-	-	
Surrogates	1,2-Dichloroethane-d4 70-120% Toluene-d8 75%-120% 4-BFB 75%-120% *check raw data for surrogated (recalculate 10% of them). *Transcription errors Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <70% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants for aq samples- 3) TGT analytes <Lab QL 4) MeCl & Acetone, 2-butanone, 4M-2Pentaone, and 2-hexanone < 5 (25 ml purge) 5) if linear range is exceeded, verify if a instrument blank was performed 6) *verify accurate transcription of times, Ids, are reported on forms 7) *verify from the raw data if the instrument blank was performed in the same vessel 8) *verify IS, RRT, and surrogate %R 9) *check 10% of raw chromotgrams for false +/-, check for transcription errors	2 method blank samples analyzed – WG165502-4 (applies to samples 03 & 04) & WG165502-6 (applies to samples 01 & 02). WG165502-4 has the following detections (all results in µg/L): Tert-butylbenzene – 0.4 (< 2.0) o-chlorotoluene – 0.37 (< 1.85) p-chlorotoluene – 0.41 (< 2.05) isopropyl benzene – 0.36 (< 1.8) 1,2,3-trichlorobenzene – 0.73 (< 3.65) 1,2,4-trichlorobenzene – 0.8 (< 4.0) 1,3,5-trimethylbenzene – 0.4 (<2.0) 1,2,4-trimethylbenzene – 0.36 (<1.8) Methylene chloride - 0.44 (< 2.2) Trichlorofluoromethane – 0.48 (<2.4) 1,1-dichloropropene – 0.38 (< 1.9) trichloroethene – 0.34 (<1.7) 1,2-dichlorobenzene – 0.35 (<1.75) 1,3-dichlorobenzene – 0.46 (<2.3) 1,4-dichlorobenzene – 0.48 (<2.4) o-xylene – 0.4 (< 2.0) Dichlorodifluoromethane – 0.63 (< 3.15) Carbon disulfide – 0.3 (< 1.5) Methylene chloride detected at 0.4 (<2.0) in WG165502-6. No detections of the above compounds in the field samples – no samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
LCS Recovery	1) benzene 79-119%, toluene 75-123%, chlorobenzene 81-123%, 1,1 DCE 69-126%, TCE 79-118%. 2) 10% and <LCL% J detec ts, UJ –Nods 3) >UCL% J detects <10% R NDs, J-detects 7) *Recalculate the concentrations for one compound in the LCS 8) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	All LCS %R's are within lab limits. No samples qualified. (LCS Batch Id - WG165502-3LCS, 5LCS & 7LCS).	X	-	
MS/MSD Recovery	1) benzene 80-120%, toluene 75-120%, chlorobenzene 80-120%, 1,1 DCE 70-130%, TCE 70-1258%. 2) 80-120% (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL% J detects 3) *Recalculate the concentrations for one compound in the MS/MSD 4) * Recalucate the %R (within 10% of lab)	Native sample; 8-GW05S-01 – lab sample 03. All MS/MSD recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% (aq) J –detects in MS sample UJ-non detects * recalculate RPD	Native sample; 8-GW05S-01 – lab sample 02. All RPDs within MPC limits. Laboratory precision is acceptable for all VOCs. No samples qualified.	x	-	
Field Dup RPD	1) RPD = 30%, <40% gaseous VOCs water; = 50 soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one >PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 4) Determine RPD for detects only. 5) *Recalculate the concentrations for one compound and the PQL	No field duplicate analyzed with this SDG.	-	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 5) * performed annually 6) *MDL is at least ½ of PQL 7) *tgt and surrogate 80-120% R 8) *VOA/SV-X11 (recalcuate %RSD and %R for three compounds (10% of them).	NA	-	-	
Internal Stds	1) IS are –50% to 200% of last Ical, or CCV 3) RRT<0.06 (30 sec) 4) IS>100% J-detects 5) IS<20%CCV NDs – R 6) IS>20%CCV <50%CCV NDs – UJ 7) *check for IS transcription errors	All IS %R and RTs are within Method limits.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %in control limits. 3) %R <10 ND- (R) , J- detects 4) 10%> but <LCL% , judgement 5) %R>UCL% J-detects 6) QC, IS, RRT meet criteria, 7) %RSD < 20% 8) MDL< MQL (3x less ideal) 9) Lab fortitied blank (see VOA/SV Part II – section X). 10) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab) 11) <u>Dilution factors for samples – impacts to sensitivity</u>	No diluted samples. No samples qualified.	X	-	
*Compound Quantitation (completed as part of other steps)	1) Check sensitivy (MDL< 1/3 PQL) 2) *Recalculate one detection and quantitation limit 3) *verify concentrations have been adjusted to account for DW, DF, 4) *verifiy correct IS and RRF were used	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 10) *Matrix effects- MS/MSD, surrogated, PDS. 11) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 12) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * compare sample Mass spectra to standard spectra; a) all ions in std spectra (with 10% rel intensity) presnent in sample spectra. B) sample ion abundance within 20% of standard spectra. 3) *chromatogram: all peaks greater than 10% of nearest IS identified.	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 13) PES > acceptance criteria – Detects in samples J, 14) PES<acceptance criteria – Detects J, NDs –R 15) VOA/SV-XI14 other criteria 16) *% of PES sample above and below criteria 17) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
Tune check	1) ion abundance with method limits 2) *check for co-elution /proper background subtratction 3) *compare reported data to raw data	All tunes passed method criteria.	X	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) within 12 hours of the tune check 3) CCCs %RSD: <30% (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC (J –detects, R or UJ NDs all samples associated with Ical) 4) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0.3, 1122TCA>0..3 (J –detects, R NDs) 5) RRF>0.05 all compounds 6) RRT < 0.06 units (all stds within 30 sec) *7) RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./* 8) *verify that instrument parameters met method and that Ical and analysis used the same parameters 9) *recalculate RRF one tgt compound associated with each IS. Recalculated values within 10% of lab values. 10) *recalculate one tgt compound associated with each IS. Recalculated values within 10% 11) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 12) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument: Elaine.i ICAL; March 16, 2004 at 13:38 (end time). RRF>0.05, %RSD<15% and/or COD>0.99 for all compounds.	X	-	
Initial Cal (Linearity)	%RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte Qualification for compounds with %RSD>30% (see VOA/SVIII-5)	Instrument: Elaine.i ICAL: March 16, 2004 at 13:38 (end time). Ical acceptable per method requirements. Calibration for all compounds are linear. No samples qualified.	X	-	
2nd Source ICV	**%D<25%.** %R (between ICV and Ical) analytes 80%--120% (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Instrument: Elaine.i ICV: March 16, 2004 at 15:51. Instrument: Elaine - %D<25% for all reported VOCs of potential concern.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED/Rationale	Inven-tory	QUAL	BIAS
CCV	1) SPCCs Average RRF: SPCCs Chloromethane >0.10, 1,1 DCA>0.10, bromoform >0.10, chlorobenzene>0..3, 1122TCA>0..3 2) RRF all compounds > 0.05 *3)* CCC: (1,1 DCA, chloroform, 1,2dichloropropane, Toluene, EB, VC) %**D<20% (or** all analytes if no CCCs reported). *4)* Lab method limits for non SPCC/CCC's. *5)* *RRF exclusions: surrogates, acetone, MeCL, chloroethane/methane, CS, 1,2 DCA, 2-butanone, 1,2 dichloropropane, 2-hexanone (IV-8)./* 6) Qualification-J detects, R or UJ NDs 7) *verify same instrument and parameters 8) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 9) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 10) *IS RRT<0.06 units (30 sec) 11) * IS area -50 % to 100 % of last ICAL 12) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 13) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Elaine - CCVs on 17 & 19 March, 2004. All %Ds within MPC limits. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory precision and accuracy acceptable and no apparent sample bias for site constituents of concern. Sample results usable for project decisions, as qualified. All surrogate recoveries within MPC limits. LCS recoveries within MPC limits. MS/MSD recoveries and RPDs within MPC limits for all compounds. Calibration: ICAL linear for all compounds. ICV's - I Cal confirmed. CCV: within MPC limits. Tripblanks non-detect for all VOCs except methylene chloride -no cross contamination apparent as sample results are non-detect for this compound. Method blanks show detections of many compounds but no apparent cross-contamination as sample results for all detected compounds are non-detects. Field duplicate not analyzed with this SDG.	X	-	

