N61165.AR.003499
CNC CHARLESTON
5090.3a

INTERIM MEASURE COMPLETION REPORT AREA OF CONCERN 633 (AOC 633) ZONE G

CNC CHARLESTON SC

9/19/2002

CH2M HILL

INTERIM MEASURE COMPLETION REPORT

AOC 633, Zone G

Charleston Naval Complex
North Charleston, South Carolina

SUBMITTED TO
U.S. Navy Southern Division
Naval Facilities Engineering Command

CH2M Jones

September 2002

Revision 0
Contract N62467-99-C-0960

CH2M HILL
3011 S.W. Williston Road
Gainesville, FL
32608-3928
Mailing address:
P.O. Box 147009
Gainesville, FL
32614-7009
Tel 352.335.7991
Fax 352.335.2959

CH2MHILL

September 19, 2002

Mr. David Scaturo
South Carolina Department of Health and
Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

Re: Interim Measure Completion Report (Revision 0) – AOC 633, Zone G

Dear Mr. Scaturo:

Enclosed please find four copies of the Interim Measure Completion Report (Revision 0) for AOC 633 in Zone G of the Charleston Naval Complex (CNC). This report has been prepared pursuant to agreements by the CNC BRAC Cleanup Team for completing the RCRA Corrective Action process.

The principal author of this document is Jim Edens. Please contact him at 352/335-5877, extension 2491, if you have any questions or comments.

Sincerely,

CH2M HILL

Dean Williamson, P.E.

cc: Rob Harrell/Navy, w/att
Gary Foster/CH2M HILL, w/att

INTERIM MEASURE COMPLETION REPORT

AOC 633, Zone G

Charleston Naval Complex
North Charleston, South Carolina

SUBMITTED TO
U.S. Navy Southern Division
Naval Facilities Engineering Command

PREPARED BY
CH2M-Jones

September 2002

Revision No. 0
Contract N62467-99-C-0960
158814.ZG.PR.03

Certification Page for the Interim Measure Completion Report, Revision 0 – AOC 633, Zone G

I, Dean Williamson, certify that this report has been prepared under my direct supervision. The data and information are, to the best of my knowledge, accurate and correct, and the report has been prepared in accordance with current standards of practice for engineering.

South Carolina

P.E. No. 21428

Dean Williamson, P.E.

9/17/2002

Date

Contents

Section **Page**

Acronyms and Abbreviations ..... **vi**
1.0 Introduction **1-1**
1.1 Background 1-1
1.2 Report Organization 1-1
Figure 1-1 Location of AOC 633, Zone G 1-3
Figure 1-2 Aerial Photograph of AOC 633 1-4
2.0 Interim Measure Implementation **2-1**
2.1 Delineation/Confirmation Sampling 2-1
2.2 Excavation Activities 2-2
2.3 LNAPL-Extent Assessment Activities 2-4
2.4 Phase II IM Work Plan 2-5
Table 2-1 Delineation/Confirmation Sample Results for Detected PCBs 2-8
Table 2-2 Detected Compounds in the Stockpile and Waste Characterization Samples 2-9
Table 2-3 Detected Compounds in the Water and Product Samples 2-10
Table 2-4 Detected Compounds in the LNAPL Delineation Borings 2-11
Table 2-5 Detected Compounds in the Electrical Vault Sample 2-16
Table 2-6 Detected Compounds in the Project Sample 633ZB001M6 2-17
Table 2-7 Detected Compounds in the Confirmation Samples 2-18
Table 2-8 Detected Compounds in the Waste Characterization Samples 2-19
Figure 2-1 Delineation Sample Locations 2-20
Figure 2-2 LNAPL Delineation Borings 2-21
Figure 2-3 Approximate LNAPL Excavation Locations 2-22
Figure 2-4 Confirmation Sample Locations 2-23
3.0 Interim Measure Outcome **3-1**
Table 3-1 Residual Aroclor-1260 Calculation 3-3
4.0 Recommendations **4-1**
5.0 References **5-1**

Contents, Continued

Appendices

A Figures Depicting Historic Sampling Locations at AOC 633

B Analytical Data Summary for the Delineation/Confirmation and Waste Characterization Samples

C Data Validation Report for the IM Analytical Data

D Waste Manifests (Waste Management Inc.)

Acronyms and Abbreviations

AOC	Area of concern
COPC	Chemical of potential concern
DAF	Dilution attenuation factor
ft bls	Feet below land surface
IM	Interim measure
LNAPL	Light non-aqueous phase liquid
MCL	Maximum contaminant level
MCS	Media cleanup standard
µg/L	Micrograms per liter
mg/kg	Milligrams per kilogram
NFI	No further investigation
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PID	Photoionization detector
SAP	Sampling and analysis plan
SSL	Soil screening level
TSCA	Toxic Substances Control Act
VOC	Volatile organic compound
WMI	Waste Management Inc.

1.0 Introduction

1.1 Background

Located near the intersection of Hobson Avenue and Viaduct Road, Area of Concern (AOC) 633 is comprised of an electrical substation. The facility is still in service, but is operating at a reduced capacity. Several polychlorinated biphenyl (PCB) releases have been reported at the site. The location of AOC 633 is illustrated in Figure 1-1. Figure 1-2 presents an aerial photograph of the site.

In September 2001, an Interim Measure Work Plan (IM WP) was developed to remove PCB-impacted subsurface soil within AOC 633 (CH2M-Jones, 2001). Soil samples were collected to delineate the areal extent of the PCB-impacted soil above the target cleanup level of 9.9 milligrams per kilogram (mg/kg). The analytical results of these samples indicated that the areal extent of PCB-impacted soil above the target cleanup level was identified.

Analytical data from surface soil samples indicated that the top 2 feet (ft) of soil was not significantly impacted with PCBs. Therefore, the IM WP specified that this overburden be removed and stockpiled onsite for use as fill material.

The removal of subsurface soil containing PCBs above the media cleanup standard (MCS) of 9.9 mg/kg was expected to complete the necessary soil related corrective measures. During the IM, light non-aqueous phase liquid (LNAPL) was encountered. The LNAPL was determined to be weathered diesel fuel and contained PCBs at a concentration of 1,200 mg/kg. To address the presence of the LNAPL, CH2M-Jones implemented a second IM. The goal of the second IM was the removal of LNAPL-impacted soil from the site. This IM Completion Report summarizes these two IMs and related sampling activity.

1.2 Report Organization

This IM Completion Report consists of the following sections:

1.0 Introduction — Presents the purpose of the report and background information relating to the two IMs that were performed.

2.0 Interim Measure Implementation — Summarizes the excavation activities at AOC 633.

3.0 Interim Measure Outcome — Provides a discussion of post-IM activities.

4.0 Recommendations — Provides recommendations for proceeding with additional RCRA corrective action activities.

5.0 References — Lists the references used in this document.

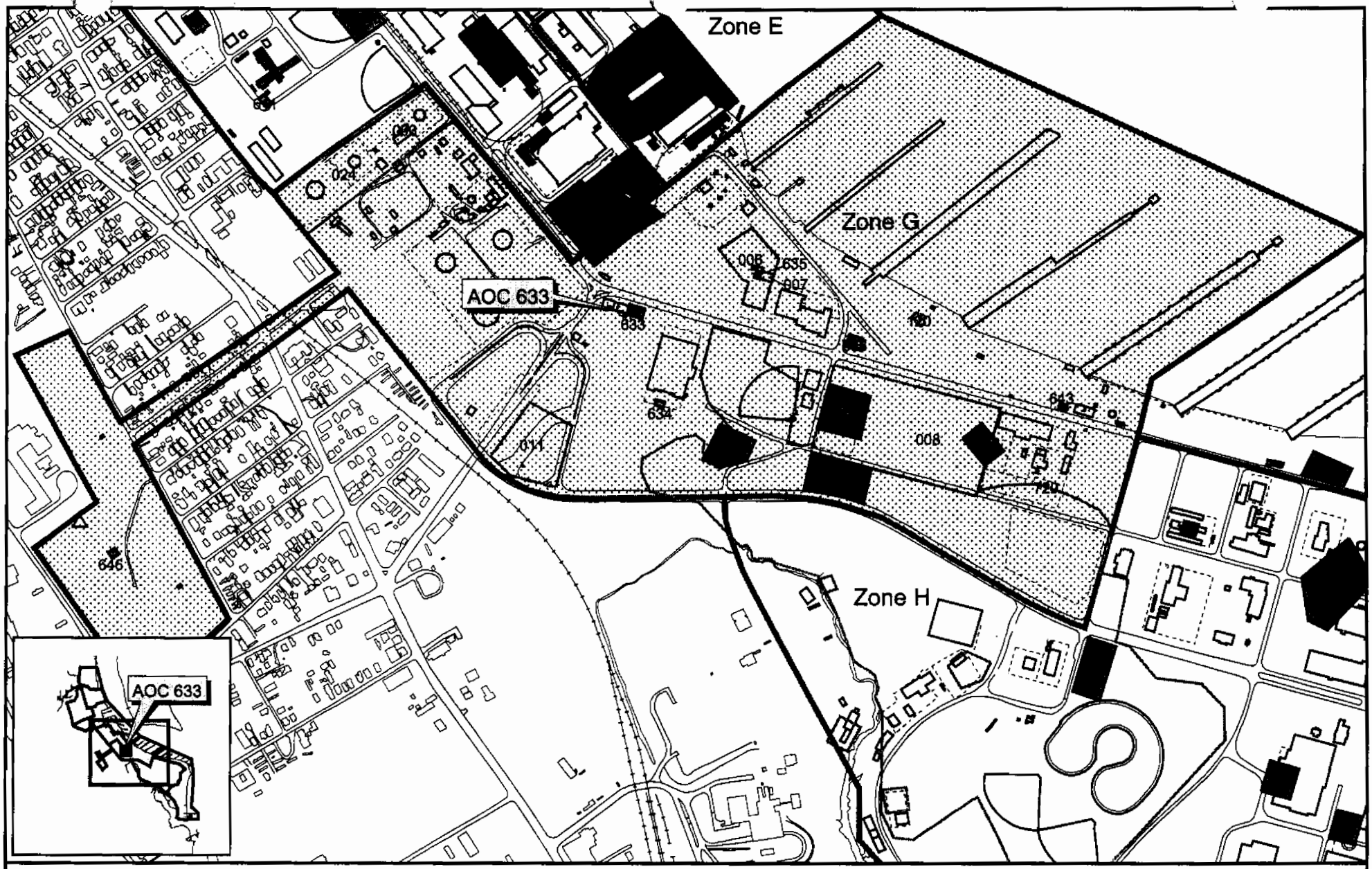
Appendix A contains figures from previous Work Plans that illustrate historical sampling locations.

Appendix B contains the analytical data from the delineation/confirmation and waste characterization samples collected at AOC 633.

Appendix C contains the data validation summary for the IM analytical data.

Appendix D contains the waste manifests from Waste Management Inc. (WMI) for soil disposal.

All tables and figures appear at the end of their respective sections.



Fence
Railroads
Roads
Shoreline
AOC Boundary
SWMU Boundary
Buildings
Zone Boundary
Zone G

N

0 800 1600 Feet

1 inch = 750 feet

Figure 1-1
Location of AOC 633
Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gis\Projects\Zone_G\zoneg_locationfig.apr, Date: 19 Aug 2002 11:32, User: NMOUDRY, AOC 633 Figure 1-1 Zone G within CNC

NOTE: Aerial Pho[illegible] 1997

Fence
Roads - Lines
SWMU / AOC
Buildings

N

0 30 60 Feet

1 inch = 25 feet

Figure 1-2
Aerial Photograph
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\16gis\Projects\Zone_G\zoneg_locationfig.apr, Date: 19 Aug 2002 13:34, User: NMCUDRY, AOC 633 Figure 1-2 Aerial Photograph

2.0 Interim Measure Implementation

2.1 Delineation/Confirmation Sampling

Extensive previous soil sampling (see locations in Figure 2-1 from the *IM Work Plan, Subsurface Soil Removal, AOC 633, Zone G* [CH2M-Jones, 2001] and Figure 2-2 of the *Phase II IM Work Plan, LNAPL and LNAPL-Impacted Soil Removal, AOC 633, Zone G* [CH2M-Jones, 2002], copies of which are presented in Appendix A of this IM Completion Report) established the target excavation limits for the IM. Surface soil analytical results showed that chemicals of potential concern (COPCs) were not present in surface soil above screening criteria. Several additional samples were collected, as described below, to better refine the excavation boundaries.

On November 6, 2001, in general accordance with the *IM Work Plan, Subsurface Soil Removal, AOC 633, Zone G* (CH2M-Jones, 2001), nine of the proposed ten subsurface soil samples were collected to determine the horizontal extent of subsurface soil containing Aroclor-1260 above the MCS of 9.9 mg/kg. The sample proposed to be collected at the location of Delineation Sample 1 was not collected at this time due to encountering a subsurface obstruction. Figure 2-1 shows the locations and sample identifications of the delineation/confirmation borings.

On January 11, 2002, a second attempt was made to collect the sample from the location of Delineation Sample 1. The CH2M-Jones field team used a slender metal rod to locate the edge of the subsurface obstruction. It was determined that the obstruction was a large section of concrete that extended into the northern portion of the proposed excavation approximately 2 ft. CH2M-Jones decided that a confirmation sample would be collected from the northern excavation face near this concrete element to replace Delineation Sample 1 (633SB04403).

Six subsurface soil samples were collected at 4 feet below land surface (ft bls) to define the horizontal excavation boundaries. Four samples, collected at 4 ft bls from within the proposed excavation boundary, were collected to define the vertical extent of the excavation (see Figure 2-1 of this report). A summary of the analytical results from these samples is presented in Table 2-1. Appendix B contains the complete data set for the IM samples; Appendix C contains the data validation report.

The reported PCB concentrations from the six horizontal delineation samples were below the cleanup levels established in the *IM Work Plan, Subsurface Soil Removal* for Aroclor-1260. Sample 633SB02703 contained Aroclor-1254 at a concentration of 1.6 mg/kg in addition to Aroclor-1260 (5.4 mg/kg). A cleanup criterion was not established for Aroclor-1254 (it was only detected in this one sample), but it would be expected to approximate that the MCS established for Aroclor-1260 and the sum of the detected PCBs (7.0 mg/kg) is below the MCS for Aroclor-1260. Therefore, the detection of Aroclor-1254 is not considered an exceedance of the MCS. These data indicate that the horizontal extent of PCB-impacted subsurface soil was adequately defined along the southern, western, and eastern boundaries. Delineation of soil contamination along the northern boundary was accomplished during the excavation activities by collecting a confirmation sample (633SB04403) from the northern face of the excavation. No PCBs, VOCs, or SVOCs were detected in the confirmation sample from this location.

Analytical results for Aroclor-1260 from the vertical delineation/confirmation subsurface soil samples 633SB02203 (21.0 mg/kg), 633SB02403 (17.0 mg/kg), and 633SB02603 (98.0 mg/kg) were reported at concentrations above the MCS. All three of these samples were collected from locations within the boundary of the larger excavation. These data, collected at 4 ft bls, indicate that the depth of the excavation needed to proceed to the top of the water bearing zone as specified in the *IM Work Plan, Subsurface Soil Removal* (CH2M-Jones, 2001).

The analytical results from the vertical delineation/confirmation sample (633SB02803, 4.4 mg/kg) collected from within the smaller excavation area were reported as being below the MCS for Aroclor-1260. No other PCB was detected in the sample. These data indicate that the depth of the small excavation could terminate at 4 ft bls.

Based on the analytical results, the horizontal area requiring soil removal was adequately defined in the IM WP. The target depth of the excavations were to the top of the water-bearing zone in the larger excavation, and to 4 ft bls in the smaller excavation. The resulting excavation areas measured approximately 10 ft in diameter and 5 ft deep (assumed depth to water) for the larger excavation (160 cubic ft ~ 6 yd^3); and 1.5 ft^2 and 4 ft deep (5 cubic feet ~ 0.2 yd^3).

2.2 Excavation Activities

On January 21, 2002, equipment and personnel were mobilized to AOC 633 to begin preparing the site for removal activities in accordance with the AOC 633 IM WP. All work

was performed in general accordance with the work plan. The approximate final excavation boundary is presented on Figure 2-1.

Excavation activities at AOC 633 began with removal and stockpiling of the top 2 ft of soil in accordance with the IM WP. A composite sample was collected from the stockpile to verify that it was suitable for use as fill material. The analytical results from this sample (633SB024M1) indicated that concentrations of PCBs were below the MCS and the soil was suitable to be returned to the excavation. The remainder of the excavated soil was placed directly into a lined roll off container for disposal. The soil in the roll off container was also sampled to determine the method of disposal for the PCB-impacted soil. Soil with PCB concentrations less than 10 mg/kg can be disposed of in a Subtitle D landfill. Soil with PCB concentrations greater than 10 mg/kg must be disposed of in a Subtitle C landfill and soil with PCB concentrations greater than 50 mg/kg must be disposed of in a Toxic Substances Control Act (TSCA)-approved landfill. Analytical results for the sample collected from the roll off container (633VA001M1; Aroclor-1260, 8.7 mg/kg) indicated that the soil could be disposed of in a Subtitle D landfill. The soil was disposed of by WMI at the Oakridge Landfill, 2183 Highway 78, PO Box 145, Dorchester, SC 29437. The waste manifests are included in Appendix D. The waste manifests from Waste Management Inc. (WMI) indicate that 8.29 tons of soil were excavated from the site and disposed of off site.

Table 2-2 presents a summary of detected compounds in the stockpile and waste disposal sample (the complete data summary is contained in Appendix B).

Observations of soil characteristics made during excavation activities supported the site conceptual model presented in the IM WP. Gravel was found in approximately the top 6 inches of removed material. From 6 inches bls to approximately 2 ft bls light colored sandy soil was noted. The soil color and texture of the sandy soil are consistent with fill material. The IM WP concluded that fill material was brought on site based on the fact that the analytical data indicated subsurface soil beneath the fill was contaminated with PCBs without corresponding surface soil contamination.

During the course of excavating the subsurface soil at AOC 633, a dark, oily substance seeped into the larger excavation near the locations of soil borings G633SB033 and G633SB043. Approximately ¼ inch of assumed "product" accumulated within the excavation. The product and the water below the product were sampled. The analytical results of the collected samples indicated that the product was likely "weathered diesel fuel." Both the product and water contained the PCB Aroclor-1260, acetone, 1,2-dichlorobenzene (1,2-DCB), 1,3-dichlorobenzene (1,3-DCB), and 1,4-dichlorobenzene (1,4-

DCB). Additionally the water sample contained chloroethane and chlorobenzene. It was not unexpected that the water sample contained many of the same compounds as the product sample as it was not possible to completely separate the product from the water during sampling. A summary of the detected compounds is presented in Table 2-3.

Following completion of the excavation, a grab soil sample (633SB04403) was collected at the location of northern most delineation sample not previously collected due to a concrete subsurface obstruction. PCBs were not detected in the sample. The excavation area was graded to match the existing grade.

2.3 LNAPL-Extent Assessment Activities

In an attempt to determine the extent and possible source of the diesel fuel, CH2M-Jones advanced eleven soil borings to just above the water table. The locations of the soil borings are presented in Figure 2-2.

The soil was examined visually to determine if obvious contamination was present, and photoionization detector (PID) readings of the soil were measured, and a sample was collected just above the water table at each boring. PID readings ranged from 0.0 at five locations to 2.1 at boring E633SB035. The collected samples were analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and PCBs. Table 2-4 summarizes the detected compounds from these samples. Acetone and bromomethane were detected in one sample each at concentrations that marginally exceeded their respective soil screening levels (SSLs). Table 2-4 also presents the mean detected concentrations for these two compounds. The mean detected concentrations are below the SSLs indicating that existing concentrations of these compounds are sufficiently protective of shallow groundwater. The mean concentrations would be expected to be lower if the non-detect data were included in the calculation.

Based on these data, neither the source of the LNAPL nor the presence of additional LNAPL were identified.

Based on the site setting, several potential sources of LNAPL were considered possible, including the FDS pipeline along Hobson Avenue and the fire station adjacent to the site. None of the borings identified any LNAPL-saturated soil. Thus, the possibility of the LNAPL originating at these offsite sources could not be confirmed, and it appeared more likely that the LNAPL originated from a small onsite release of diesel fuel.

2.4 Phase II Interim Measure Work Plan

In May 2002, CH2M-Jones submitted the *Phase II IM Work Plan, LNAPL and LNAPL-Impacted Soil Removal, AOC 633, Zone G*. The Phase II IM WP called for determining the presence, or absence, of LNAPL in the concrete electrical vault, the collection of a water sample from within the vault and the removal of LNAPL-impacted soil.

On June 5, 2002, the field team collected the sample from the electrical vault. The planned collection method was to slowly lower a bailer into the water in order to remove the water sample along with any LNAPL, if present. The depth of the water was only a couple of inches, making it difficult to collect the sample. In order to collect a sufficient liquid volume, the bailer was laid on its side. This resulted in disturbing the water and the collection of suspended solids within the water sample. The presence of LNAPL was not noted. The results of the water sample from the concrete electrical vault are presented in Table 2-5. Screening criteria are not available, and therefore not presented for this sample.

On July 22, 2002, personnel and equipment were mobilized to the site to begin LNAPL-impacted soil removal in accordance with the Phase II IM WP. Seven excavations were sequentially made at the site as described below. The approximate locations of the excavations are presented in Figure 2-3.

During the excavations at AOC 633 for the LNAPL investigation, the subsurface geology observed was consistent with other sites in Zone G which had been backfilled with dredge spoil and construction debris to increase land elevations for development.