* Tier III review items only.

Completeness Check: Inventory Check Sheet_____X__. Sample Quantitation Calculations (TIER III only):

ECC Region I Data Review Worksheet (rv 2) **SVOCs 8270C**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW06D-01	L0402219-01
8-GW02D-01	L0402219-02
8-GW05S-01	L0402219-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days aqueous – 14 days soil (extract 40 days) 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/08/04. Extracted on: 03/11/04 Analyzed by: 03/20/04. Sample prepared/analyzed within holding times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Data reported between the MDL and the MRL or exceeding upper calibration range are qualified as estimated (J). No such results – no samples qualified.	X	-	
TICs (if reported)	1) *verify library search for samples and blanks	None Reported	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Dedicated equipment – hence not collected/analyzed with this SDG	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
Surrogates	Within historical laboratory limits Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <LCL% J-detects, UJ NDs	All surrogates within MPC limits except FBP for sample 02. All halogenated aromatics for sample 02 are qualified J for detects and UJ for non-detects. Based on this sample 02 results for 1, 2, 4-trichlorobenzene, 1, 2-dichlorobenzene, 1, 3-dichlorobenzene, 1, 4-dichlorobenzene, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether and hexachlorobenzene results – all non-detects – are qualified UJ.	X	Sample 02 results for 1, 2, 4-trichlorobenzene, 1, 2-dichlorobenzene, 1, 3-dichlorobenzene, 1, 4-dichlorobenzene, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether and hexachlorobenzene results – all non-detects – are qualified UJ.	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab) 3) no phthalates >5X QL (QAPP)	Lab blank is non-detect for all reported SVOCs. No samples qualified.	X	-	
LCS Recovery	1) Within historical laboratory limits listed in (QAPP) 10% and <LCL% J detects, UJ –NDs >UCL% J detects <10% R NDs, J-detects	All LCS recoveries within MPC limits. No samples qualified.	X	-	
MS/MSD Recovery	1) Within historical laboratory limits (QAPP) (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample is part of another SDG. Native sample ID – 0402277-04 All MS/MSD recoveries within limits except for 2, 4-dinitrotoluene, for which the MS/MSD %R > UCL. For this compound, all results are non-detects – no samples qualified.	X	-	
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants. Good surrogate recovery, GPC blank check – no carryover.(VOA/SV-IX-I6). Sulfur and High MW compounds removed. Symetrical peaks for all compounds,	NA	-	-	
MS/MSD RPD	RPD =30% aq, <50% (S) J –detects in MS sample UJ-non detects	All MS/MSD RPDs are within MPC limits for all compounds. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
Tune Check	Tune check within method parameters for DFTPP	The raw data sheets were used for validation. CCV tune check within limits.	X	-	
DDT degradation Instrument performance check	1) Breakdown <20% DDT 2) benzidine and pentachlorophenol at normal response - no peak trailing (<3.0 benz. , <5.0 penta.) Detections – J	Degradation checks performed with associated tune checks are all within limits.	X	-	
Field Dup RPD	1) RPD = 100% water; = 100% soil for Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	No field duplicates collected/analyzed with this SDG. No samples qualified.	-	-	
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <15% for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte 1) CCCs %RSD: <30% (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) J –detects, R or UJ NDs all samples associated with Ical)	Instrument: Buffy End date: 17 January '04 at 08:39. RRF>0.05 all SVOCs. RSD<15% and/or COD>0.99 criteria used for linearity of SVOC Ical. Acceptable linearity. No samples qualified based on ICAL.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 25%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Instrument: Buffy Date: 17 January '04 at 10:53 (injection time) All %Ds within MPC limits for all compounds of concern. No samples qualified.	X		
CCV	1) SPCCs Average RRF: SPCCs n-nitroso-di-n-propylamine, hexachlorcyclopentdiene, 2,4 dinitrophenol, 4-nitrophenol. 2) RRF all compounds > 0.05 3) CCC: (acenatphthene, 1,4 dichlorobenzene, hexachlorobutadiene, dipheynlamin, di-n-octyl phthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4, dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, 2,4,6 trichlorophenol) 4) %D<20%. CCCs (QAPP -except surrogates). 5) Qualification-J detects, R or UJ Nods 6) %D<25% all compounds (Tier I). 7) RRF exclusions: surrogates,	CCV on 19 & 20 March 2004. %D within MPC limits for all compounds except 4-chloroaniline. Sample results for this compound – all non-detects – qualified UJ.	X	4- chloroaniline results qualified UJ in all samples.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inve n-tory	QUAL	BIAS
	8) *verify same instrument and parameters 9) *Recalculate RRF for one tgt cmpd associated with each IS. (within 10%) 10) *Recalculate %D for one tgt cmpd associated with each IS (within 10%) 11) *IS RRT<0.06 units (30 sec) 12) * IS area -50 % to 100 % of last ICAL 13) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 14) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)				
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP)	For target SVOCs the MDL< 1/3 PQL. Analytical sensitivity is adequate. Reporting limits are below the monitoring criteria for all compounds.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable and no apparent sample bias for all compounds except those mentioned above. Results are usable for making project decisions as qualified. Method blank; non-detect for all SVOCs. MS/MSD recoveries and RPDs: within MPC limits. LCS recoveries: within MPC limits. Surrogate recoveries outside MPC limits for FBP in sample 02. Results for halogenated aromatics in this sample are qualified UJ. ICAL; linear. ICV: within limits for all SVOCs. CCV: in limits except 4-chloroaniline. Sampling error – not evaluated. No field duplicate sample collected/analyzed with this SDG.	X	-	

*Tier III criteria.