At the surface, run of crusher gravel was scraped off, exposing a tan to orangish-brown silty sand, which extended to approximately 2 ft bls. This material is believed to be fill from the previous IM work. At approximately 2 to 2.5 ft bls, a sharp transition to an orangish-brown clayey material was noted. The clayey material contained decayed plant material and iron staining, variable amounts of sand, and was approximately 0.5 to 2 ft in thickness, with low moisture content.

At variable depths around 3 feet bls, the orange material grades abruptly to a dark gray to grayish brown clayey material, which contains decaying plant materials and a variety of debris, including, bricks, glass bottles, wood pallets, concrete block, wire, rope and wood scraps. This material was observed to extend to depth of about 8 feet bls in one excavation. The gray clayey material is dense and highly plastic, and slightly moist, with moisture content increasing with depth.

Groundwater, and LNAPL when present, in the excavations was noted to be entering the excavation near the bottom, from a zone of debris within the gray clayey material at depths of approximately 4 to 6 ft bls.

The initial excavation was made in the area of soil borings G633SB033 and G633SB043 as specified in the Phase II IM WP. These locations are near soil borings G633SB031 and G633SB031 (see Figures 2-1 and 2-2) where LNAPL was observed entering the initial excavation. A small amount of LNAPL (less than ¼-inch) was noted to migrate into the excavation. LNAPL-saturated soil was not observed. Because LNAPL-stained soil was not observed, it was decided to excavate additional areas to determine the extent of the LNAPL. A total of six additional excavations were made as shown on Figure 2-3, stepping out towards potential source areas, to confirm that the LNAPL-impacted area was limited in size.

LNAPL (less than ¼-inch) was observed migrating into Excavations 1 and 2 (see Figure 2-3). A small amount (a few droplets) of LNAPL was also noted in Excavation 3. LNAPL was not observed in any of the other excavations. A sample (633ZB001M6) of the product was collected, and the analytical results again identified the product as "weathered" diesel. Aroclor-1260 was also detected in the product sample at a concentration of 2,900 mg/kg. Table 2-6 presents a summary of detected compounds in the sample. The sample was collected as remote as possible from the PCB-impacted soil in an attempt to determine if the LNAPL source was site-related or migrating onto the site from the west. If the sample did not contain PCBs, the LNAPL was likely migrating onto the site. If PCBs were present, the LNAPL may have more likely originated at the site. Aroclor-1260 was detected in the product sample and the presence of the LNAPL was considered to be potentially site-related. Because of the apparent limited areal extent and the thin layer of LNAPL, the LNAPL is considered likely due to a small onsite diesel fuel spill.

On July 24, 2002, CH2M-Jones pumped the product and water from the excavations with product present. Approximately 190 gallons (3.5 drums) of water/product was removed and placed into 55-gallon drums. The excavations were periodically checked for the accumulation of product over the next two weeks. On July 30, 2002, a small amount (a heavy sheen) of LNAPL was observed in Excavation 2 (see Figure 2-3). The sheen was adsorbed with adsorbent pads. The presence of a recoverable amount of product in the excavations was not noted in later site visits. This information further supports that the presence of the LNAPL at AOC 633 was likely the result of a small onsite diesel spill; it has been adequately remediated as a result of this IM.

On July 26, 2002, confirmation samples were collected from the walls of Excavations 1 and 2 (see Figure 2-3). Waste characterization samples were also collected from the soil in the dumpster (633SB04901) and the drummed water (633VADRMM6) on this date. The locations of the confirmation samples are shown on Figure 2-4. Summaries of detected compounds are presented in Tables 2-7 and 2-8 for the confirmation samples and waste characterization samples, respectively.

Upon review of the data presented in Table 2-7, no compounds were detected above their respective SSLs. These data further support that the presence of LNAPL at the site was likely the result of a small on-site spill and that the LNAPL and impacted subsurface soil have been adequately remediated. Therefore, the excavations were backfilled and graded to match the existing grade on August 8, 2002.

The analytical results from the excavated soil indicated that it could be handled as non-hazardous and was disposed of by WMI at the Oakridge Landfill, 2183 Highway 78, PO Box 145, Dorchester, SC 29437. The waste manifests are included in Appendix D. The waste manifests from WMI indicate that a total of 17.34 tons of soil were excavated from the site during the Phase II IM and disposed of off site.

A waste characterization sample (633VADRMM6) was collected from the drummed water removed from the excavations at AOC 633. The analytical results for detected compounds in that sample are presented in Table 2-8. The analytical results indicated that the water could be disposed of as non-hazardous. CH2M-Jones submitted the results along with a request to dispose of the water in the sanitary sewer to the Charleston Sewer District. On September 4, 2002 CH2M-Jones received permission to discharge the water into the sanitary sewer.

TABLE 2-1
Delineation/Confirmation Sample Results for Detected PCBs
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Location ID	Sample ID	Collection Date	PCB	Concentration (mg/kg)
Horizontal Delineation Samples				
A633SB027	633SB02703	11/06/2001	Aroclor-1254	1.6
A633SB027	633SB02703	11/06/2001	Aroclor-1260	5.4
A633SB029	633SB02903	11/06/2001		7.0
A633SB030	633SB03003	11/06/2001		1.4
A633SB031	633SB03103	11/06/2001		3.9
A633SB023	633SB02303	11/06/2001		0.74
Vertical Delineation Samples				
A633SB022	633SB02203	11/06/2001	Aroclor-1260	**21.0**
A633SB024	633SB02403	11/06/2001		**17.0**
A633SB026	633SB02603	11/06/2001		**98.0**
A633SB028	633SB02803	11/06/2001		4.4

Bold and outlined results indicate exceedances of the site-specific SSL of 9.9 mg/kg.

TABLE 2-2
Detected Compounds in the Stockpile and Waste Characterization Samples
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Station ID	Sample ID	Date Collected	Parameter Class	Compound	Concentration (mg/kg)	Qualifier	SSL
Stockpile							
G633SB024	633SB024M1	11-Feb-02	PCB	PCB-1260 (Aroclor-1260)	0.31	J	9.9
Waste Characterization							
G633VA001	633VA001M1	11-Feb-02	PCB	PCB-1260 (Aroclor-1260)	8.7	=	
			SVOA	Benzo[a]Anthracene	0.012	=	
				Benzo[a]Pyrene	0.01	=	
				Benzo[b]Fluoranthene	0.022	=	
				Benzo[g,h,I]Perylene	0.013	=	
				Benzo[k]Fluoranthene	0.012	=	
				Chrysene	0.029	=	
				Dibenz[a,h]anthracene	0.0029	J	
				Fluoranthene	0.052	=	
				Indeno[1,2,3-c,d]pyrene	0.011	=	
				Phenanthrene	0.023	=	
				Pyrene	0.039	=	
			VOA	1,4-Dichlorobenzene	0.002	J	

All values are presented in units of milligrams per kilogram (mg/kg).

= Indicates that the analyte was detected at the concentration shown.

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.

TABLE 2-3
Detected Compounds in the Water and Product Samples
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Station ID	Sample ID	Date Collected	Parameter Class	Compound	Concentration	Qualifier
Water					**(µg/L)**	
G633GA001	633GA001M1	21-Jan-02	PCB	PCB-1260 (Aroclor-1260)	300	=
			VOA	1,2-Dichlorobenzene	0.69	J
				1,3-Dichlorobenzene	2.9	J
				1,4-Dichlorobenzene	14	=
				Acetone	28	J
				Chlorobenzene	1.8	J
				Chloroethane	4.2	J
Product					**(mg/kg)**	
G633WA001	633WA001M1	04-Feb-02	PCB	PCB-1260 (Aroclor-1260)	1,200	=
			TPH	Diesel Components	720,000	=
			VOA	1,2-Dichlorobenzene	1	J
				1,3-Dichlorobenzene	4	=
				1,4-Dichlorobenzene	19	=
				Acetone	4.2	J

All values are presented in units of milligrams per kilogram (mg/kg) or micrograms per kilogram (µg/L).

= Indicates that the analyte was detected at the concentration shown.

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.

TABLE 2-4
Detected Compounds in the LNAPL Delineation Borings
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
PCB							
	G633SB036	633SB03603	28-Feb-02	PCB-1254 (Aroclor-1254)	0.093	J	0.55[REG III]
	G633SB033	633SB03303	28-Feb-02	PCB-1260 (Aroclor-1260)	0.42	J	9.9[site-specific]
	G633SB034	633SB03403	28-Feb-02		0.96	J	
	G633SB035	633SB03503	28-Feb-02		2.4	J	
	G633SB036	633SB03603	28-Feb-02		1.1	=	
	G633SB039	633SB03903	28-Feb-02		0.066	J	
	G633SB043	633SB04303	28-Feb-02		0.35	J	
SVOA							
	G633SB038	633SB03803	28-Feb-02	Acenaphthene	0.0062	J	285
	G633SB039	633SB03903	28-Feb-02		0.0064	J	
	G633SB042	633SB04203	28-Feb-02		0.0045	J	
	G633SB036	633SB03603	28-Feb-02	Acenaphthylene	0.014	J	
	G633SB038	633SB03803	28-Feb-02		0.0025	J	285[Acenaphthene]
	G633SB039	633SB03903	28-Feb-02		0.0048	J	
	G633SB042	633SB04203	28-Feb-02		0.0071	J	
	G633SB035	633SB03503	28-Feb-02	Anthracene	0.02	J	6,000
	G633SB038	633SB03803	28-Feb-02		0.014	=	
	G633SB039	633SB03903	28-Feb-02		0.018	=	
	G633SB042	633SB04203	28-Feb-02		0.0068	J	
	G633SB033	633SB03303	28-Feb-02	Benzo[a]Anthracene	0.035	=	1
	G633SB035	633SB03503	28-Feb-02		0.009	J	
	G633SB036	633SB03603	28-Feb-02		0.06	J	
	G633SB038	633SB03803	28-Feb-02		0.066	=	
	G633SB039	633SB03903	28-Feb-02		0.13	=	
	G633SB040	633SB04003	28-Feb-02		0.031	J	
	G633SB041	633SB04103	28-Feb-02		0.018	J	
	G633SB042	633SB04203	28-Feb-02		0.035	=	
	G633SB032	633SB03203	28-Feb-02	Benzo[a]Pyrene	0.0019	J	4
	G633SB033	633SB03303	28-Feb-02		0.034	=	

TABLE 2-4
Detected Compounds in the LNAPL Delineation Borings
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
SVOA	G633SB036	633SB03603	28-Feb-02	Benzo[a]Pyrene	0.071	J	4
	G633SB038	633SB03803	28-Feb-02		0.075	=	
	G633SB039	633SB03903	28-Feb-02		0.15	=	
	G633SB040	633SB04003	28-Feb-02		0.035	J	
	G633SB041	633SB04103	28-Feb-02		0.016	J	
	G633SB042	633SB04203	28-Feb-02		0.044	=	
	G633SB032	633SB03203	28-Feb-02	Benzo[b]Fluoranthene	0.0021	J	2.5
	G633SB033	633SB03303	28-Feb-02		0.034	=	
	G633SB035	633SB03503	28-Feb-02		0.013	J	
	G633SB036	633SB03603	28-Feb-02		0.055	J	
	G633SB038	633SB03803	28-Feb-02		0.11	=	
	G633SB039	633SB03903	28-Feb-02		0.16	=	
	G633SB040	633SB04003	28-Feb-02		0.045	J	
	G633SB041	633SB04103	28-Feb-02		0.018	J	
	G633SB042	633SB04203	28-Feb-02		0.057	=	
	G633SB033	633SB03303	28-Feb-02	Benzo[g,h,I]Perylene	0.017	J	NA
	G633SB036	633SB03603	28-Feb-02		0.036	J	
	G633SB038	633SB03803	28-Feb-02		0.033	=	
	G633SB039	633SB03903	28-Feb-02		0.057	=	
	G633SB040	633SB04003	28-Feb-02		0.02	J	
	G633SB042	633SB04203	28-Feb-02		0.018	=	
	G633SB033	633SB03303	28-Feb-02	Benzo[k]Fluoranthene	0.047	=	24.5
	G633SB035	633SB03503	28-Feb-02		0.017	J	
	G633SB036	633SB03603	28-Feb-02		0.077	=	
	G633SB038	633SB03803	28-Feb-02		0.11	=	
	G633SB039	633SB03903	28-Feb-02		0.18	=	
	G633SB040	633SB04003	28-Feb-02		0.033	J	
	G633SB041	633SB04103	28-Feb-02		0.013	J	
	G633SB042	633SB04203	28-Feb-02		0.055	=	
SVOA	G633SB033	633SB03303	28-Feb-02	Chrysene	0.043	=	80

TABLE 2-4
Detected Compounds in the LNAPL Delineation Borings
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
SVOA	G633SB035	633SB03503	28-Feb-02	Chrysene	0.02	J	80
	G633SB036	633SB03603	28-Feb-02		0.069	J	
	G633SB038	633SB03803	28-Feb-02		0.1	=	
	G633SB039	633SB03903	28-Feb-02		0.15	=	
	G633SB041	633SB04103	28-Feb-02		0.021	J	
	G633SB042	633SB04203	28-Feb-02		0.046	=	
	G633SB033	633SB03303	28-Feb-02	Dibenz(a,h)anthracene	0.0088	J	1
	G633SB036	633SB03603	28-Feb-02		0.018	J	
	G633SB038	633SB03803	28-Feb-02		0.018	=	
	G633SB039	633SB03903	28-Feb-02		0.032	=	
	G633SB042	633SB04203	28-Feb-02		0.011	J	
	G633SB032	633SB03203	28-Feb-02	Fluoranthene	0.0031	J	2,150
	G633SB033	633SB03303	28-Feb-02		0.08	=	
	G633SB035	633SB03503	28-Feb-02		0.044	=	
	G633SB036	633SB03603	28-Feb-02		0.073	=	
	G633SB038	633SB03803	28-Feb-02		0.16	=	
	G633SB039	633SB03903	28-Feb-02		0.18	=	
	G633SB040	633SB04003	28-Feb-02		0.045	J	
	G633SB041	633SB04103	28-Feb-02		0.035	J	
	G633SB042	633SB04203	28-Feb-02		0.054	=	
	G633SB038	633SB03803	28-Feb-02	Fluorene	0.0066	J	280
	G633SB039	633SB03903	28-Feb-02		0.0056	J	
	G633SB042	633SB04203	28-Feb-02		0.0026	J	
	G633SB033	633SB03303	28-Feb-02	Indeno(1,2,3-c,d)pyrene	0.017	J	7
	G633SB036	633SB03603	28-Feb-02		0.031	J	
	G633SB038	633SB03803	28-Feb-02		0.024	=	
	G633SB039	633SB03903	28-Feb-02		0.038	=	
	G633SB040	633SB04003	28-Feb-02		0.02	J	
	G633SB042	633SB04203	28-Feb-02		0.013	=	
SVOA	G633SB038	633SB03803	28-Feb-02	Naphthalene	0.0021	J	42

TABLE 2-4
Detected Compounds in the LNAPL Delineation Borings
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
SVOA	G633SB039	633SB03903	28-Feb-02	Naphthalene	0.0027	J	42
	G633SB042	633SB04203	28-Feb-02		0.0022	J	
	G633SB035	633SB03503	28-Feb-02	Phenanthrene	0.078	=	6,000[anthracene]
	G633SB036	633SB03603	28-Feb-02		0.022	J	
	G633SB038	633SB03803	28-Feb-02		0.084	=	
	G633SB039	633SB03903	28-Feb-02		0.057	=	
	G633SB040	633SB04003	28-Feb-02		0.012	J	
	G633SB041	633SB04103	28-Feb-02		0.0083	J	
	G633SB042	633SB04203	28-Feb-02		0.016	=	
	G633SB032	633SB03203	28-Feb-02	Pyrene	0.0025	J	2,100
	G633SB033	633SB03303	28-Feb-02		0.079	=	
	G633SB035	633SB03503	28-Feb-02		0.034	=	
	G633SB036	633SB03603	28-Feb-02		0.093	=	
	G633SB038	633SB03803	28-Feb-02		0.14	=	
	G633SB039	633SB03903	28-Feb-02		0.19	=	
	G633SB040	633SB04003	28-Feb-02		0.058	J	
	G633SB041	633SB04103	28-Feb-02		0.038	J	
	G633SB042	633SB04203	28-Feb-02		0.049	=	
VOA							
	G633SB034	633SB03403	28-Feb-02	1,2,4-Trichlorobenzene	0.0069	J	0.3
	G633SB035	633SB03503	28-Feb-02	1,3-Dichlorobenzene	0.0091	=	0.51[site-specific]
	G633SB038	633SB03803	28-Feb-02		0.0025	J	
	G633SB035	633SB03503	28-Feb-02	1,4-Dichlorobenzene	0.038	=	7.8[site-specific]
	G633SB036	633SB03603	28-Feb-02		0.0039	J	
	G633SB038	633SB03803	28-Feb-02		0.0098	=	
	G633SB033	633SB03303	28-Feb-02	Acetone	0.24	J	0.29[site-specific]
	G633SB036	633SB03603	28-Feb-02		**0.4**	J	(mean 0.2025)
	G633SB038	633SB03803	28-Feb-02		0.095	J	
	G633SB039	633SB03903	28-Feb-02		0.13	J	

TABLE 2-4
Detected Compounds in the LNAPL Delineation Borings
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
VOA	G633SB040	633SB04003	28-Feb-02	Acetone	0.14	J	0.29[site-specific]
	G633SB042	633SB04203	28-Feb-02		0.21	J	
	G633SB033	633SB03303	28-Feb-02	Bromomethane	0.024	J	0.029[site-specific]
	G633SB036	633SB03603	28-Feb-02		**0.031**	J	(mean 0.0275)
	G633SB034	633SB03403	28-Feb-02	Carbon Disulfide	0.0039	J	2
	G633SB035	633SB03503	28-Feb-02		0.004	J	
	G633SB036	633SB03603	28-Feb-02		0.049	=	
	G633SB038	633SB03803	28-Feb-02		0.052	=	
	G633SB039	633SB03903	28-Feb-02		0.0067	J	
	G633SB040	633SB04003	28-Feb-02		0.021	=	
	G633SB041	633SB04103	28-Feb-02		0.0024	J	
	G633SB042	633SB04203	28-Feb-02		0.0064	J	
	G633SB035	633SB03503	28-Feb-02	Ethylbenzene	0.002	J	0.7
	G633SB035	633SB03503	28-Feb-02	m+p Xylene	0.01	=	9 [o-xylene]
	G633SB033	633SB03303	28-Feb-02	Methyl ethyl ketone (2-Butanone)	0.053	J	0.4[REG III]
	G633SB036	633SB03603	28-Feb-02		0.056	J	
	G633SB038	633SB03803	28-Feb-02		0.011	J	
	G633SB039	633SB03903	28-Feb-02		0.023	J	
	G633SB040	633SB04003	28-Feb-02		0.025	J	
	G633SB041	633SB04103	28-Feb-02		0.0069	J	
	G633SB042	633SB04203	28-Feb-02		0.037	J	
	G633SB035	633SB03503	28-Feb-02	o-Xylene	0.0045	J	9
	G633SB035	633SB03503	28-Feb-02	Tetrachloroethylene (PCE)	0.0067	=	0.028[site-specific]
	G633SB035	633SB03503	28-Feb-02	Xylenes, Total	0.014	=	9 [o-xylene]

SSLs are from the *Soil Screening Guidance: Technical Background Document* (EPA,1996) unless otherwise indicated.
Generic SSLs are based on a dilution-attenuation factor (DAF) of 1 for VOCs and 10 for all other compounds.
The source for SSLs other than from the Soil Screening Guidance are indicated in superscript next to the value.
Surrogate compounds for SSLs are indicated in superscript next to the value.

= Indicates that the analyte was detected at the concentration shown.

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.

TABLE 2-5
Detected Compounds in the Electrical Vault Sample
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Station ID	Sample ID	Date Collected	Parameter Class	Compound	Concentration (µg/L)	Qualifier
G633ZA001	633ZA001M4	05-Jun-02	VOCs	Acetone	2.9	J
			SVOCs	bis(2-Ethylhexyl) Phthalate	6.2	J
				Fluoranthene	3.1	J
				Pyrene	3	J
			PCBs	PCB-1254 (Aroclor-1254)	1.6	J
				PCB-1260 (Aroclor-1260)	9.5	J

All values presented in units of micrograms per liter (µg/L).

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.

TABLE 2-6
Detected Compounds in the Product Sample 633ZB001M6
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Station ID	Sample ID	Date Collected	Parameter Class	Compound	Concentration (mg/kg)	Qualifier
G633ZB001	633ZB001M6	24-Jul-02	TPH	Diesel Components	690,000	=
			PCB	PCB-1260 (Aroclor-1260)	2,900	=

All values are presented in units of milligrams per kilogram (mg/kg).

= Indicates that the analyte was detected at the concentration shown.