Completeness Check: Inventory Check Sheet_____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW06D-01	L0402219-01
8-GW02D-01	L0402219-02
8-GW05S-01	L0402219-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/08/04. Extracted on: 03/11/04 Analyzed on: 03/19/04. All samples analyzed within holding time. No samples analyzed.	X	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	No result outside the calibration range. No samples qualified.	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC. No samples qualified.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit 4) *verify concentrations have been adjusted to account for DW, DF, 5) *verify correct RRFs were used	No detected result in any of the columns. %D<25% between columns with detection criteria met. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Lab Blanks (method blanks)	1) < 5x contaminants – U 2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	No COCs detected in the MB. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Not collected/analyzed with this SDG.	-	-	
Surrogates	Surrogate acceptance limits DCB&TCX – Lab limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
LCS Recovery	1) arochlors 1016/1260 2) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's for all compounds within MPC limits except endrin ketone and hexachlorobenzene. The results for these 2 compounds – all non-detects – are qualified UJ.	X	Endrin ketone and hexachloro benzene results qualified UJ.	
MS/MSD Recovery	1) Lab limits –(30-150%); (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	Native sample is part of another SDG. Native sample ID – 0402277-04 MS/MSD %R's within MPCs except alpha-BHC and hexachlorobenzene (<LCL) No apparent matrix bias for all other compounds. The LCS %R was also low for hexachlorobenzene. The low MS %R is attributed to instrument performance rather than matrix interference for this compound. For alpha-BHC, the bias is more due to matrix interference. The results for alpha-BHC are qualified UJ for all samples as all results are non-detects.	X	Alpha-BHC qualified UJ for all samples as all results are non-detects.	
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	Native sample is part of another SDG. Native sample ID – 0402277-04 All RPDs <30%. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 1) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	Field duplicate sample not collected/analyzed with this SDG.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	8) *Recalculate the concentrations for one compound and the PQL				
*MDL Study	6) *In accordance with 40CFR – seven replicates %RSD < 20% 7) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 3) %R <10 ND- (R) , J- detects 4) 10%> but <80% , judgement 5) %R>120% J-detects 6) QC, RRT meet criteria, 7) %RSD < 20% 8) MDL< MQL (3x less ideal) 9) Lab fortitied blank (see VOA/SV Part II – section X). 10) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Sensitivity acceptable, as this is the best available technology. Groundwater criterion and O&M RL are achieved.	X	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	RPDs between two columns for detections within limits. No samples qualified.	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria 10) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	

ECC Region I Data Review Worksheet (rv 2) **Pesticide 8081A**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual (2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest2 Date: 14 Nov 2003 at 16:51 (end time). Acceptable calibration standards.	X	-	
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument Id: Pest2 Date: 14 Nov 2003 at 16:51. Internal Standard Calibration; Calibration linear. %RSD criteria met for both columns for all compounds of concern. No samples qualified.	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument; Pest 6, 14 Nov 2003 at 18:16. All compounds meet the RRF criterion for both channels. No samples qualified.	X	-	
Degradation Check	<20% DDT breakdown.	Breakdown within limits. No samples qualified.	X	-	
CCV	1) 15% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument: Pest 6, 19 & 20 March, 2004. All %Ds within limits except heptachlor which has marginal exceedances on one of the columns. All results non-detects for heptachlor - qualified UJ. .	X	Heptachlor results qualified UJ.	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory precision and accuracy are acceptable except endrin ketone, alpha-BHC and hexachlorobenzene. Alpha-BHC has low MS/MSD recovery. Low LCS recoveries for endrin ketone and hexachlorobenzene. The sample results are usable for making project decisions as qualified. No apparent matrix bias. ICAL: within MPC limits. CCV: Within MPC limits, except for heptachlor. ICV: within MPC limits. Sampling error - not evaluated for this SDG.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X

Sample Quantitation Calculations on attached sheet (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **PCB 8082**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW06D-01	L0402219-01
8-GW02D-01	L0402219-02
8-GW05S-01	L0402219-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 to extract, 40 Days to analysis 2) J –detects, UJ or R –nondetects (function of time) 3) *check transcription errors	Sent on: 03/08/04 Extracted on: 03/11/04 Analyzed on: 03/17/04. All samples analyzed within holding time, no samples qualified.	X	-	
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Not analyzed, as MS/MSD was analyzed.	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	All results were non-detects. No results exceeded calibration range.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) QC, RRT meet criteria, 5) %RSD < 20% 6) MDL< MQL (3x less ideal) 7) Lab fortified blank (see VOA/SV Part II – section X). 8) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	The RDL is less than the Project Reporting Limit but greater than the groundwater criterion. No samples qualified.	X	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP 2) %D <25% primary and secondary column identification and quantitation 3) *Recalculate one detection and quantitation limit 4) *verify concentrations have been adjusted	All aroclors non-detect on both columns. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	to account for DW, DF, 5) *verify correct RRFs were used				
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	X	-	
Lab Blanks (method blanks)	1) < 5x contaminants – U 2) analytes <lab PQL (contract lab) 3) if linear range is exceeded, verify if a instrument blank was performed 4) *verify accurate transcription of times, Ids, are reported on forms 5) *verify from the raw data if the instrument blank was performed in the same vessel 6) *verify, RRT, and surrogate %R 7) *check 10% of raw chromatograms for false +/-, check for transcription errors recalculate surrogate recovery (10% of them)	No COCs detected in the method blank. No samples qualified.	X	-	
Equip Blank	< 5x (<10x common) contaminants for aq samples for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not analyzed/collected with this SDG.	-		
Surrogates	Surrogate acceptance limits DCB –Navy limits. 40% -135% DCB (aq) TCX 40-135% Qualification: >UCL J –detects, %R<10% J –detects, R –NDs, %R >10% but <60% J-detects, UJ NDs	Surrogate %R's are within method limits for all field samples. No samples qualified.	X	-	
Internal Standards	Meet method criteria.	All internal standards are within limits. No samples qualified.	X	-	
LCS Recovery	9) arochlors 1016/1260 10) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects 4) *Recalculate the concentrations for one compound in the LCS 5) * Recalculate the %R (within 10% of lab) Note: Tier guidance as a zero blind	LCS %R's with MPC limits. No samples qualified.	X	-	
MS/MSD Recovery	1) Lab limits- 30-150%; (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <LCL% J detects, UJ -NDs >UCL - J detects 6) *Recalculate the concentration for one compound in the MS/MSD 7) * Recalculate the %R (within 10% of lab)	Native sample is part of another SDG. Native sample ID – 0402277-04 MS %R within laboratory limits. No samples qualified.	X	-	
*MS/MSD/un spiked sample RSD	1)For unspiked compounds if reported, Non- MS spike compounds <50% RSD calculated from MS/MSD/Unspiked Qualification: >50% RSD J-detects 2)*recalculate the RPD (within 10% of lab)	NA	-	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
MS/MSD RPD	RPD =30%, 40% for concentrated extracts J – detects in MS sample UJ-non detects *recalculate one RPD	MS/MSD RPD within MPC limits. Laboratory precision is acceptable.	X	-	
Field Dup RPD	1) RPD = 100% water & 50% soil for 2) Results > PQL (FD pair only) J-detects (both > PQL) 2) If one > PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement 8) *Recalculate the concentrations for one compound and the PQL	Field duplicate sample not collected/analyzed for this SDG.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * retention times within method requirements 4) * performed annually 5) *MDL is at least ½ of PQL or QAPP limits 6) *tgt and surrogate 80-120% R *check and recalculate %RSD and %R for one arochlor for 10% of them (criteria within 10% of lab)	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *System chromatography- evaluate RRTs, peaks shapes, system impacts on data, baseline shifts. 5) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*TGT Compound Identification	1) *Within 0.06 (30 sec) of CCV RRT 2) * calculate %RPD 1 and 2 columns	NA	-	-	
Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 6) PES > acceptance criteria – Detects in samples J, 7) PES<acceptance criteria – Detects J, NDs –R 8) VOA/SV-XI14 other criteria 9) *% of PES sample above and below criteria 10) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Initial Cal Multipoint (instrument evaluation)	1) correct calibration stds 2) *recalculate one tgt compound associated. Recalculated values within 10% 3) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 4) *option-recalculate cal std concentration of one std. Must agree within 10% of lab	Instrument Id: Pest8 Calibration Date: 27 February 2004. Acceptable calibration standards. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
	(option if information is in data package)				
Initial Cal (Linearity)	%RSD < 20% use average RF for calibration %RSD> 20% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20 for all target analytes, with no analyte %RSD>30% or %RSD<30% each target analyte	Instrument calibrations for both columns are linear for all PCBs. All %RSDs within MPC limits. No samples qualified. .	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes 80%--120% (USACE) %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs *Calculate %D ICV/ICAL	Instrument Id: Pest8 ICV Date: 27 February 2004. %D > 15 once in 5 pt. calibration for a few compounds in one of the columns, but average < 15%. No samples qualified.	X	-	
CCV	1) QAPP: 15% of initial calib. curve 2) Qualification-J detects, R or UJ NDs 3) *verify same instrument and parameters 4) *Recalculate RRF for one tgt cmpd (within 10%) 5) *Recalculate %D for one tgt cmpd (within 10%) 6) *option-review preparation logs to ensure cal stds are traceable to NIST stds. 7) *option-recalculate cal std concentration of one std. Must agree within 10% of lab (option if information is in data package)	Instrument Id: Pest8 CCV Date: 17 March 2004. %D > 15 in a few cases but average %D within MPC limits for all compounds in noth columns. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy is acceptable Laboratory precision is acceptable. All surrogate, LCS and MS/MSD recoveries within MPC limits. The sample results are usable for making project decisions. No apparent sample bias. ICAL: Linear, ICV: within MPC limits CCV: Within MPC limits. Sampling error- not evaluated.	X	-	

(*asterisk sections Tier III only) Completeness Check: Inventory Check Sheet__X
Sample Quantitation Calculations on attached sheet (TIER III ONLY).

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**-**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW06D-01	L0402219-01
8-GW02D-01	L0402219-02
8-GW05S-01	L0402219-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 7 Days water, 40 to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/08/04 Extracted on: 03/11/04 Analyzed on: 03/19/04. All analysis within hold times. No samples qualified.	X	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made (no USACE) 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Anthracene results for sample 02 below RL. Results J qualified.	-	Anthracene result in sample 02 J qualified.	
Equip Blank	< 5x (<10x common) contaminants for aq samples – for soil indicate EB (X rules don't apply)	Not applicable. Equipment blank not collected/analyzed with this SDG.	-	-	
Surrogates	1) Surrogate acceptance limits Nitrobenzene-d5, 2-Fluorobiphenyl & p-Terphenly -d14 within QAPP limits. Qualification: >UCL J –detects, %R<10% J –detects, R –NDs,	All surrogate recoveries within MPC limits. No samples qualified.	X	-	
Lab Blanks (method blanks)	1) < 5x (<10x common) contaminants – U 2) analytes <lab PQL (contract lab)	All method blanks were non-detects for PAHs. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
LCS Recovery	1) QAPP limits 10% and <LCL% J detects, UJ -NDs >UCL% J detects <10% R NDs, J-detects	LCS %R within MPC limits. No samples qualified	X	-	
MS/MSD Recovery	1) QAPP limits (if MS > 4X native levels) Qualification of MS sample: <10% J detects, R NDs >10% and <70% J detects, UJ -NDs >130% J detects	Native sample – sample 0402277-04 (part of another SDG). MS/MSD %R's within limits. No samples qualified.	X	-	
MS/MSD RPD	RPD =30% solid, 30%. J –detects in MS sample UJ-non detects	MS/MSD RPD within MPC limits. Laboratory precision acceptable. No samples qualified.	X		
Cleanup Performance Check (if performed)	%R< 10% NDs-R detections J %R>10% <LCL (80%GPC) –detections J, NDs UJ %R>UCL (120%) – detections J Retention Time shift <5%, symmetrical peakshape. GPC check with interferants.	NA	-	-	
Retention times	Within 3X standard deviation for each analyte from 72-hour study Exceeds: R qualify data	Retention times within limits.	X	-	
Field Dup RPD	1) RPD = 100% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect 3) Other conditions use judgement	Field duplicate sample not collected/analyzed with this SDG.	-		
Initial Cal (Linearity)	Correct calibration stds %RSD < 15% use average RF for calibration %RSD> 15% use least squares COD (r2) > 0.990 or correlation coefficient r> 0.995 or alternatively mean %RSD <20% for all target analytes, with no analyte %RSD>40% Resolution check mix –valley 60% hgt of shortest peak (CLP criteria only) Performance check mix - >90% (PEM) (CLP criteria only) SW-846 PEM –endirn/DDT breakdown evaluation. Blank and Performance Evaluation Mix (PEM) at start, and blank and midpoint Individual Standard Mix A (ISMA) and ISMB at end or samples(CLP only)	07 January 2004 at 23:57 (end time). Instrument – Mindy %RSD<20% ICAl linear. No samples qualified RRF>0.05	X	-	
2nd Source ICV	%R (between ICV and Ical) analytes %D ≤ 15%, (+ or -) once per 5 pt cal Qualification: J detects, R or UJ NDs	Date: 08 January 2004 at 00:43. ICV %D within MPC limits. No samples qualified.	X	-	
CCV	1) 15% of initial calib. Curve (85%-115%) If low re-calibrate per method. If high no recalibration needed. J qualify data. 2) 15% D 3) Qualification-J detects, R or UJ NDs	Date: 19 (all QC samples) & 22 (all field samples) March 2004. %D<15% for all runs except for benzo(ghi)perylene on 22 March 2004. All sample results for this compound – all non-detects – qualified UJ .	X	benzo(ghi) perylene results qualified UJ.	