TABLE 2-7
Detected Compounds in Confirmation Samples
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Parameter Class	Station ID	Sample ID	Date Collected	Compound	Concentration (mg/kg)	Qualifier	SSL
PCB	G633SB045	633SB04504	26-Jul-02	PCB-1260 (Aroclor-1260)	5.57	=	9.9[site-specific]
	G633SB046	633SB04604	26-Jul-02	PCB-1260 (Aroclor-1260)	0.0521	J	
	G633SB047	633SB04704	26-Jul-02	PCB-1260 (Aroclor-1260)	0.434	J	
	G633SB048	633SB04804	26-Jul-02	PCB-1260 (Aroclor-1260)	0.648	J	
VOCs	G633SB046	633SB04604	26-Jul-02	1,4-Dichlorobenzene	0.00053	J	7.8[site-specific]
	G633SB048	633SB04804	26-Jul-02	1,4-Dichlorobenzene	0.00063	J	
	G633SB047	633SB04704	26-Jul-02	m+p Xylene	0.00088	J	9 [o-xylene]
	G633SB048	633SB04804	26-Jul-02	m+p Xylene	0.0011	J	
	G633SB047	633SB04704	26-Jul-02	Xylenes, Total	0.00088	J	9 [o-xylene]
	G633SB048	633SB04804	26-Jul-02	Xylenes, Total	0.0011	J	

SSLs are from the *Soil Screening Guidance: Technical Background Document* (EPA,1996) unless otherwise indicated.

Generic SSLs are based on a dilution-attenuation factor (DAF) of 1 for VOCs and 10 for all other compounds.

The source for SSLs other than from the Soil Screening Guidance are indicated in superscript next to the value.

Surrogate compounds for SSLs are indicated in superscript next to the value.

= Indicates that the analyte was detected at the concentration shown.

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.

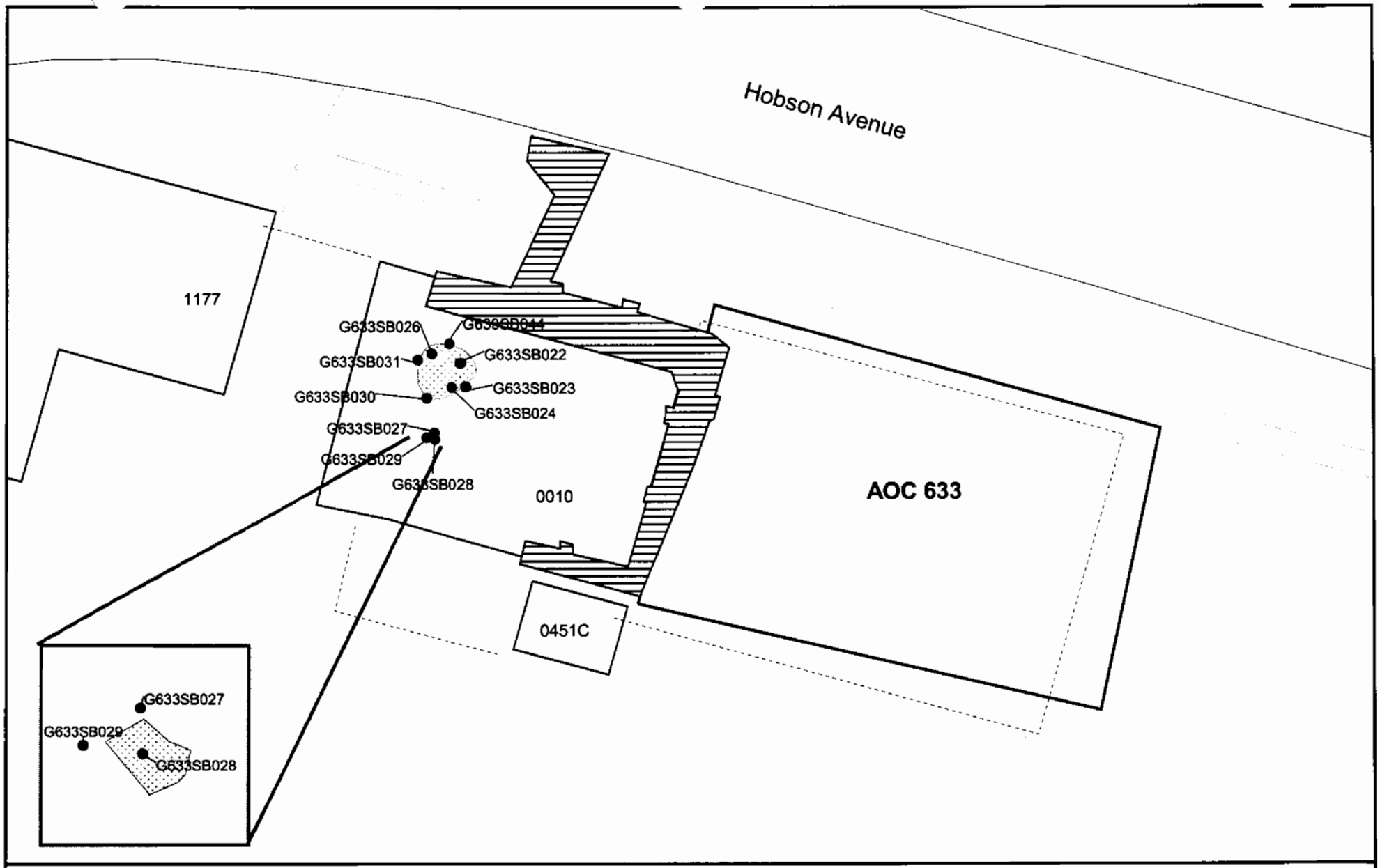
TABLE 2-8
Detected Compounds in Waste Characterization Samples
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Station ID	Sample ID	Date Collected	Parameter Class	Compound	Concentration	Qualifier
Water Drums					**(µg/L)**	
G633VADRM	633VADRMM6	26-Jul-02	VOCs	1,3-Dichlorobenzene	1.2	J
				1,4-Dichlorobenzene	5.2	=
				Acetone	17.5	=
				Chlorobenzene	0.37	J
				Methyl ethyl ketone (2-Butanone)	2.3	J
			PCBs	PCB-1260 (Aroclor-1260)	195	J
Soil Dumpster					**(mg/kg)**	
G633SB049	633SB04901	26-Jul-02	VOCs	Acetone	0.0042	J
				m+p Xylene	0.001	J
				Xylenes, Total	0.001	J
			PCBs	PCB-1260 (Aroclor-1260)	0.0117	J

All values are presented in units of milligrams per kilogram (mg/kg).

= Indicates that the analyte was detected at the concentration shown.

J Indicates an estimated value. One or more quality control (QC) parameters were outside control limits, or the value was detected below the laboratory's quantification limit.



Delineation Sample
Roads
Fence
AOC Boundary
Excavation Area
Buildings
Electrical Conduit

N

0 30 60 Feet

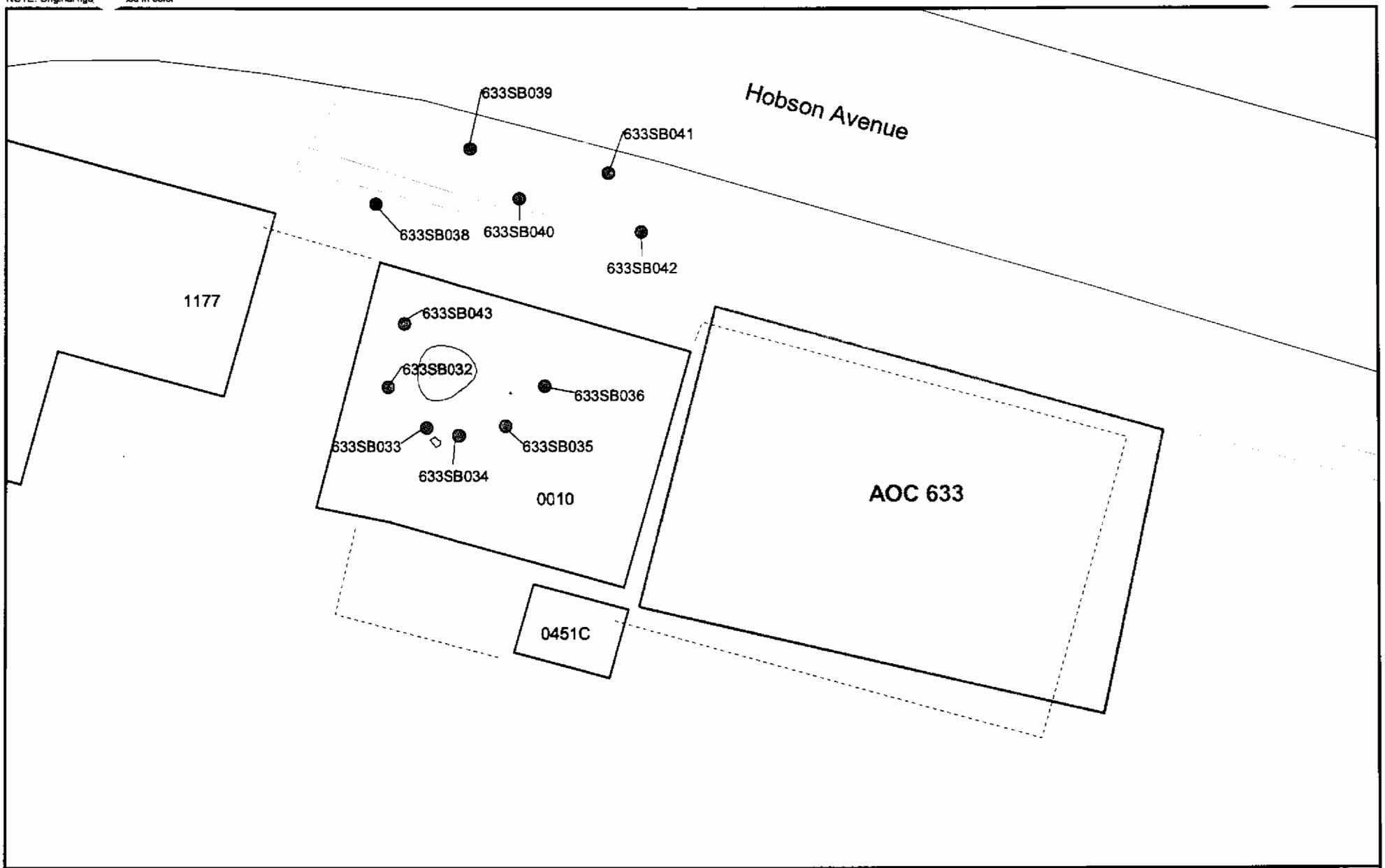
1 inch = 25 feet

Figure 2-1
Delineation Sample Locations
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gis\Projects\Zone_G\AOC_633\aoc_633.apr, Date: 23 Aug 2002 8:06, User: NMOUDRY, Figure 2-1 Delineation Sample Locations

NOTE: Original figure ...ed in color



- LNAPL Boring
- Fence
- Roads
- Excavated Area
- AOC Boundary
- Buildings

N

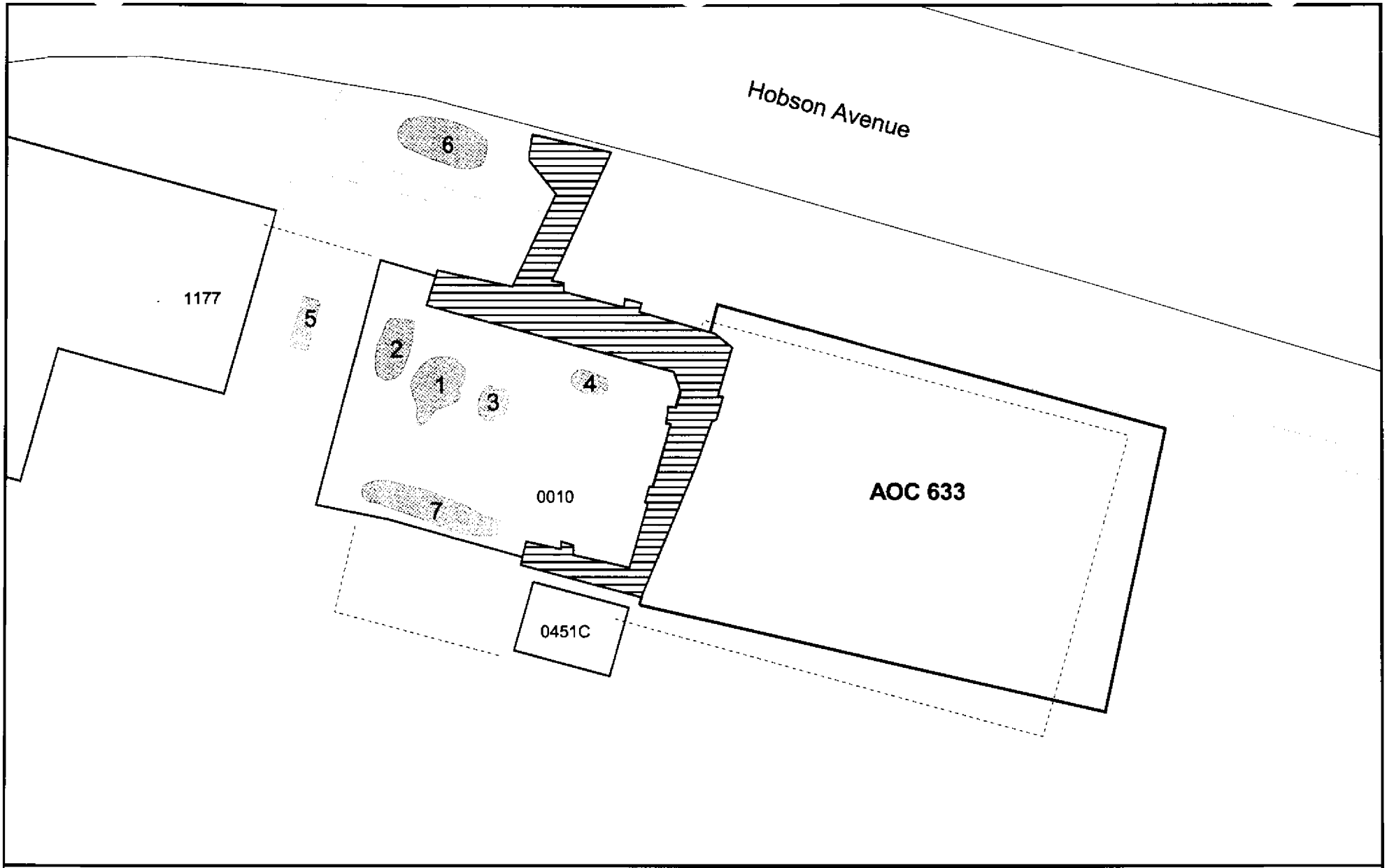
0 20 40 Feet

1 inch = 25 feet

Figure 2-2
LNAPL Delineation Borings
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gis\Projects\Zone_G\AOC_633\aoc_633.apr, Date: 20 Aug 2002 7:01, User: NMOUDRY, Figure 2-2 LNAPL Delineation Borings



Excavation Area
Fence
Roads
Pavement
Buildings
AOC Boundary
Electrical Conduit

N

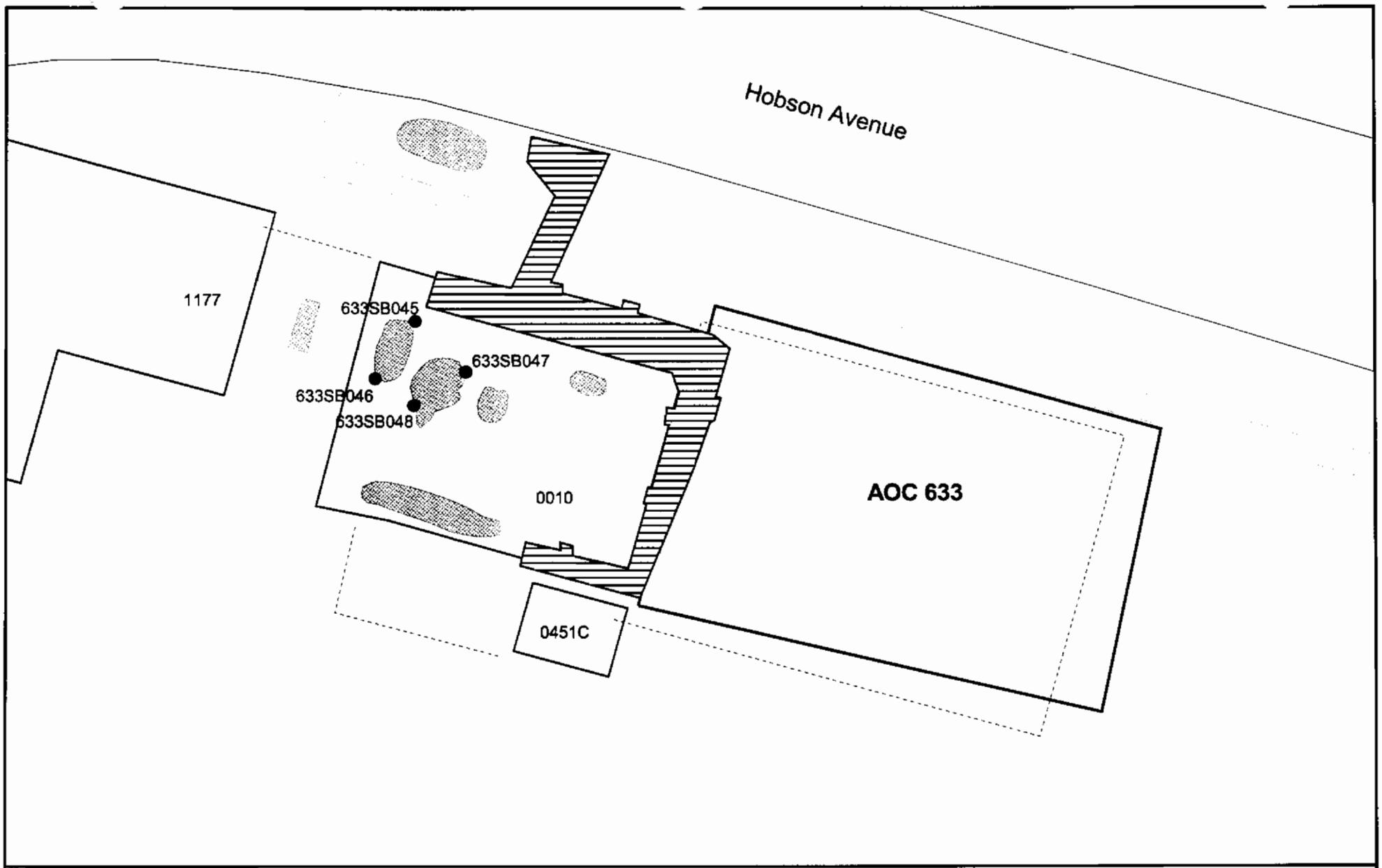
0 20 40 Feet

1 inch = 25 feet

Figure 2-3
Approximate LNAPL Excavation Locations
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gis\Projects\Zone_G\AOC_633\aoc_633.apr, Date: 23 Aug 2002 8:12, User: NMOUDRY, Figure 2-3 Approximate LNAPL Excavation Locations



Confirmation Sample
Fence
Roads
Pavement
Buildings
AOC Boundary
Electrical Conduit
Excavation Area

N

0 20 40 Feet

1 inch = 25 feet

Figure 2-4
Confirmation Sample Locations
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gis\Projects\Zone_G\AOC_633\aoc_633.apr, Date: 23 Aug 2002 8:17, User: NMOUDRY, Figure 2-4 Confirmation Sample

Section 3.0

3.0 Interim Measure Outcome

Prior to the initial excavation, a total of ten delineation/confirmation samples (633SB02203 through 633SB03103) were collected at a depth of 4 ft bls and submitted for PCB analysis. The depth was chosen based on the depth of the contamination, and to coincide with the expected floor of the excavation. The vertical delineation samples collected from within the excavation boundary contained Aroclor-1260 above the target cleanup level of 9.9 mg/kg. As a result, the excavation was terminated at the top of the water-bearing zone. The horizontal extent of contamination was adequately defined during the delineation/confirmation sampling effort. No sample collected from the proposed excavation boundary contained Aroclor-1260 above the media cleanup standard (MCS) of 9.9 mg/kg, which was established in the Phase II IM WP for AOC 633. Additionally, the confirmation sample (633SB04403, 0.16 U mg/kg) collected from the north wall of the excavation, did not contain Aroclor-1260. Please refer to Figure 2-1 for the locations of the samples collected as part of the IM. A summary of the analytical results is presented in Table 2-1; the complete data are provided in Appendix B.

Following the removal of subsurface soil at AOC 633, one residual subsurface soil sample (00EEG00017-6, 17.0 mg/kg) remains in place that exceeds the site-specific SSL (9.9 mg/kg). As discussed in the IM WP (CH2M-Jones, 2001), the data in this area indicate a very small area of PCB-impacted soil. Additionally, point exceedances of individual constituents do not necessarily pose a leaching risk. Average concentrations are a better indication of whether a constituent is likely to impact shallow groundwater. Therefore, CH2M-Jones evaluated the subsurface analytical data to determine the residual Aroclor-1260 concentration.

Table 3-1 presents the subsurface analytical results for Aroclor-1260. Analytical results from samples that were removed during the IM were replaced with the concentration (0.069 U mg/kg) reported for the fill material. These data were used to calculate the residual mean Aroclor-1260 concentration. Analytical results for samples in which Aroclor-1260 was not detected were replaced by ½ the reported value. This resulted in a mean Aroclor-1260 concentration of 1.54 mg/kg, which is below the site-specific SSL (9.9 mg/kg).

These data indicate that PCB-impacted soil at AOC 633 has been adequately remediated, and no further investigative or remedial actions are warranted for soil at AOC 633.

Following the removal of PCB-impacted soil, the excavation was backfilled with the stockpiled overburden and fill obtained from the Butler Ware Trucking Co. The backfill was compacted and graded to match the existing grade.