ECC Region I Data Review Worksheet (rv 2) **PAH 8270C - SIM**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED	Inven-tory	QUAL	BIAS
Tune Check	Tune check within method parameters for DFTPP	Ical tune check within limits. And CCV tune check within limits. Raw data was used to check the tunes. No samples qualified. Degradation checks associated with sample analysis and ICAL tune checks with limits.	X	-	
Internal Stds	1) IS are –50% to 200% of CCV 1) RRT<0.06 (30 sec) 2) IS>100% J-detects 3) IS<20%CCV NDs – R 4) IS>20%CCV <50%CCV NDs – UJ 5) *check for IS transcription errors	Internal standards are within MPC limits. No samples qualified.	X	-	
Sensitivity	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 2) %R <10 ND- (R) , J- detects 3) 10%> but <80% , judgement 4) %R>120% J-detects 5) QC, RRT meet criteria, 6) %RSD < 20% 7) MDL< MQL (3x less ideal) 8) Lab fortified blank (see VOA/SV Part II –section X). 9) *Check and recalculate %RSDs and %R for three compounds (with 10% of lab)	Reporting limit is less than the primary monitoring criterion for all compounds.	x	-	
Compound Quantitation	1) Check sensitivy (MDL< 1/3 PQL or per QAPP	RDL> Project Reporting Limit but well below the groundwater criterion for all compounds. All MDLs< PRL. Acceptable sensitivity for all compounds. No samples qualified.	X	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	The laboratory accuracy and precision are acceptable. No apparent sample bias. Data are usable for project decisions as qualified. Anthracene results for sample 02 below RL qualified as estimated (J) All surrogate, LCS and MS/MSD recoveries within MPC limits. MS/MSD RPDs within MPC limits. ICAL is linear. ICV: within MPC limits. CCV; within MPC limits except benzo(ghi)perylene . Sampling error – not evaluated.	X	-	

(*Tier III criteria)

Completeness Check: Inventory Check Sheet_____X__ Sample Quantitation Calculations (TIER III ONLY):

ECC Region I Data Review Worksheet (rv 2) **Metals 6010B/7000**
Project: New London ECC Job No. 5700 **Review Criteria: Region I Tier II Guidance & OM Manual(2002)**

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Tier II	**Aqueous**	**HNO3**	**3-coolers 3.1, 1.7 & 0.8 °C**	**Alpha Laboratory Westborough, MA**	**0402219**

Field Identification of Samples Evaluated:

Field ID	Lab Sample Number
8-GW02D-01	L0402219-01
8-GW05S-01	L0402219-02
8-GW06D-01	L0402219-03

Note: Samples are described below in the data worksheets by reference to the last two digits of the Lab Sample Number.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
COC, Sample Delivery Group Form.	1)Unbroken custody (accept or if broken R) 2) Temp≤6° (Soil-J detects, R -nondetects 3) preserved per method (amber bottles, temperature, HCl (aq), MeOH/NAHSO4 (soils) (J, UJ, or R (function of HT and compound)	Cooler temperatures < 6 °C in all the coolers. Sample preservation using ice adequate. Sample custody transferred from Field Team Leader to lab sample courier in person. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	1) 180 days (6010), Hg 28 Days to analysis 2) J –detects, UJ or R –nondetects (function of time)	Sent on: 03/08/04 Extracted on: 03/15/04 Analyzed on: 03/22/04 & 03/23/04. Hg analyzed on 03/22/04. Samples analyzed within holding time. No samples qualified.	X	-	
Lab Duplicate	1) RPD < 20% 1) If both values > PQL 2) Qualify samples in batch: detects J, NDs UJ	Native sample – 0402277-04 (part of another SDG) for total metals and dissolved metals. Totals: Cu & As have RPDs>20% with the results <MRL. Total Cu & As results qualified with J for detects and UJ for non-detects. Dissolved metals: As has RPD> MPC limits and results <MRL. Soluble As results qualified with J for detects and UJ for non-detects. Lab duplicate RPDs within MPC limits for all other total and dissolved metals. Laboratory precision adequate. No other samples qualified.	X	Total Cu & As results qualified with J for detects and UJ for non-detects. Soluble As results qualified with J for detects and UJ for non-detects.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
LCS Recovery	1) once per sample batch 2) 75-125% water, soil, QAPP limits. 3) <LCL% Reject 4) >UCL% detects J	LCS %R's acceptable. No samples qualified.	X	-	
Field Dup RPD	1) RPD = 50% water & soil for Results > X PQL (FD pair only) J-detects (both > X PQL) 2) If one >X PQL, other ND, J-detections, UJ non-detect	Field duplicate sample not collected with this SDG.	-	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made 1) <10% R entire sample 2) 10%.> and <30%; J-detects, NDs -R	Not applicable	-	-	
Results > Cal Range or <Cal Range	1) >Upper Cal Range J-detects - ensure instrument blank performed 2) <PQL but >MDL – J –detects (estimated)	Results less than the method reporting limits and greater than the method detection limit are qualified J. See data summary table.	x	J qualify results < PQL and > MDL.	
Lab Blanks (method blank or p reparation blank)	1) Once per sample batch 2) Results> QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Al – 0.00696 (<0.0348 qualified U – samples 02 & 03) Ba – 0.00004 (< 0.0002 qualified U – none qualified) Be – 0.00002 (<0.0001 qualified U – none qualified) Cr – 0.00005 (<0.00025 qualified U – none qualified) Co – 0.00002 (<0.0001 qualified U – none qualified) Cu – 0.00072 (<0.0036 qualified U – samples 01 & 03) Fe – 0.00647 (<0.03235 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00661 (<0.03305 qualified U – none qualified) Mn – 0.00008 (<0.0004 qualified U – none qualified) Mo – 0.00012 (<0.0006 qualified U – none qualified) Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.0108 (<0.054 qualified U – none qualified) Na – 0.00966 (<0.0483 qualified U – none qualified) Zn – 0.00193 (<0.00965 qualified U – none qualified) Total metals: Al – 0.00369 (<0.01845 qualified U – none qualified) Ba – 0.00037 (< 0.00185 qualified U –	X	Dissolved Al results in samples 02 & 03, dissolved Cu results in samples 01 & 03, total Cr result in sample 02 and total Zn result in sample 02 are U qualified.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		none qualified) Cr – 0.00012 (<0.00060 qualified U – sample 02 qualified) Cu – 0.0004 (<0.002 qualified U – none qualified) Fe – 0.00304 (<0.0152 qualified U – none qualified) Pb – 0.00005 (<0.0002 qualified U – none qualified) Mg – 0.00242 (<0.0121 qualified U – none qualified) Mn – 0.00033 (<0.00165 qualified U – none qualified) Mo – 0.00007 (<0.00035 qualified U – none qualified) Ni – 0.00008 (<0.0004 qualified U – none qualified) Na – 0.0195(<0.0975 qualified U – none qualified) V – 0.00022 (<0.0011 qualified U – none qualified) Zn – 0.00124 (<0.0062 qualified U – sample 02 qualified)			
MS Recovery	1) 75-125% GFAA/ICP if MS > 4X native levels) Qualification of MS sample: 2) <30% J detects, R NDs 3) 30%--74%, detects J, NDs UJ >125% J detects	Native sample – sample 0402277-04 for total metals and dissolved metals. MS %R's within limits for total and dissolved analyses. No samples qualified.	X	-	
Sensitivity*	1) MDL study – 7 replicates (40 CFR) 2) Surrogates %R 80-120%, 1) %R <10 ND- (R) , J- detects 2) 10%> but <80% , judgement 3) %R>120% J-detects 4) %RSD < 20% 5) MDL< MQL (3x less ideal) 6) Lab fortitied blank (see VOA/SV Part II – section X). 7) *Check and recalculate %RSDs and %R fir three compounds (with 10% of lab)	MDL> OM RL for Zn. Lab RL >OM RL for all metals but less than lowest groundwater criterion.	X	-	
Equip Blank	< 5x contaminants for aq samples – for soil indicate EB (X rules don't apply)	Equipment blank not collected/analyzed with this SDG.	-	-	
Negative blanks	If negative values are reported for an analyte with absolute value >DL and sample value is <5X the absolute value of the blank or is nondetect Qualify detects as estimated (J) Nondetects as estimated (UJ	No analyte detections for target metals All negative blanks <DL. No samples qualified.	X	-	
Initial Cal Multipoint	1) 6010: 1 std and blank and low-level check at MQL – check std 20% 2) 3 stds and a blank- R = 0.995	ICAL performed according to method. Two point calibration and check standards. The pre-analysis check standard was within limits.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
Initial Calibration Blanks	1) Ical blank after Ical 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	(All results below in mg/L) Dissolved metals: Sb – 0.00007 (<0.00035 qualified U – sample 01) As – 0.00008 (< 0.0004 qualified U – none qualified) Ba – 0.00007 (< 0.00035 qualified U – none qualified) Be – 0.00007 (< 0.00035 qualified U – none qualified) Cd – 0.00007 (< 0.00035 qualified U – none qualified) Cr – 0.00007 (< 0.00035 qualified U – none qualified) Co – 0.00007 (< 0.00035 qualified U – sample 03 qualified) Fe – 0.00696 (<0.0348 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00675 (<0.03375 qualified U – none qualified) Mn – 0.00007 (<0.00035 qualified U – none qualified) Mo – 0.0001 (<0.0005 qualified U – none qualified) Ni – 0.00007 (<0.00035 qualified U – none qualified) K – 0.00981 (<0.04905 qualified U – none qualified Tl – 0.00007 (<0.00035 qualified U – none qualified) V – 0.00007 (<0.00035 qualified U – none qualified) Total metals: Sb – 0.00006 (<0.0003 qualified U – none qualified) As – 0.00006 (<0.0003 qualified U – none qualified) Ba – 0.00006 (<0.0003 qualified U – none qualified) Be - 0.00006 (<0.0003 qualified U – sample 01 qualified) Cd - 0.00008 (<0.0004 qualified U – none qualified) Cr – 0.0001 (<0.0005 qualified U – none qualified) Co – 0.00007 (<0.00035 qualified U – sample 03 qualified) Fe – 0.00675 (<0.03375 qualified U – none qualified) Pb – 0.00006 (<0.0003 qualified U – none qualified) Mg – 0.00613 (<0.03065 qualified U – none qualified) Mn – 0.00006 (<0.0003 qualified U – none qualified) Mo – 0.00009 (<0.00045 qualified U – none qualified)	X	Sample 01 result for dissolved Sb, sample 03 result for dissolved Co, sample 01 result for total Be, sample 03 result for total Co and sample 01 result for total Tl are qualified U.	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		Ni – 0.00006 (<0.0003 qualified U – none qualified) K – 0.00408 (<0.0204 qualified U – none qualified) Na – 0.02836 (<0.1418 qualified U – none qualified) Tl – 0.00006 (<0.0003 qualified U – sample 01 qualified) V – 0.00005 (<0.00025 qualified U – none qualified)			
Continuing Calibration Blanks	1) CCB every 10 samples end of run 2) Results > QL; sample results <5X ; sample result U (nd) 3) Sample results >5X blank level; no action	Only 3 of the 6 CCBs applied to the field samples. The detections in the CCBs and the resulting qualifications are listed below (all the results are in mg/L). Dissolved metals: Al (0.00653) & Mn (0.00088) had detections lower than prep blank contamination and therefore had no further qualifications. Sb (0.00003), As (0.00005), Ba (0.00004), Be (0.00003), Cd (0.00003), Cr (0.00005), Co (0.00003), Ni (0.00003), Tl (0.00003) and V (0.00003) had detections lower than ICB contamination levels and therefore had no further qualifications. Fe (0.00931), Mg (0.01515), Mo (0.00019), K (0.01889) & Na (0.1431) had no results < 5X detection levels and had no further qualifications. Total metals: Ba (0.00011), Cr (0.00004), Mn (0.00008) and Ni (0.00004) have detection levels lower than prep blank contamination levels. No further qualifications. Sb (0.00005), As (0.00004), Be (0.00003), Cd (0.00004), Co (0.00005), Pb (0.00005), Tl (0.00003) and V (0.00005) had detections less than ICB contamination levels and therefore had no further qualifications. Ca (0.00883), Fe (0.00599), Mg (0.00961), Mo (0.00012), K (0.00998) and Na (0.1151) had no results < 5X detection levels and therefore no qualifications.	X	-	
Serial Dilution	1) once per digestion batch 2) Meets method limits (RPD 10%). 3) Metal results >50X MDL levels.	SD on native sample 0402277-04. %D's within limits for Site COCs. No apparent matrix bias.	x	-	
Interelement checks ICS-A, ICS-AB Instrument performance check	1) start of sequence 2) 80-120% target analytes 3) >120% ; detects J (ICS-AB) 4) 50%-79% R ICS-AB; detects J, NDs – UJ 5) <50% R – reject data 6) ICS-A response > DL and samples have <5X ICS-A response: detects J	ICS's %R's within MPC limits for COC elements. No samples qualified.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
2nd Source ICV	1) following calibration 2) 90- 110% Recovery (6010/7000) 3) 75%-89% R – detects J, NDs – UJ 4) 111-125% R – detects J 5) outside 75-125% R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
CCV	1) every 10 samples and end of run 2) 90- 110% Recovery (6010) Hg; 80-120% 3) 6010: 75%-89% R Hg, 65-79% R; – detects J, NDs – UJ. 4) 6010: 111-125%, Hg: 121-135% detects J 5) 6010: outside 75-125%, Hg; outside 65-135%; R – reject data (R)	Within limits of MPC. No samples qualified.	X	-	
Post Digestion Spike	1) 75- 125% R	PDS not performed as MS %R's within MPC limits for Site COCs.	X	-	
*MDL Study	1) *In accordance with 40CFR – seven replicates %RSD < 20% 2) * IS and retention times within method requirements 3) * performed annually 4) *MDL is at least ½ of PQL *tgt and surrogate 80-120% R	NA	-	-	
*System Performance	1)* evaluate PES, MS//MSD, cal STDs, MDS study, and surrogates for systemic bias – high or low and access system accuracy 3) *Matrix effects- MS/MSD, surrogated, PDS. 4) *overall system contamination-review all blanks for systemic or sporadic contamination	NA	-	-	
*Single Blind PE	1) Qualify associated samples in PES batch PES = ND, Detects J – ND PE analytes in samples, NDs – R 5) PES > acceptance criteria – Detects in samples J, 6) PES<acceptance criteria – Detects J, NDs –R 7) VOA/SV-XI14 other criteria 8) *% of PES sample above and below criteria 9) *Recalculate concentrations for one tgt compound per PES (10% of lab)	NA	-	-	
Overall Evaluation of Data	1) Appropriate method 2) Evaluate any analytical problems 3) Evaluate sampling errors – field contamination, sample hold times	Laboratory accuracy and precision is acceptable. Accuracy is shown by the LCS being within MPC limits. The ICS-A, and ICS-AB were within limits for all elements. Total and dissolved As and total Cu results were qualified J for detects and UJ for non-detects due to lab duplicate RPDs being out of MPC limits. Prep blank and ICB contamination necessitated U qualifiers to be assigned	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative (samples listed on attached sheets)	Inven-tory	QUAL	BIAS
		to some of the results – the list of results and the qualifiers can be obtained from the above tables or from the data summary tables. ICAL; 2-point calibration. ICV: within MPC limits. CCV: within MPC limits. Serial dilution: within MPC limits. Matrix spike %R within MPC limits. No apparent matrix bias. Field duplicate sample not collected with this SDG. Sample results are usable for project decision making.			