The observations made during the Phase II IM indicate that the LNAPL discovered during the initial IM was likely the result of a small onsite spill of diesel fuel. The LNAPL was removed to the extent practical during the Phase II IM. Analytical results from the LNAPL delineation borings and the excavation confirmation samples did not indicate a residual presence of PCBs, PAHs, or VOCs above conservative screening criteria.

Based on this information, the LNAPL and LNAPL-impacted soil have been adequately remediated, and no further investigative or remedial actions are warranted for LNAPL at AOC 633.

TABLE 3-1
Residual Aroclor-1260 Calculation
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Chemical	Station ID	Sample ID	Notes	Date Collected	Adjusted Results[a] (mg/kg)	Qualifier
RFI Samples						
	G633SB001	633SB00102		10/02/1996	0.100	U
	G633SB002	633SB00202		10/02/1996	0.130	U
	G633SB003	633SB00302		10/02/1996	0.100	U
	G633SB004	633SB00402		10/02/1996	0.310	=
	G633SB007	633SB00702	removed	10/02/1996	0.069	U
	G633SB008	633SB00802		01/07/1997	0.110	U
	G633SB009	633SB00902		01/07/1997	0.028	U
	G633SB010	633SB01002		01/07/1997	0.080	U
	G633SB011	633SB01102		07/29/1999	0.041	U
	G633SB012	633SB01202		07/29/1999	0.037	U
	G633SB013	633SB01302		07/27/1999	0.050	U
	G633SB014	633SB01402		07/27/1999	0.057	U
	G633SB015	633SB01502		07/28/1999	0.054	=
	G633SB017	633SB01702		07/28/1999	0.039	U
	G633SB018	633SB01802		07/27/1999	0.240	J
	G633SB019	633SB01902		07/27/1999	0.039	U
	G633SB020	633SB02002		07/27/1999	0.230	=
	G633SB021	633SB02102		01/28/2000	0.080	U
Delineation Samples						
	PT-1	00EEG0009-1		01/12/2000	7.000	=
	PT-2	00EEG0009-2		01/12/2000	2.900	=
	PT-3	00EEG0009-3		01/12/2000	3.100	=
	PT-4	00EEG0009-4		01/12/2000	4.800	=
	PT-5	00EEG0009-5		01/12/2000	6.800	=
	PT-6	00EEG00010-1		10/13/1996	0.520	=
	PT-7	00EEG00010-2	removed	10/13/1996	0.069	U
	PT-8	00EEG00010-3		10/13/1996	9.900	=
	PT-9	00EEG00010-4		10/13/1996	0.200	=
	PT-10	00EEG00017-1	removed	02/01/2000	0.069	U

TABLE 3-1
Residual Aroclor-1260 Calculation
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Chemical	Station ID	Sample ID	Notes	Date Collected	Adjusted Results[a] (mg/kg)	Qualifier
Delineation Samples						
	PT-11	00EEG00017-2	removed	02/01/2000	0.069	U
	PT-12	00EEG00017-3		02/01/2000	1.400	=
	PT-13	00EEG00017-4		02/01/2000	0.061	U
	PT-14	00EEG00017-5	removed	02/01/2000	0.069	U
	PT-15	00EEG00017-6		02/01/2000	17.000	=
	PT-16	00EEG00017-7		02/01/2000	0.300	=
	PT-17	00EEG00017-8		02/01/2000	1.300	=
Post-RFI Samples						
	G633SB022	633SB02203	removed	11/06/2001	0.069	U
	G633SB023	633SB02303		11/06/2001	0.740	J
	G633SB024	633SB02403	removed	11/06/2001	0.069	U
	G633SB026	633SB02603	removed	11/06/2001	0.069	U
	G633SB027	633SB02703		11/06/2001	5.400	=
	G633SB028	633SB02803		11/06/2001	4.400	=
	G633SB029	633SB02903		11/06/2001	7.000	=
	G633SB030	633SB03003		11/06/2001	1.400	=
	G633SB031	633SB03103		11/06/2001	3.900	=
	G633SB032	633SB03203		02/28/2002	0.086	UJ
	G633SB033	633SB03303		02/28/2002	0.420	=
	G633SB034	633SB03403		02/28/2002	0.960	J
	G633SB035	633SB03503		02/28/2002	2.400	J
	G633SB036	633SB03603		02/28/2002	1.100	=
	G633SB038	633SB03803		02/28/2002	0.820	U
	G633SB039	633SB03903		02/28/2002	0.066	J
	G633SB040	633SB04003		02/28/2002	0.240	UJ
	G633SB041	633SB04103		02/28/2002	0.160	U
	G633SB042	633SB04203		02/28/2002	0.240	UJ
	G633SB043	633SB04303		02/28/2002	0.350	J
	G633SB044	633SB04403		11/06/2001	0.160	U

TABLE 3-1
Residual Aroclor-1260 Calculation
Interim Measure Completion Report, AOC 633, Zone G, Charleston Naval Complex

Chemical	Station ID	Sample ID	Notes	Date Collected	Adjusted Results[a] (mg/kg)	Qualifier
Post-RFI Samples						
	G633SB045	633SB04504		07/26/2002	5.570	=
	G633SB046	633SB04604		07/26/2002	0.052	J
	G633SB047	633SB04704		07/26/2002	0.434	J
	G633SB048	633SB04804		07/26/2002	0.648	J
		Residual Mean Aroclor-1260 Concentration			**1.54**	

[a] Analytical results for samples that were removed during the IM were replaced by the analytical results from the fill material (0.069 U mg/Kg).

"Removed" in the "Notes" column indicated that the sample location was removed during the IM excavation.

U indicates that the analyte was not detected, the reported concentration is the detection limit.

UJ indicates that the analyte was not detected, the reported concentration is an estimated detection limit.

J indicates that the analyte was detected, the reported concentration is an estimated concentration.

= indicates that the analyte was detected, the reported concentration is the actual analytical concentration.

"Residual Mean Aroclor-1260 Concentration" was calculated using 1/2 the reported value for non-detect samples.

Section 4.0

4.0 Recommendations

Characterization and remedial actions for groundwater at AOC 633 have not been completed. A sampling and analysis plan (SAP) for groundwater has been developed and submitted for the site. The groundwater SAP is intended to assess groundwater quality at AOC 633. Analytical results and recommendations for groundwater will be presented in a CMS once the data have been collected and evaluated.

Because the data support the conclusion that the soil at AOC 633 has been adequately remediated, this IM effort is expected to be the final soil remedial action at AOC 633. Therefore, CH2M-Jones recommends no further investigation (NFI) for soil at the site and that the groundwater investigation proceed as quickly as practical.

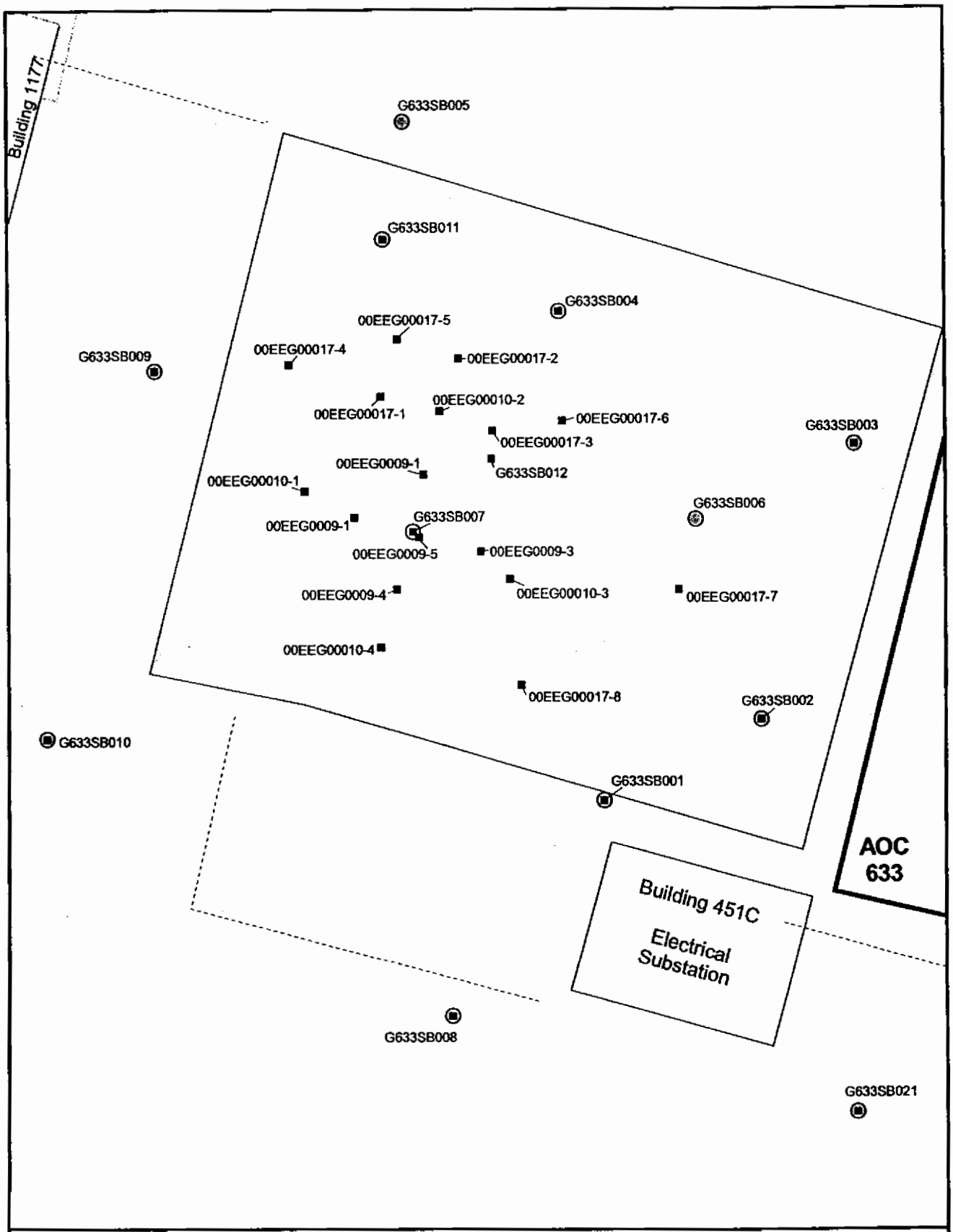
Section 5.0

5.0 References

EnSafe Inc. *Zone G RCRA Facility Investigation Report*, Comprehensive Long-Term Environmental Action Navy, Charleston Naval Complex, Charleston, South Carolina. Revision 0. March 31, 1999.

CH2M-Jones Inc. *Interim Measure Work Plan – Subsurface Soil Removal, AOC 633, Zone G, Charleston Naval Complex*. Revision 0. September 2001.

CH2M-Jones Inc. *Phase II Interim Measure Work Plan – LNAPL and LNAPL-Impacted Soil Removal, AOC 633, Zone G, Charleston Naval Complex*. Revision 0. May 2002.



Surface Soil Samples
Subsurface Soil Samples
Roads
Fence
AOC Boundary
Buildings

N

0 9 18 Feet

Figure 2-1
Soil Sample Locations
AOC 633, Zone G
Charleston Naval Complex

CH2MHILL

File Path: C:\18gle\Projects\Zone_G\Swmu_633\Apns\aco633je.apr, Date: 13 Sep 2001 14:36, User: ASWINFOR, Figure 2-1 Subsurface Soil Sample Locations

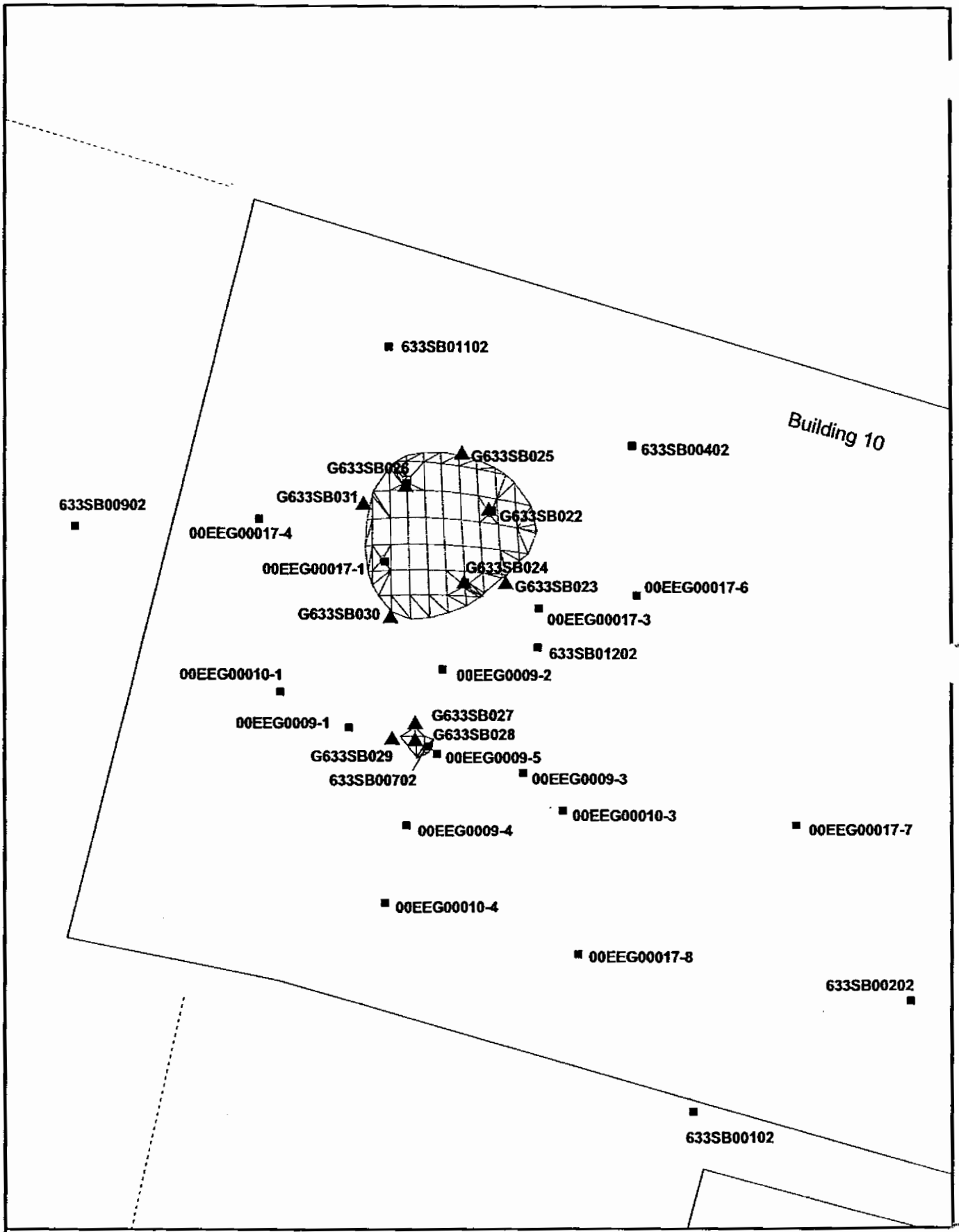


Figure 2-2
Previous IM Boundary and Delineation Sample Locations
AOC 633, Zone G
Charleston Naval Complex

Appendix B

Analytical Data Summary

	StationID	G633SB022		G633SB023		G633SB024		G633SB024	
	SampleID	633SB02203		633SB02303		633CB02403 (3-5ft)		633SB02403	
	DateCollected	11/6/2001		11/6/2001		11/1/2001		11/6/2001	
	DateExtracted	11/14/2001		11/14/2001		11/14/2001		11/14/2001	
	DateAnalyzed	11/15/2001		11/15/2001		11/15/2001		11/15/2001	
	SDGNumber	CNC44		CNC44		CNC44		CNC44	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	1600	U	41	UJ	900	U	870	U
PCB-1221 (Arochlor 1221)	ug/kg	1600	U	41	UJ	900	U	870	U
PCB-1232 (Arochlor 1232)	ug/kg	1600	U	41	UJ	900	U	870	U
PCB-1242 (Arochlor 1242)	ug/kg	1600	U	41	UJ	900	U	870	U
PCB-1248 (Arochlor 1248)	ug/kg	1600	U	41	UJ	900	U	870	U
PCB-1254 (Arochlor 1254)	ug/kg	3300	U	84	UJ	1800	U	1800	U
PCB-1260 (Arochlor 1260)	ug/kg	21000	=	740	J	13000	=	17000	=

	StationID	G633SB026		G633SB027		G633SB028		G633SB029	
	SampleID	633SB02603		633SB02703		633SB02803		633SB02903	
	DateCollected	11/6/2001		11/6/2001		11/6/2001		11/6/2001	
	DateExtracted	11/14/2001		11/14/2001		11/14/2001		11/14/2001	
	DateAnalyzed	11/16/2001		11/15/2001		11/15/2001		11/15/2001	
	SDGNumber	CNC44		CNC44		CNC44		CNC44	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	4200	U	380	U	190	U	390	U
PCB-1221 (Arochlor 1221)	ug/kg	4200	U	380	U	190	U	390	U
PCB-1232 (Arochlor 1232)	ug/kg	4200	U	380	U	190	U	390	U
PCB-1242 (Arochlor 1242)	ug/kg	4200	U	380	U	190	U	390	U
PCB-1248 (Arochlor 1248)	ug/kg	4200	U	380	U	190	U	390	U
PCB-1254 (Arochlor 1254)	ug/kg	8600	U	1600	=	390	U	790	U
PCB-1260 (Arochlor 1260)	ug/kg	98000	=	5400	=	4400	=	7000	=

	StationID	G633SB030		G633SB031	
	SampleID	633SB03003		633SB03103	
	DateCollected	11/6/2001		11/6/2001	
	DateExtracted	11/14/2001		11/14/2001	
	DateAnalyzed	11/16/2001		11/15/2001	
	SDGNumber	CNC44		CNC44	
Parameter	**Units**				
PCB-1016 (Arochlor 1016)	ug/kg	78	U	200	U
PCB-1221 (Arochlor 1221)	ug/kg	78	U	200	U
PCB-1232 (Arochlor 1232)	ug/kg	78	U	200	U
PCB-1242 (Arochlor 1242)	ug/kg	78	U	200	U
PCB-1248 (Arochlor 1248)	ug/kg	78	U	200	U
PCB-1254 (Arochlor 1254)	ug/kg	160	U	410	U
PCB-1260 (Arochlor 1260)	ug/kg	1400	=	3900	=

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/6/2002	
	DateAnalyzed	2/8/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	mg/kg	100	U
PCB-1221 (Arochlor 1221)	mg/kg	200	U
PCB-1232 (Arochlor 1232)	mg/kg	100	U
PCB-1242 (Arochlor 1242)	mg/kg	100	U
PCB-1248 (Arochlor 1248)	mg/kg	100	U
PCB-1254 (Arochlor 1254)	mg/kg	100	U
PCB-1260 (Arochlor 1260)	mg/kg	1200	=

Analytical Data Summary

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/6/2002	
	DateAnalyzed	2/7/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
4-Methylphenol (p-Cresol)	ug/kg	500000	U
N-Nitrosodiphenylamine	ug/kg	500000	U
Phenol	ug/kg	500000	U
bis(2-Chloroethyl) ether (2-Chloroethyl Ether)	ug/kg	500000	U
2-Chlorophenol	ug/kg	500000	U
Benzyl alcohol	ug/kg	500000	U
Bis(2-Chloroisopropyl)Ether	ug/kg	500000	U
2-Methylphenol (o-Cresol)	ug/kg	500000	U
N-Nitrosodi-n-propylamine	ug/kg	500000	U
Hexachloroethane	ug/kg	500000	U
Nitrobenzene	ug/kg	500000	U
Isophorone	ug/kg	500000	U
2-Nitrophenol	ug/kg	500000	U
2,4-Dimethylphenol	ug/kg	500000	U
bis(2-Chloroethoxy) Methane	ug/kg	500000	U
2,4-Dichlorophenol	ug/kg	500000	U
Benzoic acid	ug/kg	2400000	UJ
Naphthalene	ug/kg	500000	U
4-Chloroaniline	ug/kg	500000	U
Hexachlorobutadiene	ug/kg	500000	U
4-Chloro-3-methylphenol	ug/kg	500000	U
2-Methylnaphthalene	ug/kg	500000	U
Hexachlorocyclopentadiene	ug/kg	500000	U
2,4,6-Trichlorophenol	ug/kg	500000	U
2,4,5-Trichlorophenol	ug/kg	2400000	U
2-Chloronaphthalene	ug/kg	500000	U
2-Nitroaniline	ug/kg	2400000	U
3-Nitroaniline	ug/kg	2400000	U
Dimethyl Phthalate	ug/kg	500000	U
2,6-Dinitrotoluene	ug/kg	500000	U

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/6/2002	
	DateAnalyzed	2/7/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
Acenaphthylene	ug/kg	500000	U
Acenaphthene	ug/kg	500000	U
2,4-Dinitrophenol	ug/kg	2400000	U
Dibenzofuran	ug/kg	500000	U
2,4-Dinitrotoluene	ug/kg	500000	U
Diethyl Phthalate	ug/kg	500000	U
4-Nitrophenol	ug/kg	2400000	U
Fluorene	ug/kg	500000	U
4-Chlorophenyl Phenyl Ether	ug/kg	500000	U
4,6-Dinitro-2-methylphenol	ug/kg	2400000	U
4-Nitroaniline	ug/kg	2400000	U
4-Bromophenyl Phenyl Ether	ug/kg	500000	U
Hexachlorobenzene	ug/kg	500000	U
Pentachlorophenol	ug/kg	2400000	U
Phenanthrene	ug/kg	500000	U
Anthracene	ug/kg	500000	U
Di-n-butyl Phthalate	ug/kg	500000	U
Fluoranthene	ug/kg	500000	U
Pyrene	ug/kg	500000	U
Benzyl Butyl Phthalate	ug/kg	500000	U
Benzo(a)Anthracene	ug/kg	500000	U
3,3'-Dichlorobenzidine	ug/kg	990000	U
Chrysene	ug/kg	500000	U
bis(2-Ethylhexyl) Phthalate	ug/kg	500000	U
Di-n-octylphthalate	ug/kg	500000	U
Benzo(b)Fluoranthene	ug/kg	500000	U
Benzo(k)Fluoranthene	ug/kg	500000	U
Benzo(a)Pyrene	ug/kg	500000	U
Indeno(1,2,3-c,d)pyrene	ug/kg	500000	U
Dibenz(a,h)anthracene	ug/kg	500000	U

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/6/2002	
	DateAnalyzed	2/7/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
Benzo(g,h,i)Perylene	ug/kg	500000	U
Carbazole	ug/kg	500000	U

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/6/2002	
	DateAnalyzed	2/7/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
140 Solvent	mg/kg	150000	U
90 Solvent	mg/kg	150000	U
Diesel Components	mg/kg	720000	=
HiSol 10	mg/kg	150000	U
HiSol 15	mg/kg	150000	U
Kerosene	mg/kg	150000	U
Kwik Dri	mg/kg	150000	U
Mineral Spirits	mg/kg	150000	U
V M & P Naphtha	mg/kg	150000	U

Analytical Data Summary

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/8/2002	
	DateAnalyzed	2/8/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
m-Xylene	ug/kg	2000	U
Chloromethane	ug/kg	4000	U
Vinyl chloride	ug/kg	4000	U
Bromomethane	ug/kg	4000	UJ
Chloroethane	ug/kg	4000	U
1,1-Dichloroethene	ug/kg	2000	U
Acetone	ug/kg	4200	J
Carbon Disulfide	ug/kg	2000	U
Methylene Chloride	ug/kg	2000	U
trans-1,2-Dichloroethene	ug/kg	2000	U
1,1-Dichloroethane	ug/kg	2000	U
Vinyl acetate	ug/kg	4000	U
Methyl ethyl ketone (2-Butanone)	ug/kg	4000	UJ
cis-1,2-Dichloroethylene	ug/kg	2000	U
1,2-Dichloroethene (total)	ug/kg	2000	U
Chloroform	ug/kg	2000	U
1,1,1-Trichloroethane	ug/kg	2000	U
Carbon Tetrachloride	ug/kg	2000	U
1,2-Dichloroethane	ug/kg	2000	U
Benzene	ug/kg	2000	U
Trichloroethylene (TCE)	ug/kg	2000	U
1,2-Dichloropropane	ug/kg	2000	U
Bromodichloromethane	ug/kg	2000	U
2-Chloroethyl vinyl ether	ug/kg	4000	U
cis-1,3-Dichloropropene	ug/kg	2000	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	4000	UJ
Toluene	ug/kg	2000	U
trans-1,3-Dichloropropene	ug/kg	2000	U
1,1,2-Trichloroethane	ug/kg	2000	UJ
2-Hexanone	ug/kg	4000	UJ

	StationID	G633WA001	
	SampleID	633WA001M1	
	DateCollected	2/4/2002	
	DateExtracted	2/8/2002	
	DateAnalyzed	2/8/2002	
	SDGNumber	CNC65	
Parameter	**Units**		
Tetrachloroethylene (PCE)	ug/kg	2000	U
Dibromochloromethane	ug/kg	2000	U
Chlorobenzene	ug/kg	2000	U
Ethylbenzene	ug/kg	2000	U
o-Xylene	ug/kg	2000	U
Xylenes, Total	ug/kg	2000	U
Styrene	ug/kg	2000	U
Bromoform	ug/kg	2000	U
1,1,2,2-Tetrachloroethane	ug/kg	2000	U
1,3-Dichlorobenzene	ug/kg	4000	=
1,4-Dichlorobenzene	ug/kg	19000	=
1,2-Dichlorobenzene	ug/kg	1000	J
1,2,4-Trichlorobenzene	ug/kg	2000	U
1,2,3-Trichlorobenzene	ug/kg	2000	U

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/22/2002	
	DateAnalyzed	1/24/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	ug/l	25	U
PCB-1221 (Arochlor 1221)	ug/l	25	U
PCB-1232 (Arochlor 1232)	ug/l	25	U
PCB-1242 (Arochlor 1242)	ug/l	25	U
PCB-1248 (Arochlor 1248)	ug/l	25	U
PCB-1254 (Arochlor 1254)	ug/l	50	U
PCB-1260 (Arochlor 1260)	ug/l	300	=

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/22/2002	
	DateAnalyzed	1/24/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
4-Methylphenol (p-Cresol)	ug/l	1000	U
N-Nitrosodiphenylamine	ug/l	1000	U
Phenol	ug/l	1000	U
bis(2-Chloroethyl) ether (2-Chloroethyl Ether)	ug/l	1000	U
2-Chlorophenol	ug/l	1000	U
1,3-Dichlorobenzene	ug/l	1000	U
1,4-Dichlorobenzene	ug/l	1000	U
Benzyl alcohol	ug/l	1000	U
1,2-Dichlorobenzene	ug/l	1000	U
Bis(2-Chloroisopropyl)Ether	ug/l	1000	U
2-Methylphenol (o-Cresol)	ug/l	1000	U
N-Nitrosodi-n-propylamine	ug/l	1000	U
Hexachloroethane	ug/l	1000	U
Nitrobenzene	ug/l	1000	U
Isophorone	ug/l	1000	U
2-Nitrophenol	ug/l	1000	U
2,4-Dimethylphenol	ug/l	1000	U
bis(2-Chloroethoxy) Methane	ug/l	1000	U
2,4-Dichlorophenol	ug/l	1000	U
Benzoic acid	ug/l	5000	U
1,2,4-Trichlorobenzene	ug/l	1000	U
Naphthalene	ug/l	1000	U
4-Chloroaniline	ug/l	1000	U
Hexachlorobutadiene	ug/l	1000	U
4-Chloro-3-methylphenol	ug/l	1000	U
2-Methylnaphthalene	ug/l	1000	U
Hexachlorocyclopentadiene	ug/l	1000	U
2,4,6-Trichlorophenol	ug/l	1000	U
2,4,5-Trichlorophenol	ug/l	5000	U
2-Chloronaphthalene	ug/l	1000	U

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/22/2002	
	DateAnalyzed	1/24/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
2-Nitroaniline	ug/l	5000	U
3-Nitroaniline	ug/l	5000	U
Dimethyl Phthalate	ug/l	1000	U
2,6-Dinitrotoluene	ug/l	1000	U
Acenaphthylene	ug/l	1000	U
Acenaphthene	ug/l	1000	U
2,4-Dinitrophenol	ug/l	5000	U
Dibenzofuran	ug/l	1000	U
2,4-Dinitrotoluene	ug/l	1000	UJ
Diethyl Phthalate	ug/l	1000	U
4-Nitrophenol	ug/l	5000	U
Fluorene	ug/l	1000	U
4-Chlorophenyl Phenyl Ether	ug/l	1000	U
4,6-Dinitro-2-methylphenol	ug/l	5000	U
4-Nitroaniline	ug/l	5000	U
4-Bromophenyl Phenyl Ether	ug/l	1000	U
Hexachlorobenzene	ug/l	1000	U
Pentachlorophenol	ug/l	5000	U
Phenanthrene	ug/l	1000	U
Anthracene	ug/l	1000	U
Di-n-butyl Phthalate	ug/l	1000	U
Fluoranthene	ug/l	1000	U
Pyrene	ug/l	1000	U
Benzyl Butyl Phthalate	ug/l	1000	U
Benzo(a)Anthracene	ug/l	1000	U
3,3'-Dichlorobenzidine	ug/l	2000	U
Chrysene	ug/l	1000	U
bis(2-Ethylhexyl) Phthalate	ug/l	1000	U
Di-n-octylphthalate	ug/l	1000	U
Benzo(b)Fluoranthene	ug/l	1000	U

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/22/2002	
	DateAnalyzed	1/24/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
Benzo(k)Fluoranthene	ug/l	1000	U
Benzo(a)Pyrene	ug/l	1000	U
Indeno(1,2,3-c,d)pyrene	ug/l	1000	U
Dibenz(a,h)anthracene	ug/l	1000	U
Benzo(g,h,i)Perylene	ug/l	1000	U
Carbazole	ug/l	1000	U

Analytical Data Summary

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/23/2002	
	DateAnalyzed	1/23/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
Chloromethane	ug/l	10	U
Vinyl chloride	ug/l	10	U
Bromomethane	ug/l	10	UJ
Chloroethane	ug/l	4.2	J
1,1-Dichloroethene	ug/l	5	U
Acetone	ug/l	28	J
Carbon Disulfide	ug/l	5	U
Methylene Chloride	ug/l	5	U
trans-1,2-Dichloroethene	ug/l	5	U
1,1-Dichloroethane	ug/l	5	U
Vinyl acetate	ug/l	10	U
Methyl ethyl ketone (2-Butanone)	ug/l	10	U
cis-1,2-Dichloroethylene	ug/l	5	U
1,2-Dichloroethene (total)	ug/l	5	U
Chloroform	ug/l	5	U
1,1,1-Trichloroethane	ug/l	5	U
Carbon Tetrachloride	ug/l	5	U
1,2-Dichloroethane	ug/l	5	U
Benzene	ug/l	5	U
Trichloroethylene (TCE)	ug/l	5	U
1,2-Dichloropropane	ug/l	5	U
Bromodichloromethane	ug/l	5	U
2-Chloroethyl vinyl ether	ug/l	10	U
cis-1,3-Dichloropropene	ug/l	5	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/l	10	U
Toluene	ug/l	5	U
trans-1,3-Dichloropropene	ug/l	5	U
1,1,2-Trichloroethane	ug/l	5	U
2-Hexanone	ug/l	10	U
Tetrachloroethylene (PCE)	ug/l	5	U

	StationID	G633GA001	
	SampleID	633GA001M1	
	DateCollected	1/21/2002	
	DateExtracted	1/23/2002	
	DateAnalyzed	1/23/2002	
	SDGNumber	CNC64	
Parameter	**Units**		
Dibromochloromethane	ug/l	5	U
Chlorobenzene	ug/l	1.8	J
Ethylbenzene	ug/l	5	U
m+p Xylene	ug/l	5	U
o-Xylene	ug/l	5	U
Xylenes, Total	ug/l	5	U
Styrene	ug/l	5	U
Bromoform	ug/l	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U
1,3-Dichlorobenzene	ug/l	2.9	J
1,4-Dichlorobenzene	ug/l	14	=
1,2-Dichlorobenzene	ug/l	0.69	J
1,2,4-Trichlorobenzene	ug/l	5	U
1,2,3-Trichlorobenzene	ug/l	5	U

Analytical Data Summary

	StationID	G633SB024		G633SB044		G633VA001	
	SampleID	633SB024M1		633SB04403 (4-5ft)		633VA001M1	
	DateCollected	2/11/2002		11/6/2001		2/11/2002	
	DateExtracted	2/12/2002		2/19/2002		2/12/2002	
	DateAnalyzed	2/14/2002		2/20/2002		2/14/2002	
	SDGNumber	CNC68		CNC68		CNC68	
Parameter	**Units**						
PCB-1016 (Arochlor 1016)	ug/kg	38	UJ	80	UJ	730	U
PCB-1221 (Arochlor 1221)	ug/kg	38	UJ	80	U	730	U
PCB-1232 (Arochlor 1232)	ug/kg	38	UJ	80	U	730	U
PCB-1242 (Arochlor 1242)	ug/kg	38	UJ	80	U	730	U
PCB-1248 (Arochlor 1248)	ug/kg	38	UJ	80	U	730	U
PCB-1254 (Arochlor 1254)	ug/kg	76	UJ	160	U	1500	U
PCB-1260 (Arochlor 1260)	ug/kg	310	J	160	U	8700	=

Analytical Data Summary

	StationID	G633SB024		G633SB044		G633VA001	
	SampleID	633SB024M1		633SB04403 (4-5ft)		633VA001M1	
	DateCollected	2/11/2002		11/6/2001		2/11/2002	
	DateExtracted	2/12/2002		2/12/2002		2/12/2002	
	DateAnalyzed	2/13/2002		2/13/2002		2/13/2002	
	SDGNumber	CNC68		CNC68		CNC68	
Parameter	**Units**						
1-Methyl naphthalene	ug/kg	7.6	U	8.1	U	7.4	U
Naphthalene	ug/kg	7.6	U	8.1	U	7.4	U
2-Methylnaphthalene	ug/kg	7.6	U	8.1	U	7.4	U
Acenaphthylene	ug/kg	7.6	U	8.1	U	7.4	U
Acenaphthene	ug/kg	7.6	U	8.1	UJ	7.4	U
Fluorene	ug/kg	7.6	U	8.1	U	7.4	U
Phenanthrene	ug/kg	7.6	U	8.1	U	23	=
Anthracene	ug/kg	7.6	U	8.1	U	7.4	U
Fluoranthene	ug/kg	7.6	U	8.1	U	52	=
Pyrene	ug/kg	7.6	U	8.1	U	39	=
Benzo(a)Anthracene	ug/kg	7.6	U	8.1	U	12	=
Chrysene	ug/kg	7.6	U	8.1	U	29	=
Benzo(b)Fluoranthene	ug/kg	7.6	U	8.1	U	22	=
Benzo(k)Fluoranthene	ug/kg	7.6	U	8.1	U	12	=
Benzo(a)Pyrene	ug/kg	7.6	U	8.1	U	10	=
Indeno(1,2,3-c,d)pyrene	ug/kg	7.6	U	8.1	U	11	=
Dibenz(a,h)anthracene	ug/kg	7.6	U	8.1	U	2.9	J
Benzo(g,h,i)Perylene	ug/kg	7.6	U	8.1	U	13	=

	StationID	G633SB024		G633SB044		G633VA001	
	SampleID	633SB024M1		633SB04403 (4-5ft)		633VA001M1	
	DateCollected	2/11/2002		11/6/2001		2/11/2002	
	DateExtracted	2/14/2002		2/14/2002		2/14/2002	
	DateAnalyzed	2/14/2002		2/14/2002		2/14/2002	
	SDGNumber	CNC68		CNC68		CNC68	
Parameter	**Units**						
Chloromethane	ug/kg	9.5	U	12	U	12	U
Vinyl chloride	ug/kg	9.5	U	12	U	12	U
Bromomethane	ug/kg	9.5	U	12	U	12	U
Chloroethane	ug/kg	9.5	U	12	U	12	U
1,1-Dichloroethene	ug/kg	4.7	U	6	U	5.8	U
Acetone	ug/kg	28	U	45	U	20	U
Carbon Disulfide	ug/kg	4.7	U	6	U	5.8	U
Methylene Chloride	ug/kg	4.7	U	6	U	5.8	U
trans-1,2-Dichloroethene	ug/kg	4.7	U	6	U	5.8	U
1,1-Dichloroethane	ug/kg	4.7	U	6	U	5.8	U
Vinyl acetate	ug/kg	9.5	UJ	12	UJ	12	UJ
Methyl ethyl ketone (2-Butanone)	ug/kg	9.5	U	12	U	12	U
cis-1,2-Dichloroethylene	ug/kg	4.7	U	6	U	5.8	U
1,2-Dichloroethene (total)	ug/kg	4.7	U	6	U	5.8	U
Chloroform	ug/kg	4.7	U	6	U	5.8	U
1,1,1-Trichloroethane	ug/kg	4.7	U	6	U	5.8	U
Carbon Tetrachloride	ug/kg	4.7	U	6	U	5.8	U
1,2-Dichloroethane	ug/kg	4.7	U	6	U	5.8	U
Benzene	ug/kg	4.7	U	6	U	5.8	U
Trichloroethylene (TCE)	ug/kg	4.7	U	6	U	5.8	U
1,2-Dichloropropane	ug/kg	4.7	U	6	U	5.8	U
Bromodichloromethane	ug/kg	4.7	U	6	U	5.8	U
2-Chloroethyl vinyl ether	ug/kg	9.5	UJ	12	UJ	12	UJ
cis-1,3-Dichloropropene	ug/kg	4.7	U	6	U	5.8	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	9.5	U	12	U	12	U
Toluene	ug/kg	4.7	U	6	U	5.8	U
trans-1,3-Dichloropropene	ug/kg	4.7	U	6	U	5.8	U
1,1,2-Trichloroethane	ug/kg	4.7	U	6	U	5.8	U
2-Hexanone	ug/kg	9.5	U	12	U	12	U
Tetrachloroethylene (PCE)	ug/kg	4.7	U	6	U	5.8	U

	StationID	G633SB024		G633SB044		G633VA001	
	SampleID	633SB024M1		633SB04403 (4-5ft)		633VA001M1	
	DateCollected	2/11/2002		11/6/2001		2/11/2002	
	DateExtracted	2/14/2002		2/14/2002		2/14/2002	
	DateAnalyzed	2/14/2002		2/14/2002		2/14/2002	
	SDGNumber	CNC68		CNC68		CNC68	
Parameter	**Units**						
Dibromochloromethane	ug/kg	4.7	U	6	U	5.8	U
Chlorobenzene	ug/kg	4.7	U	6	U	5.8	U
Ethylbenzene	ug/kg	4.7	U	6	U	5.8	U
m+p Xylene	ug/kg	4.7	U	6	U	5.8	U
o-Xylene	ug/kg	4.7	U	6	U	5.8	U
Xylenes, Total	ug/kg	4.7	U	6	U	5.8	U
Styrene	ug/kg	4.7	U	6	U	5.8	U
Bromoform	ug/kg	4.7	U	6	U	5.8	U
1,1,2,2-Tetrachloroethane	ug/kg	4.7	U	6	U	5.8	U
1,3-Dichlorobenzene	ug/kg	4.7	U	6	U	5.8	U
1,4-Dichlorobenzene	ug/kg	4.7	U	6	U	2	J
1,2-Dichlorobenzene	ug/kg	4.7	U	6	U	5.8	U
1,2,4-Trichlorobenzene	ug/kg	4.7	U	6	U	5.8	U
1,2,3-Trichlorobenzene	ug/kg	4.7	U	6	U	5.8	U

Analytical Data Summary

	StationID	G633SB032		G633SB033		G633SB033		G633SB034	
	SampleID	633SB03203 (3-4ft)		633CB03303 (5-6ft)		633SB03303 (5-6ft)		633SB03403 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/1/2002		3/12/2002		3/1/2002		3/1/2002	
	DateAnalyzed	3/6/2002		3/14/2002		3/6/2002		3/6/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	42	UJ	110	U	62	UJ	80	U
PCB-1221 (Arochlor 1221)	ug/kg	42	UJ	110	UJ	62	UJ	80	U
PCB-1232 (Arochlor 1232)	ug/kg	42	UJ	110	UJ	62	UJ	80	U
PCB-1242 (Arochlor 1242)	ug/kg	42	UJ	110	UJ	62	UJ	80	U
PCB-1248 (Arochlor 1248)	ug/kg	42	UJ	110	UJ	62	UJ	80	UJ
PCB-1254 (Arochlor 1254)	ug/kg	86	UJ	190	J	130	UJ	160	U
PCB-1260 (Arochlor 1260)	ug/kg	86	UJ	1100	=	420	J	960	J

	StationID	G633SB035		G633SB036		G633SB038		G633SB039	
	SampleID	633SB03503 (4-5ft)		633SB03603 (4-5ft)		633SB03803 (4-5ft)		633SB03903 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/1/2002		3/12/2002		3/1/2002		3/1/2002	
	DateAnalyzed	3/6/2002		3/14/2002		3/11/2002		3/6/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	180	U	140	U	400	U	54	UJ
PCB-1221 (Arochlor 1221)	ug/kg	180	U	140	UJ	400	U	54	UJ
PCB-1232 (Arochlor 1232)	ug/kg	180	U	140	UJ	400	U	54	UJ
PCB-1242 (Arochlor 1242)	ug/kg	180	U	140	UJ	400	U	54	UJ
PCB-1248 (Arochlor 1248)	ug/kg	180	UJ	140	UJ	400	U	54	UJ
PCB-1254 (Arochlor 1254)	ug/kg	380	U	93	J	820	U	110	UJ
PCB-1260 (Arochlor 1260)	ug/kg	2400	J	1100	=	820	U	66	J

	StationID	G633SB040		G633SB041		G633SB042		G633SB043	
	SampleID	633SB04003 (4-5ft)		633SB04103 (4-5ft)		633SB04203 (3-4ft)		633SB04303 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/12/2002		3/12/2002		3/12/2002		3/1/2002	
	DateAnalyzed	3/13/2002		3/13/2002		3/13/2002		3/6/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	120	U	80	U	120	U	41	UJ
PCB-1221 (Arochlor 1221)	ug/kg	120	UJ	80	UJ	120	UJ	41	UJ
PCB-1232 (Arochlor 1232)	ug/kg	120	UJ	80	UJ	120	UJ	41	UJ
PCB-1242 (Arochlor 1242)	ug/kg	120	UJ	80	UJ	120	UJ	41	UJ
PCB-1248 (Arochlor 1248)	ug/kg	120	UJ	80	UJ	120	UJ	41	UJ
PCB-1254 (Arochlor 1254)	ug/kg	240	UJ	160	UJ	240	UJ	84	UJ
PCB-1260 (Arochlor 1260)	ug/kg	240	UJ	160	U	240	UJ	350	J