*TIER III DATA VALIDATION ONLY Completeness Check: Inventory Check Sheet___X_Sample Quantitation Calculations (TIER III DATA VALIDATION ONLY):

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
Eight Walkup Drive Westborough, MA 01581
TEL: 508-898-9220 FAX: 508-898-9193

Date Rec'd in Lab:

ALPHA Job #:

Client Information

Client: ECC
Address: 50 D'Angelo Drive
Marlborough, MA 01752
Phone: 508 229 2270
Fax:
Email:
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: GOSS Cove
Project Location: New London, CT
Project #:
Project Manager: Darren Gainer
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria
NAVY	

MCP PRESUMPTIVE CERTAINTY - THESE QUESTIONS MUST BE ANSWERED

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Are Drinking Water Samples Submitted?
☐ Yes ☐ No Have you met minimum field QC requirements?

Other Project Specific Requirements/Comments/Detection Limits:
* Field Filtered

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC	SVOC	PAH	Pest	PCB	Total metals	Hardness	Dissolved metals *	Anions (Sulfate, Nitr)				Sample Specific Comments	TOTAL # BOTTLES
	8-GW06D-01	3/8/04	1643	GW	SW	X	X	X	X	X	X	X	X	X					13
	8-GW02D-01	3/8/04	1639	GW	MM	X	X	X	X	X	X	X	X	X					13
	8-GW05S-01	3/8/04	1639	GW	DC	X	X	X	X	X	X	X	X	X					13
	8-TB01	3/9/04	1200	W	FS	X													2

Container Type
Preservative

QUESTIONS ABOVE MUST BE ANSWERED FOR PRESUMPTIVE CERTAINTY

IS YOUR PROJECT MCP ?

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	3/9/04 4:20pm	[illegible]	3/9 16:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.

FORM no: 07-03 std

APPENDIX F

Derived Waste: Waste Manifest and Disposal Custody Form

THIS IS NOT A FINAL BILL. SUBJECT TO CHANGE.

UNITED INDUSTRIAL SERVICES
DIVISION OF UNITED OIL RECOVERY, INC.
136 GRACEY AVENUE MERIDEN, CT 06451-2270
TEL. (203) 238-6745
t0 FAX (203) 630-2503

CHAIN OF CUSTODY

Incoming Load

Date 05/04/04 Transporter UNITED INDUSTRIAL SER

Time In _____ Time Out _____

Sample Number M08D Sample Collector _____

Work Order 00411636 Receiving Tanks _____

|X| Total Halogens NA |X| PCB'S ND<2 |X| Total Solvents TVO:ND

|X| Flash Point >200 |_| BTU _____ |X| pH 7 |_| TVO _____

Methylene Chloride _____ Carbon Tetrachloride _____

Freon _____ 1,1,1-Trichloroethane _____

Trichloroethylene _____ Tetrachloroethylene _____

Oil 2 % Water 98 % Sediment _____ _____

Lead _____ Copper _____ Nickel _____ Zinc _____

Transporter Invoice

W/O No.	Mail Site ID	Appr ID	Manifest	Quantity	UOM	Price	Ext Amt
00411636	USN003	0767FLM	CTF1061182	55.00			
	001USN	US NAVAL SUBMARINE BASE		CRYSTAL LAKE ROAD/ RTE 12			
	State Waste IDs: CR04 Truck: S35			Driver: ISAB			