	StationID	G633SB032		G633SB033		G633SB033	
	SampleID	633SB03203 (3-4ft)		633CB03303 (5-6ft)		633SB03303 (5-6ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Chloromethane	ug/kg	11	UJ	20	UJ	23	UJ
Vinyl chloride	ug/kg	11	U	20	U	23	U
Bromomethane	ug/kg	11	UJ	20	UJ	24	J
Chloroethane	ug/kg	11	U	20	U	23	U
1,1-Dichloroethene	ug/kg	5.7	U	9.8	U	12	U
Acetone	ug/kg	33	UJ	290	J	240	J
Carbon Disulfide	ug/kg	5.7	U	30	=	12	U
Methylene Chloride	ug/kg	5.7	U	9.8	U	12	U
trans-1,2-Dichloroethene	ug/kg	5.7	U	9.8	U	12	U
1,1-Dichloroethane	ug/kg	5.7	U	9.8	U	12	U
Vinyl acetate	ug/kg	11	U	20	U	23	U
Methyl ethyl ketone (2-Butanone)	ug/kg	11	UJ	34	J	53	J
cis-1,2-Dichloroethylene	ug/kg	5.7	U	9.8	U	12	U
1,2-Dichloroethene (total)	ug/kg	5.7	U	9.8	UJ	12	U
Chloroform	ug/kg	5.7	U	9.8	U	12	U
1,1,1-Trichloroethane	ug/kg	5.7	U	9.8	U	12	U
Carbon Tetrachloride	ug/kg	5.7	U	9.8	U	12	U
1,2-Dichloroethane	ug/kg	5.7	U	9.8	U	12	U
Benzene	ug/kg	5.7	U	9.8	U	12	U
Trichloroethylene (TCE)	ug/kg	5.7	U	9.8	U	12	U
1,2-Dichloropropane	ug/kg	5.7	U	9.8	U	12	U
Bromodichloromethane	ug/kg	5.7	U	9.8	U	12	U
2-Chloroethyl vinyl ether	ug/kg	11	R	20	R	23	R
cis-1,3-Dichloropropene	ug/kg	5.7	U	9.8	U	12	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	11	UJ	20	UJ	23	UJ
Toluene	ug/kg	5.7	U	9.8	U	12	U
trans-1,3-Dichloropropene	ug/kg	5.7	U	9.8	UJ	12	U
1,1,2-Trichloroethane	ug/kg	5.7	U	9.8	UJ	12	U
2-Hexanone	ug/kg	11	UJ	20	UJ	23	UJ
Tetrachloroethylene (PCE)	ug/kg	5.7	U	9.8	UJ	12	U

	StationID	G633SB034		G633SB034		G633SB035	
	SampleID	633SB03403 (4-5ft)		633SB03403RE (4-5ft)		633SB03503 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/4/2002		3/5/2002		3/4/2002	
	DateAnalyzed	3/4/2002		3/5/2002		3/4/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Chloromethane	ug/kg	12	U	11	R	10	U
Vinyl chloride	ug/kg	12	U	11	R	10	U
Bromomethane	ug/kg	12	UJ	4.1	R	10	UJ
Chloroethane	ug/kg	12	U	11	R	10	U
1,1-Dichloroethene	ug/kg	6	U	5.5	R	5	U
Acetone	ug/kg	110	UJ	240	R	110	UJ
Carbon Disulfide	ug/kg	3.9	J	3.6	R	4	J
Methylene Chloride	ug/kg	6	U	5.5	R	5	U
trans-1,2-Dichloroethene	ug/kg	6	U	5.5	R	5	U
1,1-Dichloroethane	ug/kg	6	U	5.5	R	5	U
Vinyl acetate	ug/kg	12	U	11	R	10	U
Methyl ethyl ketone (2-Butanone)	ug/kg	12	UJ	13	R	18	UJ
cis-1,2-Dichloroethylene	ug/kg	6	U	5.5	R	5	U
1,2-Dichloroethene (total)	ug/kg	6	U	5.5	R	5	U
Chloroform	ug/kg	6	U	5.5	R	5	U
1,1,1-Trichloroethane	ug/kg	6	U	5.5	R	5	U
Carbon Tetrachloride	ug/kg	6	U	5.5	R	5	U
1,2-Dichloroethane	ug/kg	6	U	5.5	R	5	U
Benzene	ug/kg	6	U	5.5	R	5	U
Trichloroethylene (TCE)	ug/kg	6	U	5.5	R	5	U
1,2-Dichloropropane	ug/kg	6	U	5.5	R	5	U
Bromodichloromethane	ug/kg	6	U	5.5	R	5	U
2-Chloroethyl vinyl ether	ug/kg	12	R	11	R	10	R
cis-1,3-Dichloropropene	ug/kg	6	U	5.5	R	5	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	12	UJ	11	R	10	UJ
Toluene	ug/kg	6	U	5.5	R	5	U
trans-1,3-Dichloropropene	ug/kg	6	U	5.5	R	5	U
1,1,2-Trichloroethane	ug/kg	6	U	5.5	R	5	U
2-Hexanone	ug/kg	12	UJ	11	R	10	UJ
Tetrachloroethylene (PCE)	ug/kg	6	U	5.5	R	6.7	=

	StationID	G633SB035		G633SB036		G633SB038	
	SampleID	633SB03503RE (4-5ft)		633SB03603 (4-5ft)		633SB03803 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Chloromethane	ug/kg	10	R	27	UJ	11	UJ
Vinyl chloride	ug/kg	10	R	27	U	11	U
Bromomethane	ug/kg	10	R	31	J	11	UJ
Chloroethane	ug/kg	10	R	27	U	11	U
1,1-Dichloroethene	ug/kg	5.1	R	14	U	5.6	U
Acetone	ug/kg	120	R	400	J	95	J
Carbon Disulfide	ug/kg	5.1	R	49	=	52	=
Methylene Chloride	ug/kg	5.1	R	14	U	5.6	U
trans-1,2-Dichloroethene	ug/kg	5.1	R	14	U	5.6	U
1,1-Dichloroethane	ug/kg	5.1	R	14	U	5.6	U
Vinyl acetate	ug/kg	10	R	27	U	11	U
Methyl ethyl ketone (2-Butanone)	ug/kg	16	R	56	J	11	J
cis-1,2-Dichloroethylene	ug/kg	5.1	R	14	U	5.6	U
1,2-Dichloroethene (total)	ug/kg	5.1	R	14	U	5.6	U
Chloroform	ug/kg	5.1	R	14	U	5.6	U
1,1,1-Trichloroethane	ug/kg	5.1	R	14	U	5.6	U
Carbon Tetrachloride	ug/kg	5.1	R	14	U	5.6	U
1,2-Dichloroethane	ug/kg	5.1	R	14	U	5.6	U
Benzene	ug/kg	5.1	R	14	U	5.6	U
Trichloroethylene (TCE)	ug/kg	5.1	R	14	U	5.6	U
1,2-Dichloropropane	ug/kg	5.1	R	14	U	5.6	U
Bromodichloromethane	ug/kg	5.1	R	14	U	5.6	U
2-Chloroethyl vinyl ether	ug/kg	10	R	27	R	11	R
cis-1,3-Dichloropropene	ug/kg	5.1	R	14	U	5.6	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	10	R	27	UJ	11	UJ
Toluene	ug/kg	5.1	R	14	U	5.6	U
trans-1,3-Dichloropropene	ug/kg	5.1	R	14	U	5.6	U
1,1,2-Trichloroethane	ug/kg	5.1	R	14	U	5.6	U
2-Hexanone	ug/kg	10	R	27	UJ	11	UJ
Tetrachloroethylene (PCE)	ug/kg	5.1	R	14	U	5.6	U

	StationID	G633SB039		G633SB040		G633SB041	
	SampleID	633SB03903 (4-5ft)		633SB04003 (4-5ft)		633SB04103 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Chloromethane	ug/kg	15	UJ	20	UJ	9.7	UJ
Vinyl chloride	ug/kg	15	U	20	U	9.7	U
Bromomethane	ug/kg	15	UJ	20	UJ	9.7	UJ
Chloroethane	ug/kg	15	U	20	U	9.7	U
1,1-Dichloroethene	ug/kg	7.6	U	10	U	4.8	U
Acetone	ug/kg	130	J	140	J	52	UJ
Carbon Disulfide	ug/kg	6.7	J	21	=	2.4	J
Methylene Chloride	ug/kg	7.6	U	10	U	4.8	U
trans-1,2-Dichloroethene	ug/kg	7.6	U	10	U	4.8	U
1,1-Dichloroethane	ug/kg	7.6	U	10	U	4.8	U
Vinyl acetate	ug/kg	15	U	20	U	9.7	U
Methyl ethyl ketone (2-Butanone)	ug/kg	23	J	25	J	6.9	J
cis-1,2-Dichloroethylene	ug/kg	7.6	U	10	U	4.8	U
1,2-Dichloroethene (total)	ug/kg	7.6	U	10	UJ	4.8	U
Chloroform	ug/kg	7.6	U	10	U	4.8	U
1,1,1-Trichloroethane	ug/kg	7.6	U	10	U	4.8	U
Carbon Tetrachloride	ug/kg	7.6	U	10	U	4.8	U
1,2-Dichloroethane	ug/kg	7.6	U	10	U	4.8	U
Benzene	ug/kg	7.6	U	10	U	4.8	U
Trichloroethylene (TCE)	ug/kg	7.6	U	10	U	4.8	U
1,2-Dichloropropane	ug/kg	7.6	U	10	U	4.8	U
Bromodichloromethane	ug/kg	7.6	U	10	U	4.8	U
2-Chloroethyl vinyl ether	ug/kg	15	R	20	R	9.7	R
cis-1,3-Dichloropropene	ug/kg	7.6	U	10	U	4.8	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	15	UJ	20	UJ	9.7	UJ
Toluene	ug/kg	7.6	U	10	U	4.8	U
trans-1,3-Dichloropropene	ug/kg	7.6	U	10	UJ	4.8	U
1,1,2-Trichloroethane	ug/kg	7.6	U	10	UJ	4.8	U
2-Hexanone	ug/kg	15	UJ	20	UJ	9.7	UJ
Tetrachloroethylene (PCE)	ug/kg	7.6	U	10	UJ	4.8	U

	StationID	G633SB042		G633SB043	
	SampleID	633SB04203 (3-4ft)		633SB04303 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70	
Parameter	**Units**				
Chloromethane	ug/kg	21	UJ	10	UJ
Vinyl chloride	ug/kg	21	U	10	U
Bromomethane	ug/kg	21	UJ	10	UJ
Chloroethane	ug/kg	21	U	10	U
1,1-Dichloroethene	ug/kg	10	U	5.3	U
Acetone	ug/kg	210	J	25	UJ
Carbon Disulfide	ug/kg	6.4	J	5.3	U
Methylene Chloride	ug/kg	10	U	5.3	U
trans-1,2-Dichloroethene	ug/kg	10	U	5.3	U
1,1-Dichloroethane	ug/kg	10	U	5.3	U
Vinyl acetate	ug/kg	21	U	10	U
Methyl ethyl ketone (2-Butanone)	ug/kg	37	J	10	UJ
cis-1,2-Dichloroethylene	ug/kg	10	U	5.3	U
1,2-Dichloroethene (total)	ug/kg	10	U	5.3	U
Chloroform	ug/kg	10	U	5.3	U
1,1,1-Trichloroethane	ug/kg	10	U	5.3	U
Carbon Tetrachloride	ug/kg	10	U	5.3	U
1,2-Dichloroethane	ug/kg	10	U	5.3	U
Benzene	ug/kg	10	U	5.3	U
Trichloroethylene (TCE)	ug/kg	10	U	5.3	U
1,2-Dichloropropane	ug/kg	10	U	5.3	U
Bromodichloromethane	ug/kg	10	U	5.3	U
2-Chloroethyl vinyl ether	ug/kg	21	R	10	R
cis-1,3-Dichloropropene	ug/kg	10	U	5.3	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	21	UJ	10	UJ
Toluene	ug/kg	10	U	5.3	U
trans-1,3-Dichloropropene	ug/kg	10	U	5.3	U
1,1,2-Trichloroethane	ug/kg	10	U	5.3	U
2-Hexanone	ug/kg	21	UJ	10	UJ
Tetrachloroethylene (PCE)	ug/kg	10	U	5.3	U

	StationID	G633SB032		G633SB033		G633SB033	
	SampleID	633SB03203 (3-4ft)		633CB03303 (5-6ft)		633SB03303 (5-6ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Dibromochloromethane	ug/kg	5.7	U	9.8	UJ	12	U
Chlorobenzene	ug/kg	5.7	U	9.8	UJ	12	U
Ethylbenzene	ug/kg	5.7	U	9.8	UJ	12	U
m+p Xylene	ug/kg	5.7	U	9.8	UJ	12	U
o-Xylene	ug/kg	5.7	U	9.8	UJ	12	U
Xylenes, Total	ug/kg	5.7	U	9.8	UJ	12	U
Styrene	ug/kg	5.7	U	9.8	UJ	12	U
Bromoform	ug/kg	5.7	U	9.8	UJ	12	U
1,1,2,2-Tetrachloroethane	ug/kg	5.7	U	9.8	UJ	12	U
1,3-Dichlorobenzene	ug/kg	5.7	U	9.8	UJ	12	U
1,4-Dichlorobenzene	ug/kg	5.7	U	9.8	UJ	12	U
1,2-Dichlorobenzene	ug/kg	5.7	U	9.8	UJ	12	U
1,2,4-Trichlorobenzene	ug/kg	5.7	UJ	9.8	UJ	12	UJ
1,2,3-Trichlorobenzene	ug/kg	5.7	UJ	9.8	UJ	12	UJ

	StationID	G633SB034		G633SB034		G633SB035	
	SampleID	633SB03403 (4-5ft)		633SB03403RE (4-5ft)		633SB03503 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/4/2002		3/5/2002		3/4/2002	
	DateAnalyzed	3/4/2002		3/5/2002		3/4/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Dibromochloromethane	ug/kg	6	U	5.5	R	5	U
Chlorobenzene	ug/kg	6	U	5.5	R	5	U
Ethylbenzene	ug/kg	6	U	5.5	R	2	J
m+p Xylene	ug/kg	6	U	5.5	R	10	=
o-Xylene	ug/kg	6	U	5.5	R	4.5	J
Xylenes, Total	ug/kg	6	U	5.5	R	14	=
Styrene	ug/kg	6	U	5.5	R	5	U
Bromoform	ug/kg	6	UJ	5.5	R	5	UJ
1,1,2,2-Tetrachloroethane	ug/kg	6	U	5.5	R	5	U
1,3-Dichlorobenzene	ug/kg	6	U	1.9	R	9.1	=
1,4-Dichlorobenzene	ug/kg	6	U	5	R	38	=
1,2-Dichlorobenzene	ug/kg	6	U	5.5	R	5	U
1,2,4-Trichlorobenzene	ug/kg	6.9	J	7.2	R	5	UJ
1,2,3-Trichlorobenzene	ug/kg	6	UJ	5.5	R	5	UJ

	StationID	G633SB035		G633SB036		G633SB038	
	SampleID	633SB03503RE (4-5ft)		633SB03603 (4-5ft)		633SB03803 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Dibromochloromethane	ug/kg	5.1	R	14	U	5.6	U
Chlorobenzene	ug/kg	2.1	R	14	U	5.6	U
Ethylbenzene	ug/kg	5.4	R	14	U	5.6	U
m+p Xylene	ug/kg	25	R	14	U	5.6	U
o-Xylene	ug/kg	11	R	14	U	5.6	U
Xylenes, Total	ug/kg	36	R	14	U	5.6	U
Styrene	ug/kg	5.1	R	14	U	5.6	U
Bromoform	ug/kg	5.1	R	14	U	5.6	U
1,1,2,2-Tetrachloroethane	ug/kg	5.1	R	14	U	5.6	U
1,3-Dichlorobenzene	ug/kg	27	R	14	U	2.5	J
1,4-Dichlorobenzene	ug/kg	100	R	3.9	J	9.8	=
1,2-Dichlorobenzene	ug/kg	5.1	R	14	U	5.6	U
1,2,4-Trichlorobenzene	ug/kg	4.4	R	14	UJ	5.6	UJ
1,2,3-Trichlorobenzene	ug/kg	5.1	R	14	UJ	5.6	UJ

	StationID	G633SB039		G633SB040		G633SB041	
	SampleID	633SB03903 (4-5ft)		633SB04003 (4-5ft)		633SB04103 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70	
Parameter	**Units**						
Dibromochloromethane	ug/kg	7.6	U	10	UJ	4.8	U
Chlorobenzene	ug/kg	7.6	U	10	UJ	4.8	U
Ethylbenzene	ug/kg	7.6	U	10	UJ	4.8	U
m+p Xylene	ug/kg	7.6	U	10	UJ	4.8	U
o-Xylene	ug/kg	7.6	U	10	UJ	4.8	U
Xylenes, Total	ug/kg	7.6	U	10	UJ	4.8	U
Styrene	ug/kg	7.6	U	10	UJ	4.8	U
Bromoform	ug/kg	7.6	U	10	UJ	4.8	U
1,1,2,2-Tetrachloroethane	ug/kg	7.6	U	10	UJ	4.8	U
1,3-Dichlorobenzene	ug/kg	7.6	U	10	UJ	4.8	U
1,4-Dichlorobenzene	ug/kg	7.6	U	10	UJ	4.8	U
1,2-Dichlorobenzene	ug/kg	7.6	U	10	UJ	4.8	U
1,2,4-Trichlorobenzene	ug/kg	7.6	UJ	10	UJ	4.8	UJ
1,2,3-Trichlorobenzene	ug/kg	7.6	UJ	10	UJ	4.8	UJ

Analytical Data Summary

	StationID	G633SB042		G633SB043	
	SampleID	633SB04203 (3-4ft)		633SB04303 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002	
	DateExtracted	3/5/2002		3/5/2002	
	DateAnalyzed	3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70	
Parameter	**Units**				
Dibromochloromethane	ug/kg	10	U	5.3	U
Chlorobenzene	ug/kg	10	U	5.3	U
Ethylbenzene	ug/kg	10	U	5.3	U
m+p Xylene	ug/kg	10	U	5.3	U
o-Xylene	ug/kg	10	U	5.3	U
Xylenes, Total	ug/kg	10	U	5.3	U
Styrene	ug/kg	10	U	5.3	U
Bromoform	ug/kg	10	U	5.3	U
1,1,2,2-Tetrachloroethane	ug/kg	10	U	5.3	U
1,3-Dichlorobenzene	ug/kg	10	U	5.3	U
1,4-Dichlorobenzene	ug/kg	10	U	5.3	U
1,2-Dichlorobenzene	ug/kg	10	U	5.3	U
1,2,4-Trichlorobenzene	ug/kg	10	UJ	5.3	UJ
1,2,3-Trichlorobenzene	ug/kg	10	UJ	5.3	UJ

	StationID	G633SB032		G633SB033		G633SB033		G633SB034	
	SampleID	633SB03203 (3-4ft)		633CB03303 (5-6ft)		633SB03303 (5-6ft)		633SB03403 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/1/2002		3/1/2002		3/1/2002		3/1/2002	
	DateAnalyzed	3/6/2002		3/5/2002		3/5/2002		3/6/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
Naphthalene	ug/kg	8.6	U	44	U	25	U	65	U
Acenaphthylene	ug/kg	8.6	U	44	U	25	U	65	U
Acenaphthene	ug/kg	8.6	U	44	U	25	U	65	U
Fluorene	ug/kg	8.6	U	44	U	25	U	65	U
Phenanthrene	ug/kg	8.6	U	44	U	25	U	65	U
Anthracene	ug/kg	8.6	U	44	U	25	U	65	U
Fluoranthene	ug/kg	3.1	J	44	U	80	=	65	U
Pyrene	ug/kg	2.5	J	51	=	79	=	65	U
Benzo(a)Anthracene	ug/kg	8.6	U	24	J	35	=	65	U
Chrysene	ug/kg	8.6	U	30	J	43	=	65	U
Benzo(b)Fluoranthene	ug/kg	2.1	J	30	J	34	=	65	U
Benzo(k)Fluoranthene	ug/kg	8.6	U	22	J	47	=	65	U
Benzo(a)Pyrene	ug/kg	1.9	J	22	J	34	=	65	U
Indeno(1,2,3-c,d)pyrene	ug/kg	8.6	U	11	J	17	J	65	U
Dibenz(a,h)anthracene	ug/kg	8.6	U	44	U	8.8	J	65	U
Benzo(g,h,i)Perylene	ug/kg	8.6	U	14	J	17	J	65	U

	StationID	G633SB035		G633SB036		G633SB038		G633SB039	
	SampleID	633SB03503 (4-5ft)		633SB03603 (4-5ft)		633SB03803 (4-5ft)		633SB03903 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/1/2002		3/1/2002		3/1/2002		3/1/2002	
	DateAnalyzed	3/5/2002		3/6/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
Naphthalene	ug/kg	30	U	73	U	2.1	J	2.7	J
Acenaphthylene	ug/kg	30	U	14	J	2.5	J	4.8	J
Acenaphthene	ug/kg	30	U	73	U	6.2	J	6.4	J
Fluorene	ug/kg	30	U	73	U	6.6	J	5.6	J
Phenanthrene	ug/kg	78	=	22	J	84	=	57	=
Anthracene	ug/kg	20	J	73	U	14	=	18	=
Fluoranthene	ug/kg	44	=	73	=	160	=	180	=
Pyrene	ug/kg	34	=	93	=	140	=	190	=
Benzo(a)Anthracene	ug/kg	9	J	60	J	66	=	130	=
Chrysene	ug/kg	20	J	69	J	100	=	150	=
Benzo(b)Fluoranthene	ug/kg	13	J	55	J	110	=	160	=
Benzo(k)Fluoranthene	ug/kg	17	J	77	=	110	=	180	=
Benzo(a)Pyrene	ug/kg	30	U	71	J	75	=	150	=
Indeno(1,2,3-c,d)pyrene	ug/kg	30	U	31	J	24	=	38	=
Dibenz(a,h)anthracene	ug/kg	30	U	18	J	18	=	32	=
Benzo(g,h,i)Perylene	ug/kg	30	U	36	J	33	=	57	=

	StationID	G633SB040		G633SB041		G633SB042		G633SB043	
	SampleID	633SB04003 (4-5ft)		633SB04103 (4-5ft)		633SB04203 (3-4ft)		633SB04303 (4-5ft)	
	DateCollected	2/28/2002		2/28/2002		2/28/2002		2/28/2002	
	DateExtracted	3/1/2002		3/1/2002		3/1/2002		3/1/2002	
	DateAnalyzed	3/6/2002		3/6/2002		3/5/2002		3/5/2002	
	SDGNumber	CNC70		CNC70		CNC70		CNC70	
Parameter	**Units**								
Naphthalene	ug/kg	59	U	40	U	2.2	J	8.4	U
Acenaphthylene	ug/kg	59	U	40	U	7.1	J	8.4	U
Acenaphthene	ug/kg	59	U	40	U	4.5	J	8.4	U
Fluorene	ug/kg	59	U	40	U	2.6	J	8.4	U
Phenanthrene	ug/kg	12	J	8.3	J	16	=	8.4	U
Anthracene	ug/kg	59	U	40	U	6.8	J	8.4	U
Fluoranthene	ug/kg	45	J	35	J	54	=	8.4	U
Pyrene	ug/kg	58	J	38	J	49	=	8.4	U
Benzo(a)Anthracene	ug/kg	31	J	18	J	35	=	8.4	U
Chrysene	ug/kg	59	U	21	J	46	=	8.4	U
Benzo(b)Fluoranthene	ug/kg	45	J	18	J	57	=	8.4	U
Benzo(k)Fluoranthene	ug/kg	33	J	13	J	55	=	8.4	U
Benzo(a)Pyrene	ug/kg	35	J	16	J	44	=	8.4	U
Indeno(1,2,3-c,d)pyrene	ug/kg	20	J	40	U	13	=	8.4	U
Dibenz(a,h)anthracene	ug/kg	59	U	40	U	11	J	8.4	U
Benzo(g,h,i)Perylene	ug/kg	20	J	40	U	18	=	8.4	U

Analytical Data Summary

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/7/2002	
	SDGNumber	61539	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	ug/L	5	UJ
PCB-1221 (Arochlor 1221)	ug/L	5	UJ
PCB-1232 (Arochlor 1232)	ug/L	5	UJ
PCB-1242 (Arochlor 1242)	ug/L	5	UJ
PCB-1248 (Arochlor 1248)	ug/L	5	UJ
PCB-1254 (Arochlor 1254)	ug/L	1.6	J
PCB-1260 (Arochlor 1260)	ug/L	9.5	J

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/6/2002	
	SDGNumber	61539	
Parameter	**Units**		
Phenol	ug/L	41.7	U
bis(2-Chloroethyl) ether (2-Chloroethyl Ether)	ug/L	41.7	U
2-Chlorophenol	ug/L	41.7	U
1,3-Dichlorobenzene	ug/L	41.7	U
1,4-Dichlorobenzene	ug/L	41.7	U
Benzyl alcohol	ug/L	41.7	UJ
1,2-Dichlorobenzene	ug/L	41.7	U
Bis(2-Chloroisopropyl)Ether	ug/L	41.7	U
2-Methylphenol (o-Cresol)	ug/L	41.7	U
N-Nitrosodi-n-propylamine	ug/L	41.7	U
3-Methylphenol/4-Methylphenol (mp-Cresol)	ug/L	41.7	U
Hexachloroethane	ug/L	41.7	U
Nitrobenzene	ug/L	41.7	U
Isophorone	ug/L	41.7	U
2-Nitrophenol	ug/L	41.7	U
2,4-Dimethylphenol	ug/L	41.7	U
bis(2-Chloroethoxy) Methane	ug/L	41.7	U
2,4-Dichlorophenol	ug/L	41.7	U
Benzoic acid	ug/L	208	U
1,2,4-Trichlorobenzene	ug/L	41.7	U
Naphthalene	ug/L	41.7	U
4-Chloroaniline	ug/L	41.7	U
Hexachlorobutadiene	ug/L	41.7	U
4-Chloro-3-methylphenol	ug/L	41.7	U
2-Methylnaphthalene	ug/L	41.7	U
Hexachlorocyclopentadiene	ug/L	41.7	U
2,4,6-Trichlorophenol	ug/L	41.7	U
2,4,5-Trichlorophenol	ug/L	208	U
2-Chloronaphthalene	ug/L	41.7	U
2-Nitroaniline	ug/L	208	U

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/6/2002	
	SDGNumber	61539	
Parameter	**Units**		
3-Nitroaniline	ug/L	208	U
Dimethyl Phthalate	ug/L	41.7	U
2,6-Dinitrotoluene	ug/L	41.7	U
Acenaphthylene	ug/L	41.7	U
Acenaphthene	ug/L	41.7	U
2,4-Dinitrophenol	ug/L	208	U
Dibenzofuran	ug/L	41.7	U
2,4-Dinitrotoluene	ug/L	41.7	U
Diethyl Phthalate	ug/L	41.7	U
4-Nitrophenol	ug/L	208	UJ
Fluorene	ug/L	41.7	U
4-Chlorophenyl Phenyl Ether	ug/L	41.7	U
4,6-Dinitro-2-methylphenol	ug/L	208	U
4-Nitroaniline	ug/L	208	U
Diphenylamine	ug/L	41.7	U
4-Bromophenyl Phenyl Ether	ug/L	41.7	U
Hexachlorobenzene	ug/L	41.7	U
Pentachlorophenol	ug/L	208	U
Phenanthrene	ug/L	41.7	U
Anthracene	ug/L	41.7	U
Di-n-butyl Phthalate	ug/L	41.7	U
Fluoranthene	ug/L	3.1	J
Pyrene	ug/L	3	J
Benzyl Butyl Phthalate	ug/L	41.7	U
Benzo(a)Anthracene	ug/L	41.7	U
3,3'-Dichlorobenzidine	ug/L	83.3	U
Chrysene	ug/L	41.7	U
bis(2-Ethylhexyl) Phthalate	ug/L	6.2	J
Di-n-octylphthalate	ug/L	41.7	U
Benzo(b)Fluoranthene	ug/L	41.7	U

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/6/2002	
	SDGNumber	61539	
Parameter	**Units**		
Benzo(k)Fluoranthene	ug/L	41.7	U
Benzo(a)Pyrene	ug/L	4.2	U
Indeno(1,2,3-c,d)pyrene	ug/L	41.7	U
Dibenz(a,h)anthracene	ug/L	41.7	U
Benzo(g,h,i)Perylene	ug/L	41.7	U
Carbazole	ug/L	41.7	U

Analytical Data Summary

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/6/2002	
	SDGNumber	61538	
Parameter	**Units**		
Chloromethane	ug/L	10	U
Vinyl chloride	ug/L	10	U
Bromomethane	ug/L	10	U
Chloroethane	ug/L	10	U
1,1-Dichloroethene	ug/L	5	U
Acetone	ug/L	2.9	J
Carbon Disulfide	ug/L	5	U
Methylene Chloride	ug/L	5	U
trans-1,2-Dichloroethene	ug/L	5	U
1,1-Dichloroethane	ug/L	5	U
Vinyl acetate	ug/L	10	U
Methyl ethyl ketone (2-Butanone)	ug/L	10	U
cis-1,2-Dichloroethylene	ug/L	5	U
1,2-Dichloroethene (total)	ug/L	5	U
Chloroform	ug/L	5	U
1,1,1-Trichloroethane	ug/L	5	U
Carbon Tetrachloride	ug/L	5	U
1,2-Dichloroethane	ug/L	5	U
Benzene	ug/L	5	U
Trichloroethylene (TCE)	ug/L	5	U
1,2-Dichloropropane	ug/L	5	U
Bromodichloromethane	ug/L	5	U
2-Chloroethyl vinyl ether	ug/L	5	U
cis-1,3-Dichloropropene	ug/L	5	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/L	10	U
Toluene	ug/L	5	U
trans-1,3-Dichloropropene	ug/L	5	U
1,1,2-Trichloroethane	ug/L	5	U
2-Hexanone	ug/L	10	U
Tetrachloroethylene (PCE)	ug/L	5	U

	StationID	G633ZA001	
	SampleID	633ZA001M4	
	DateCollected	6/5/2002	
	DateExtracted	6/6/2002	
	DateAnalyzed	6/6/2002	
	SDGNumber	61538	
Parameter	**Units**		
Dibromochloromethane	ug/L	5	U
Chlorobenzene	ug/L	5	U
Ethylbenzene	ug/L	5	U
m+p Xylene	ug/L	5	U
o-Xylene	ug/L	5	U
Xylenes, Total	ug/L	5	U
Styrene	ug/L	5	U
Bromoform	ug/L	5	U
1,1,2,2-Tetrachloroethane	ug/L	5	U
1,3-Dichlorobenzene	ug/L	5	U
1,4-Dichlorobenzene	ug/L	5	U
1,2-Dichlorobenzene	ug/L	5	U
1,2,4-Trichlorobenzene	ug/L	5	U
1,2,3-Trichlorobenzene	ug/L	5	U

Analytical Data Summary

	StationID	G633SB045		G633SB046		G633SB047		G633SB048	
	SampleID	633SB04504		633SB04604		633SB04704		633SB04804	
	DateCollected	7/26/2002		7/26/2002		7/26/2002		7/26/2002	
	DateExtracted	7/29/2002		7/29/2002		7/29/2002		7/29/2002	
	DateAnalyzed	8/1/2002		8/1/2002		8/1/2002		8/2/2002	
	SDGNumber	64297		64297		64297		64297	
Parameter	**Units**								
PCB-1016 (Arochlor 1016)	ug/kg	1880	U	40.6	U	376	U	372	U
PCB-1221 (Arochlor 1221)	ug/kg	1880	U	40.6	U	376	U	372	U
PCB-1232 (Arochlor 1232)	ug/kg	1880	U	40.6	U	376	U	372	U
PCB-1242 (Arochlor 1242)	ug/kg	1880	U	40.6	U	376	U	372	U
PCB-1248 (Arochlor 1248)	ug/kg	1880	U	40.6	U	376	U	372	U
PCB-1254 (Arochlor 1254)	ug/kg	3820	U	82.5	U	764	U	755	U
PCB-1260 (Arochlor 1260)	ug/kg	5570	=	52.1	J	434	J	648	J

	StationID	G633SB049	
	SampleID	633SB04901 (0-1ft)	
	DateCollected	7/26/2002	
	DateExtracted	7/29/2002	
	DateAnalyzed	8/2/2002	
	SDGNumber	64297	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	ug/kg	36.7	U
PCB-1221 (Arochlor 1221)	ug/kg	36.7	U
PCB-1232 (Arochlor 1232)	ug/kg	36.7	U
PCB-1242 (Arochlor 1242)	ug/kg	36.7	U
PCB-1248 (Arochlor 1248)	ug/kg	36.7	U
PCB-1254 (Arochlor 1254)	ug/kg	74.5	U
PCB-1260 (Arochlor 1260)	ug/kg	11.7	J

Analytical Data Summary

	StationID	G633SB045		G633SB046		G633SB047	
	SampleID	633SB04504		633SB04604		633SB04704	
	DateCollected	7/26/2002		7/26/2002		7/26/2002	
	DateExtracted	7/26/2002		7/26/2002		7/26/2002	
	DateAnalyzed	7/29/2002		7/29/2002		7/29/2002	
	SDGNumber	64296		64296		64296	
Parameter	**Units**						
Chloromethane	ug/kg	13.6	U	13.7	U	12.1	U
Vinyl chloride	ug/kg	13.6	U	13.7	U	12.1	U
Bromomethane	ug/kg	13.6	U	13.7	U	12.1	U
Chloroethane	ug/kg	13.6	U	13.7	U	12.1	U
1,1-Dichloroethene	ug/kg	6.8	U	6.8	U	6.1	U
Acetone	ug/kg	13.6	U	13.7	U	12.1	U
Carbon Disulfide	ug/kg	6.8	U	6.8	U	6.1	U
Methylene Chloride	ug/kg	6.8	U	6.8	U	6.1	U
trans-1,2-Dichloroethene	ug/kg	6.8	U	6.8	U	6.1	U
1,1-Dichloroethane	ug/kg	6.8	U	6.8	U	6.1	U
Vinyl acetate	ug/kg	13.6	U	13.7	U	12.1	U
Methyl ethyl ketone (2-Butanone)	ug/kg	13.6	U	13.7	U	12.1	U
cis-1,2-Dichloroethylene	ug/kg	6.8	U	6.8	U	6.1	U
1,2-Dichloroethene (total)	ug/kg	6.8	U	6.8	U	6.1	U
Chloroform	ug/kg	6.8	U	6.8	U	6.1	U
1,1,1-Trichloroethane	ug/kg	6.8	U	6.8	U	6.1	U
Carbon Tetrachloride	ug/kg	6.8	U	6.8	U	6.1	U
1,2-Dichloroethane	ug/kg	6.8	U	6.8	U	6.1	U
Benzene	ug/kg	6.8	U	6.8	U	6.1	U
Trichloroethylene (TCE)	ug/kg	6.8	U	6.8	U	6.1	U
1,2-Dichloropropane	ug/kg	6.8	U	6.8	U	6.1	U
Bromodichloromethane	ug/kg	6.8	U	6.8	U	6.1	U
2-Chloroethyl vinyl ether	ug/kg	13.6	UJ	13.7	UJ	12.1	UJ
cis-1,3-Dichloropropene	ug/kg	6.8	U	6.8	U	6.1	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	13.6	U	13.7	U	12.1	U
Toluene	ug/kg	6.8	U	6.8	U	6.1	U
trans-1,3-Dichloropropene	ug/kg	6.8	U	6.8	U	6.1	U
1,1,2-Trichloroethane	ug/kg	6.8	U	6.8	U	6.1	U
2-Hexanone	ug/kg	13.6	U	13.7	U	12.1	U
Tetrachloroethylene (PCE)	ug/kg	6.8	U	6.8	U	6.1	U

	StationID	G633SB048		G633SB049	
	SampleID	633SB04804		633SB04901 (0-1ft)	
	DateCollected	7/26/2002		7/26/2002	
	DateExtracted	7/26/2002		7/26/2002	
	DateAnalyzed	7/29/2002		7/29/2002	
	SDGNumber	64296		64296	
Parameter	**Units**				
Chloromethane	ug/kg	12	U	11.8	U
Vinyl chloride	ug/kg	12	U	11.8	U
Bromomethane	ug/kg	12	U	11.8	U
Chloroethane	ug/kg	12	U	11.8	U
1,1-Dichloroethene	ug/kg	6	U	5.9	U
Acetone	ug/kg	12	U	4.2	J
Carbon Disulfide	ug/kg	6	U	5.9	U
Methylene Chloride	ug/kg	6	U	5.9	U
trans-1,2-Dichloroethene	ug/kg	6	U	5.9	U
1,1-Dichloroethane	ug/kg	6	U	5.9	U
Vinyl acetate	ug/kg	12	U	11.8	U
Methyl ethyl ketone (2-Butanone)	ug/kg	12	U	11.8	U
cis-1,2-Dichloroethylene	ug/kg	6	U	5.9	U
1,2-Dichloroethene (total)	ug/kg	6	U	5.9	U
Chloroform	ug/kg	6	U	5.9	U
1,1,1-Trichloroethane	ug/kg	6	U	5.9	U
Carbon Tetrachloride	ug/kg	6	U	5.9	U
1,2-Dichloroethane	ug/kg	6	U	5.9	U
Benzene	ug/kg	6	U	5.9	U
Trichloroethylene (TCE)	ug/kg	6	U	5.9	U
1,2-Dichloropropane	ug/kg	6	U	5.9	U
Bromodichloromethane	ug/kg	6	U	5.9	U
2-Chloroethyl vinyl ether	ug/kg	12	UJ	11.8	UJ
cis-1,3-Dichloropropene	ug/kg	6	U	5.9	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	12	U	11.8	U
Toluene	ug/kg	6	U	5.9	U
trans-1,3-Dichloropropene	ug/kg	6	U	5.9	U
1,1,2-Trichloroethane	ug/kg	6	U	5.9	U
2-Hexanone	ug/kg	12	U	11.8	U
Tetrachloroethylene (PCE)	ug/kg	6	U	5.9	U

	StationID	G633SB045		G633SB046		G633SB047	
	SampleID	633SB04504		633SB04604		633SB04704	
	DateCollected	7/26/2002		7/26/2002		7/26/2002	
	DateExtracted	7/26/2002		7/26/2002		7/26/2002	
	DateAnalyzed	7/29/2002		7/29/2002		7/29/2002	
	SDGNumber	64296		64296		64296	
Parameter	**Units**						
Dibromochloromethane	ug/kg	6.8	U	6.8	U	6.1	U
Chlorobenzene	ug/kg	6.8	U	6.8	U	6.1	U
Ethylbenzene	ug/kg	6.8	U	6.8	U	6.1	U
m+p Xylene	ug/kg	6.8	U	6.8	U	0.88	J
o-Xylene	ug/kg	6.8	U	6.8	U	6.1	U
Xylenes, Total	ug/kg	6.8	U	6.8	U	0.88	J
Styrene	ug/kg	6.8	U	6.8	U	6.1	U
Bromoform	ug/kg	6.8	U	6.8	U	6.1	U
1,1,2,2-Tetrachloroethane	ug/kg	6.8	U	6.8	U	6.1	U
1,3-Dichlorobenzene	ug/kg	6.8	U	6.8	U	6.1	U
1,4-Dichlorobenzene	ug/kg	6.8	U	0.53	J	6.1	U
1,2-Dichlorobenzene	ug/kg	6.8	U	6.8	U	6.1	U
1,2,4-Trichlorobenzene	ug/kg	6.8	UJ	6.8	UJ	6.1	UJ
1,2,3-Trichlorobenzene	ug/kg	6.8	UJ	6.8	UJ	6.1	UJ

	StationID	G633SB048		G633SB049	
	SampleID	633SB04804		633SB04901 (0-1ft)	
	DateCollected	7/26/2002		7/26/2002	
	DateExtracted	7/26/2002		7/26/2002	
	DateAnalyzed	7/29/2002		7/29/2002	
	SDGNumber	64296		64296	
Parameter	**Units**				
Dibromochloromethane	ug/kg	6	U	5.9	U
Chlorobenzene	ug/kg	6	U	5.9	U
Ethylbenzene	ug/kg	6	U	5.9	U
m+p Xylene	ug/kg	1.1	J	1	J
o-Xylene	ug/kg	6	U	5.9	U
Xylenes, Total	ug/kg	1.1	J	1	J
Styrene	ug/kg	6	U	5.9	U
Bromoform	ug/kg	6	U	5.9	U
1,1,2,2-Tetrachloroethane	ug/kg	6	U	5.9	U
1,3-Dichlorobenzene	ug/kg	6	U	5.9	U
1,4-Dichlorobenzene	ug/kg	0.63	J	5.9	U
1,2-Dichlorobenzene	ug/kg	6	U	5.9	U
1,2,4-Trichlorobenzene	ug/kg	6	UJ	5.9	UJ
1,2,3-Trichlorobenzene	ug/kg	6	UJ	5.9	UJ

	StationID	G633VADRM	
	SampleID	633VADRMM6	
	DateCollected	7/26/2002	
	DateExtracted	7/30/2002	
	DateAnalyzed	8/2/2002	
	SDGNumber	64299	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	ug/L	198	U
PCB-1221 (Arochlor 1221)	ug/L	198	U
PCB-1232 (Arochlor 1232)	ug/L	198	U
PCB-1242 (Arochlor 1242)	ug/L	198	U
PCB-1248 (Arochlor 1248)	ug/L	198	U
PCB-1254 (Arochlor 1254)	ug/L	396	U
PCB-1260 (Arochlor 1260)	ug/L	195	J

	StationID	G633VADRM	
	SampleID	633VADRMM6	
	DateCollected	7/26/2002	
	DateExtracted	7/31/2002	
	DateAnalyzed	7/31/2002	
	SDGNumber	64298	
Parameter	**Units**		
Chloromethane	ug/L	10	U
Vinyl chloride	ug/L	10	U
Bromomethane	ug/L	10	U
Chloroethane	ug/L	10	U
1,1-Dichloroethene	ug/L	5	U
Acetone	ug/L	17.5	=
Carbon Disulfide	ug/L	5	U
Methylene Chloride	ug/L	5	U
trans-1,2-Dichloroethene	ug/L	5	U
1,1-Dichloroethane	ug/L	5	U
Vinyl acetate	ug/L	10	U
Methyl ethyl ketone (2-Butanone)	ug/L	2.3	J
cis-1,2-Dichloroethylene	ug/L	5	U
1,2-Dichloroethene (total)	ug/L	5	U
Chloroform	ug/L	5	U
1,1,1-Trichloroethane	ug/L	5	U
Carbon Tetrachloride	ug/L	5	U
1,2-Dichloroethane	ug/L	5	U
Benzene	ug/L	5	U
Trichloroethylene (TCE)	ug/L	5	U
1,2-Dichloropropane	ug/L	5	U
Bromodichloromethane	ug/L	5	U
2-Chloroethyl vinyl ether	ug/L	10	UJ
cis-1,3-Dichloropropene	ug/L	5	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/L	10	U
Toluene	ug/L	5	U
trans-1,3-Dichloropropene	ug/L	5	U
1,1,2-Trichloroethane	ug/L	5	U
2-Hexanone	ug/L	10	U
Tetrachloroethylene (PCE)	ug/L	5	U