Manifest Total 55.00 GALS

CUSTOMER AGREES TO PAY SERVICE CHARGES OF 1½% PER MONTH OR THE HIGHEST RATE ALLOWED BY LAW, (WHICHEVER IS LESSER) FROM THE DUE DATE OF EACH INVOICE TO DATE OF PAYMENT. IN THE EVENT CUSTOMER'S ACCOUNT IS PLACED FOR COLLECTION, CUSTOMER AGREES TO PAY ALL COSTS OF COLLECTION, INCLUDING REASONABLE ATTORNEY'S FEES.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

FOR STATE USE ONLY

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CT 4 1 7 0 0 2 2 0 2 0 Manifest Document No. 1 1 1

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law

3. Generator's Name and Mailing Address
US NAVY SUB BASE NEW LONDON
P.O. BOX 39 /ENVIRONMENTAL GROTON, CT 06349

4. Generator's Phone (860 694-4298 ATTN:BRIAN BIRCH)

A. State Manifest Document Number **CT F 1061182**

B. G.S.I. (Gen. Site Address)
US NAVAL SUBMARINE BASE
CRYSTAL LAKE ROAD/ RTE 12
GROTON, CT 06349

5. Transporter 1 Company Name: UNITED INDUSTRIAL SERVICES

6. US EPA ID Number: C T D 0 2 1 6 1 6 8 8 9

7. Transporter 2 Company Name

8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 321864 CT

D. Tran. Phone (203 238 6745)

9. Designated Facility Name and Site Address
UNITED OIL RECOVERY INC.
135 GRACEY AVENUE
MERIDEN, CT 06451

10. US EPA ID Number: C T D 0 2 1 8 1 6 8 8 9

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone 203 238 6745

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. STATE REGULATED WASTE NONE, NONE	001	DM	00055	G	EPA NONE STATE CN041
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
PURGE WATER
a. c.
b. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final	Interim	Final
a.	S02	T45 T49 T08		
b.			d.	

15. Special Handling Instructions and Additional Information
0767FLM EMERGENCY RESPONSE GUIDE # N/A EMERGENCY PHONE # (203)238-6745

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: ANTONIO LEITE | Signature | Month Day Year: 04 13 04

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DAVID ISABELLE | Signature | Month Day Year: 04 13 04

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name: Mario Catamash | Signature | Month Day Year: 05 04 04

EPA Form 8700-22 (Rev. 9-91) Form Approved OMB No. 2050-0039

GENERATOR — TRANSPORTER — FACILITY

FOR SPILLS WITHIN CONNECTICUT, CONTACT CT DEP - OIL AND CHEMICAL SPILL RESPONSE AT (860) 424-3338

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802

COPY 1: FACILITY MAILS TO DESTINATION STATE

CT F 1061182

COPY 1: FACILITY MAILS TO DESTINATION STATE

UNITED OIL RECOVERY, INC.
136 Gracey Ave.
Meriden, CT 06451- (203) 238-6751

BRIDGEPORT UNITED RECYCLING, INC.
50 Cross Street
Bridgeport, CT 06610

04-0767

UOR USE ONLY
New ✓ Update
Profile 07767 F 4m
Sample Arrival Date

WASTE STREAM PROFILE SHEET

GENERATOR
Site Name: US NAVAL SUB MARINE BASE
Address: CRYSTAL LAKE RD RTE 12, GROTON CT 06349
Mailing Name: US NAVY NEW LONDON
Address: P.O. BOX 39 - FLASH ENVIRONMENTAL, GROTON, CT 06349
Technical Contact:
Phone #:
Shipping Contact:
Phone #:
EPA ID #: ON FILE

BROKER / SALESPERSON
Name: Environmental Chemical Ref #
Address: 50 D'Angelo Drive, Marlboro, MA 01752
Contact: JACKSON RIKER Phone #: 508-229-2270

TRANSPORTER
Name: United Oil Recovery
Address: 136 Gracey Ave, Meriden, CT 06451
Contact: KAL THIPAVONG Phone #: (401) 265-1548
EPA ID #:

WASTE DESCRIPTION

Chemical & Physical State: ☐ Liquid ☐ Semi-Liquid ☐ Solids ☐ Multilayered ☐ Bilayered ☐ Single Phase
pH: ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8-10 ☐ 10-12 ☐ >12

Odor: Mild Flash Point: >200 % Oil: 2 % Bottom Sediment: 0
TSS: Heat Value (BTU/lb): NA % Interface: 0 Specific Gravity: ~1.0
Color: Blue % Water: 100

Please submit a one (1) quart representative sample of the waste stream. Describe the sampling method below.
2 x 1 Quart

Process Description - Describe the process generating waste stream. Please include a list of virgin materials and their Material Safety Data Sheets.

PURGE WATER FROM ALL WELLS AT GOSS COVE.

CHEMICAL CONSTITUENTS

Petroleum Phase	Suspected Levels	Actual Levels (UOR use only)	Aqueous Phase	Suspected Levels	Actual Levels (UOR use only)		Suspected Levels	Actual Levels (UOR use only)
PCBs	NS		Copper (Cu)	NS		Selenium (Se)	NS	
Halogens			Cadmium (Cd)			Mercury(Hg)		
Solvents			Chromium (Cr)			Cyanide (CN^-)		
Arsenic (As)			Lead (Pb)			Iron (Fe)		
Cadmium (Cd)			Nickel (Ni)			pH	~7	
Chromium (Cr)			Silver (Ag)			Phenols		
Lead (Pb)			Zinc (Zn)					

Please list Specific Solvents:

This waste is: ☐ RCRA Listed ☐ State Regulated ☐ Non-Regulated ☐ Virgin Material
RCRA Number(s):
State Number: CROY

Notes & special handling information
RUN VOC (Certified)
(Analytical Only)

SHIPPING INFORMATION
DOT Hazard Class / Packing Group
DOT Shipping Name: State Regulated Waste
Additional Description
☐ DOT Regulated ☐ Non-Regulated
UN/NA Number: None
Amount of Waste / Shipment (gals.)
Frequency of Shipment

The undersigned certifies that all above information is true and accurate to the best of his/her knowledge. The accompanying sample is representative of the waste stream described above. All potential hazards have been noted in the handling section. Shipments may not begin until this waste stream has been approved as treatable by United Oil Recovery, Inc. If at any time, the information above should change or prove different, shipments will cease until further approval is obtained from United Oil Recovery, Inc. The undersigned accepts full responsibility for any misrepresentation and any damage that the misrepresentation does to equipment or personnel of United Oil Recovery, Inc. This will also certify that the waste stream described above does not contain Pesticides, Herbicides or any TSCA Polychlorinated Biphenyls (PCBs). It is understood by both the Generator and the Broker, that in the event of default of payment by the Broker, United and its affiliates reserve the right to pursue payment from the Generator.

Signature: [signature] Title: Senior Chemist Date: 12 March

FACILITY USE ONLY
Rec'd on Rec'd By
Sample Container
Approved By: B. D. 4/27/04
Comments
M B