Analytical Data Summary

	StationID	G633VADRM	
	SampleID	633VADRMM6	
	DateCollected	7/26/2002	
	DateExtracted	7/31/2002	
	DateAnalyzed	7/31/2002	
	SDGNumber	64298	
Parameter	**Units**		
Dibromochloromethane	ug/L	5	U
Chlorobenzene	ug/L	0.37	J
Ethylbenzene	ug/L	5	U
m+p Xylene	ug/L	5	U
o-Xylene	ug/L	5	U
Xylenes, Total	ug/L	5	U
Styrene	ug/L	5	U
Bromoform	ug/L	5	U
1,1,2,2-Tetrachloroethane	ug/L	5	U
1,3-Dichlorobenzene	ug/L	1.2	J
1,4-Dichlorobenzene	ug/L	5.2	=
1,2-Dichlorobenzene	ug/L	5	U
1,2,4-Trichlorobenzene	ug/L	5	U
1,2,3-Trichlorobenzene	ug/L	5	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/25/2002	
	DateAnalyzed	7/30/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
4-Methylphenol (p-Cresol)	ug/kg	990000	U
N-Nitrosodiphenylamine	ug/kg	990000	UJ
Phenol	ug/kg	990000	U
bis(2-Chloroethyl) ether (2-Chloroethyl Ether)	ug/kg	990000	U
2-Chlorophenol	ug/kg	990000	U
Benzyl alcohol	ug/kg	990000	U
Bis(2-Chloroisopropyl)Ether	ug/kg	990000	U
2-Methylphenol (o-Cresol)	ug/kg	990000	U
N-Nitrosodi-n-propylamine	ug/kg	990000	U
Hexachloroethane	ug/kg	990000	U
Nitrobenzene	ug/kg	990000	U
Isophorone	ug/kg	990000	U
2-Nitrophenol	ug/kg	990000	U
2,4-Dimethylphenol	ug/kg	990000	U
bis(2-Chloroethoxy) Methane	ug/kg	990000	U
2,4-Dichlorophenol	ug/kg	990000	U
Benzoic acid	ug/kg	4800000	U
Naphthalene	ug/kg	990000	U
4-Chloroaniline	ug/kg	990000	U
Hexachlorobutadiene	ug/kg	990000	U
4-Chloro-3-methylphenol	ug/kg	990000	U
2-Methylnaphthalene	ug/kg	990000	U
Hexachlorocyclopentadiene	ug/kg	990000	U
2,4,6-Trichlorophenol	ug/kg	990000	U
2,4,5-Trichlorophenol	ug/kg	4800000	U
2-Chloronaphthalene	ug/kg	990000	U
2-Nitroaniline	ug/kg	4800000	U
3-Nitroaniline	ug/kg	4800000	U
Dimethyl Phthalate	ug/kg	990000	U
2,6-Dinitrotoluene	ug/kg	990000	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/25/2002	
	DateAnalyzed	7/30/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
Acenaphthylene	ug/kg	990000	U
Acenaphthene	ug/kg	990000	U
2,4-Dinitrophenol	ug/kg	4800000	UJ
Dibenzofuran	ug/kg	990000	U
2,4-Dinitrotoluene	ug/kg	990000	U
Diethyl Phthalate	ug/kg	990000	U
4-Nitrophenol	ug/kg	4800000	U
Fluorene	ug/kg	990000	U
4-Chlorophenyl Phenyl Ether	ug/kg	990000	U
4,6-Dinitro-2-methylphenol	ug/kg	4800000	UJ
4-Nitroaniline	ug/kg	4800000	U
4-Bromophenyl Phenyl Ether	ug/kg	990000	UJ
Hexachlorobenzene	ug/kg	990000	UJ
Pentachlorophenol	ug/kg	4800000	UJ
Phenanthrene	ug/kg	990000	UJ
Anthracene	ug/kg	990000	UJ
Di-n-butyl Phthalate	ug/kg	990000	UJ
Fluoranthene	ug/kg	990000	UJ
Pyrene	ug/kg	990000	U
Benzyl Butyl Phthalate	ug/kg	990000	U
Benzo(a)Anthracene	ug/kg	990000	U
3,3'-Dichlorobenzidine	ug/kg	2000000	U
Chrysene	ug/kg	990000	U
bis(2-Ethylhexyl) Phthalate	ug/kg	990000	U
Di-n-octylphthalate	ug/kg	990000	U
Benzo(b)Fluoranthene	ug/kg	990000	U
Benzo(k)Fluoranthene	ug/kg	990000	U
Benzo(a)Pyrene	ug/kg	990000	U
Indeno(1,2,3-c,d)pyrene	ug/kg	990000	U
Dibenz(a,h)anthracene	ug/kg	990000	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/25/2002	
	DateAnalyzed	7/30/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
Benzo(g,h,i)Perylene	ug/kg	990000	U
Carbazole	ug/kg	990000	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/31/2002	
	DateAnalyzed	7/31/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
m-Xylene	ug/kg	10000	U
Chloromethane	ug/kg	20000	U
Vinyl chloride	ug/kg	20000	U
Bromomethane	ug/kg	20000	U
Chloroethane	ug/kg	20000	U
1,1-Dichloroethene	ug/kg	10000	U
Acetone	ug/kg	20000	UJ
Carbon Disulfide	ug/kg	10000	U
Methylene Chloride	ug/kg	10000	U
trans-1,2-Dichloroethene	ug/kg	10000	U
1,1-Dichloroethane	ug/kg	10000	U
Vinyl acetate	ug/kg	20000	UJ
Methyl ethyl ketone (2-Butanone)	ug/kg	20000	U
cis-1,2-Dichloroethylene	ug/kg	10000	U
1,2-Dichloroethene (total)	ug/kg	10000	U
Chloroform	ug/kg	10000	U
1,1,1-Trichloroethane	ug/kg	10000	U
Carbon Tetrachloride	ug/kg	10000	U
1,2-Dichloroethane	ug/kg	10000	U
Benzene	ug/kg	10000	U
Trichloroethylene (TCE)	ug/kg	10000	U
1,2-Dichloropropane	ug/kg	10000	U
Bromodichloromethane	ug/kg	10000	U
2-Chloroethyl vinyl ether	ug/kg	20000	R
cis-1,3-Dichloropropene	ug/kg	10000	U
Methyl isobutyl ketone (4-Methyl-2-pentanone)	ug/kg	20000	U
Toluene	ug/kg	10000	U
trans-1,3-Dichloropropene	ug/kg	10000	U
1,1,2-Trichloroethane	ug/kg	10000	U
2-Hexanone	ug/kg	20000	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/31/2002	
	DateAnalyzed	7/31/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
Tetrachloroethylene (PCE)	ug/kg	10000	U
Dibromochloromethane	ug/kg	10000	U
Chlorobenzene	ug/kg	10000	U
Ethylbenzene	ug/kg	10000	U
o-Xylene	ug/kg	10000	U
Xylenes, Total	ug/kg	10000	U
Styrene	ug/kg	10000	U
Bromoform	ug/kg	10000	U
1,1,2,2-Tetrachloroethane	ug/kg	10000	U
1,3-Dichlorobenzene	ug/kg	10000	U
1,4-Dichlorobenzene	ug/kg	10000	U
1,2-Dichlorobenzene	ug/kg	10000	U
1,2,4-Trichlorobenzene	ug/kg	10000	U
1,2,3-Trichlorobenzene	ug/kg	10000	U

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/25/2002	
	DateAnalyzed	7/29/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
PCB-1016 (Arochlor 1016)	mg/kg	250	U
PCB-1221 (Arochlor 1221)	mg/kg	500	U
PCB-1232 (Arochlor 1232)	mg/kg	250	UJ
PCB-1242 (Arochlor 1242)	mg/kg	250	U
PCB-1248 (Arochlor 1248)	mg/kg	250	U
PCB-1254 (Arochlor 1254)	mg/kg	250	U
PCB-1260 (Arochlor 1260)	mg/kg	2900	=

	StationID	G633ZB001	
	SampleID	633ZB001M6	
	DateCollected	7/24/2002	
	DateExtracted	7/25/2002	
	DateAnalyzed	7/29/2002	
	SDGNumber	CNC132	
Parameter	**Units**		
140 Solvent	mg/kg	300000	U
90 Solvent	mg/kg	300000	U
Diesel Components	mg/kg	690000	=
HiSol 10	mg/kg	300000	U
HiSol 15	mg/kg	300000	U
Kerosene	mg/kg	300000	U
Kwik Dri	mg/kg	300000	U
Mineral Spirits	mg/kg	300000	U
V M & P Naphtha	mg/kg	300000	U

Data Validation Summary - Charleston Naval Complex - Zone G, AOC 633

TO: Jim Edens/CH2M HILL/GNA

FROM: Amy Juchem/CH2M HILL/GNA
Herb Kelly/CH2M HILL/GNA

DATE: August 22, 2002

The purpose of this memorandum is to present the results of the data validation process for the samples collected in Zone G, AOC 633. The samples were collected between the dates of November 1, 2001 and July 26, 2002.

The specific samples and analytical fractions reviewed are summarized below in Table 1.

The Quality Control areas that were review and the resulting findings are documented within each subsection that follows. This data was validated for compliance with the analytical method requirements. This process also included a review of the data to assess the accuracy, precision, and completeness based upon procedures described in the guidance documents such as the Environmental Protection Agency (EPA) *National Functional Guidelines for Inorganic Data Review (EPA 1994) and National Functional Guidelines for Organic Data Review (EPA 1999)*. Quality assurance/quality control (QA/QC) summary forms and data reports were reviewed.

Samples were submitted to General Engineering Laboratories, Inc., in Charleston, South Carolina, for the following analyses: SW-846 8260 Volatile Organic Compounds (VOC), SW-846 8270 Semivolatile Organic Compounds (SVOC), and SW-846 8082 Polychlorinated Biphenyls (PCBs).

Samples were submitted to Severn Trent Services, STL Savannah Laboratories, Inc., in Savannah, Georgia, for the following analyses: SW-846 8260 Volatile Organic Compounds (VOC), SW-846 8270 Semivolatile Organic Compounds (SVOC), SW-846 8082 Polychlorinated Biphenyls (PCBs), and Fuel Fingerprinting by GC/FID following SW-846 8100 methodology.

Sample results that were not within the acceptance limits were appended with a qualifying flag, which consisted of a single- or double-letter code that indicated a possible problem with the data. The qualifying flags originated during the data review and validation processes. These also include the secondary, or the two-digit "sub-qualifier" flags. The secondary qualifiers provide the reasoning behind the assignment of a qualifier flag to the data. The secondary qualifiers are presented and defined below.

Attachment 1 lists the changes in data qualifiers, due to the validation process.

The following primary flags were used to qualify the data:

[=] Detected. The analyte was analyzed for and detected at the concentration shown.

[J] Estimated. The analyte was present but the reported value may not be accurate or precise.

[U] Undetected. The analyte was analyzed for but not detected above the method detection limit.

[UJ] Detection limit estimated. The analyte was analyzed for but qualified as not detected; the result is estimated.

[R] Rejected. The data is not useable.

Secondary Data Validation Qualifiers

Code	Definition
2S	Second Source
BL	Blank
BD	Blank Spike/Blank Spike Duplicate or (LCS/LCSD) Precision
BS	Blank Spike/LCS
CC	Continuing Calibration Verification
DL	Dilution
FD	Field Duplicate
HT	Holding Time
IB	In-Between (metals - B's → J's)
IC	Initial Calibration
IS	Internal Standard
LD	Lab Duplicate
LR	Concentration exceeded Linear Range
MD	MS/MSD or LCS/LCSD Precision
MS	Matrix Spike/Matrix Spike Duplicate
OT	Other (see DV worksheet)
PD	Pesticide Degradation
PS	Post Spike
RE	Re-extraction/Re-analysis
SD	Serial Dilution
SS	Spiked Surrogate
TN	Tune

Table 1 - Chemical Analytical Methods – Field and Quality Control Samples

[illegible]	[illegible]	Sample ID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
i1538	G633ZA001	633ZA001M4	61538001	WG	N				06/05/02	X			
i1538	LABQC	1200229543	1200229543	WQ	LB					X			
61538	LABQC	1200229546	1200229546	WQ	BS					X			
61539	G633ZA001	633ZA001M4	61539001	WG	N				06/05/02		X	X	
61539	LABQC	1200229281	1200229281	WQ	LB						X		
61539	LABQC	1200229282	1200229282	WQ	BS						X		
61539	LABQC	1200229325	1200229325	WQ	LB							X	
61539	LABQC	1200229326	1200229326	WQ	BS							X	
61539	LABQC	1200229327	1200229327	WQ	BD							X	
61539	LABQC	1200229683	1200229683	WQ	BD						X		
64296	G633SB045	633SB04504	64296001	SO	N				07/26/02	X			
64296	G633SB046	633SB04604	64296002	SO	N				07/26/02	X			
64296	G633SB047	633SB04704	64296003	SO	N				07/26/02	X			
64296	G633SB048	633SB04804	64296004	SO	N				07/26/02	X			
64296	G633SB049	633SB04901	64296005	SO	N		0	1	07/26/02	X			
64296	LABQC	1200272551	1200272551	SQ	LB					X			
64296	LABQC	1200272554	1200272554	SQ	BS					X			
64296	LABQC	1200272557	1200272557	SQ	BD					X			

297	G633SB045	633SB04504	64297001	SO	N				07/26/02			X	
297	G633SB046	633SB04604	64297002	SO	N				07/26/02			X	
297	G633SB047	633SB04704	64297003	SO	N				07/26/02			X	
297	G633SB048	633SB04804	64297004	SO	N				07/26/02			X	
297	G633SB049	633SB04901	64297005	SO	N		0	1	07/26/02			X	
297	LABQC	1200272468	1200272468	SQ	LB							X	
297	LABQC	1200272469	1200272469	SQ	BS							X	
297	G633SB045	633SB04504MS	1200272470	SO	MS				07/26/02			X	
297	G633SB045	633SB04504SD	1200272471	SO	SD				07/26/02			X	
298	G633VADRM	633VADRMM6	64298001	WG	N				07/26/02	X			
298	LABQC	1200279797	1200279797	WQ	LB					X			
298	LABQC	1200279798	1200279798	WQ	BS					X			
299	G633VADRM	633VADRMM6	64299001	WG	N				07/26/02			X	
299	LABQC	1200272714	1200272714	WQ	LB							X	
99	LABQC	1200272715	1200272715	WQ	BS							X	
99	G633VADRM	633VADRMM6MS	1200272716	WG	MS				07/26/02			X	
99	G633VADRM	633VADRMM6SD	1200272717	WG	SD				07/26/02			X	
C44	G633SB022	633SB02203	S117222*1	SO	N				11/06/01			X	
C44	G633SB023	633SB02303	S117222*2	SO	N				11/06/01			X	
C44	G633SB024	633SB02403	S117222*3	SO	N				11/06/01			X	

NC44	G633SB024	633CB02403	S117222*4	SO	FD		3	5	11/01/01			X	
NC44	G633SB026	633SB02603	S117222*5	SO	N				11/06/01			X	
NC44	G633SB027	633SB02703	S117222*6	SO	N				11/06/01			X	
NC44	G633SB028	633SB02803	S117222*7	SO	N				11/06/01			X	
NC44	G633SB029	633SB02903	S117222*8	SO	N				11/06/01			X	
NC44	G633SB030	633SB03003	S117222*9	SO	N				11/06/01			X	
NC44	G633SB031	633SB03103	S117222*10	SO	N				11/06/01			X	
NC44	FIELDQC	633EB022L1	S117222*11	SQ	EB							X	
NC44	LABQC	1722212LB	S117222*12	SQ	LB							X	
NC44	LABQC	1722213BS	S117222*13	SQ	BS							X	
NC44	LABQC	1722219LB	S117222*19	WQ	LB							X	
NC44	LABQC	1722220BS	S117222*20	WQ	BS							X	
NC64	G633GA001	633GA001M1	S240444*1	WG	N				01/21/02	X	X	X	
NC64	LABQC	404442LB	S240444*2	WQ	LB					X	X	X	
NC64	LABQC	404443BS	S240444*3	WQ	BS					X	X	X	
NC65	G633WA001	633WA001M1	S240779*1	LO	N				02/04/02	X	X	X	X
NC65	LABQC	407792LB	S240779*2	LQ	LB					X	X	X	X
NC65	LABQC	407793BS	S240779*3	LQ	BS					X		X	
NC68	G633SB044	633SB04403	S240948*1	SO	N		4	5	11/06/01	X	X	X	
NC68	G633SB024	633SB024M1	S240948*2	SO	N				02/11/02	X	X	X	

C68	G633VA001	633VA001M1	S240948*3	SO	N				02/11/02	X	X	X	
C68	FIELDQC	633EB023M1	S240948*4	WQ	EB				02/11/02	X	X	X	
C68	LABQC	409485LB	S240948*5	WQ	LB					X	X	X	
C68	LABQC	409486BS	S240948*6	WQ	BS					X	X	X	
C68	LABQC	4094812LB	S240948*12	SQ	LB					X	X	X	
C68	LABQC	4094813BS	S240948*13	SQ	BS					X	X	X	
C68	LABQC	4094819LB	S240948*19	SQ	LB							X	
C68	LABQC	4094820BS	S240948*20	SQ	BS							X	
C70	G633SB043	633SB04303	S241406*1	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB032	633SB03203	S241406*2	SO	N		3	4	02/28/02	X	X	X	
C70	G633SB033	633SB03303	S241406*3	SO	N		5	6	02/28/02	X	X	X	
C70	G633SB033	633CB03303	S241406*4	SO	FD		5	6	02/28/02	X	X	X	
C70	G633SB034	633SB03403	S241406*5	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB034	633SB03403RE	S241406*5*RE	SO	LR	RE	4	5	02/28/02	X			
C70	G633SB035	633SB03503	S241406*6	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB035	633SB03503RE	S241406*6*RE	SO	LR	RE	4	5	02/28/02	X			
C70	G633SB036	633SB03603	S241406*7	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB038	633SB03803	S241406*8	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB039	633SB03903	S241406*9	SO	N		4	5	02/28/02	X	X	X	
C70	G633SB040	633SB04003	S241406*10	SO	N		4	5	02/28/02	X	X	X	

CNC70	G633SB041	633SB04103	S241406*11	SO	N		4	5	02/28/02	X	X	X	
CNC70	G633SB042	633SB04203	S241406*12	SO	N		3	4	02/28/02	X	X	X	
CNC70	FIELDQC	633EB031M3	S241406*13	WQ	EB				02/28/02	X	X	X	
CNC70	FIELDQC	633TB031M3	S241406*14	WG	TB				02/28/02	X			
CNC70	LABQC	4140615LB	S241406*15	WQ	LB					X	X	X	
CNC70	LABQC	4140616BS	S241406*16	WQ	BS					X	X	X	
CNC70	LABQC	4140622LB	S241406*22	SQ	LB					X	X	X	
CNC70	LABQC	4140623BS	S241406*23	SQ	BS					X	X	X	
CNC70	LABQC	4140629LB	S241406*29	SQ	LB					X		X	
CNC70	LABQC	4140630BS	S241406*30	SQ	BS					X		X	
CNC132	G633ZB001	633ZB001M6	S245278*1	LO	N				07/24/02	X	X	X	X
CNC132	G633ZB001	633ZB001M6RE	S245278*1*RE	LO	LR	RE			07/24/02		X		
CNC132	LABQC	452782LB	S245278*2	LQ	LB					X	X	X	X
CNC132	LABQC	452783BS	S245278*3	LQ	BS					X		X	

TRIX CODE

– Groundwater
– Water QC Sample
– Soil
– Soil QC Sample
– Oil
– Oil QC Sample

MPLE TYPE CODE

- Blank Spike
- Equipment Blank
– Trip Blank
- Field Duplicate
Native Sample
- Laboratory Blank
– Laboratory Replicate
– Reanalysis
- Matrix Spike
- Matrix Spike duplicate

ALYSIS CODE

C - Volatile Organic Compounds
OC - Semivolatile Organic Compounds
Bs – Polychlorinated Biphenyls

Organic Parameters

Quality Control Review

The following list represents the QA/QC measures that were reviewed during the data quality evaluation procedure for organic data.

- **Holding Times** – The holding times are evaluated to verify that samples were extracted and analyzed within holding times.
- **Blank samples** – Method blanks, equipment blanks, and trip blanks were provided for this project. Blank samples enable the reviewer to determine if an analyte may be attributed to sampling or laboratory procedures, rather than environmental contamination from site activities.
- **Surrogate Recoveries** – Surrogate Compounds are added to each sample and the recoveries are used to monitor lab performance and possible matrix interference.
- **Lab Control Sample (LCS)** – This sample is a "controlled matrix", either laboratory reagent water or Ottawa sand, in which target compounds have been added prior to extraction/analysis. The recoveries serve as a monitor of the overall performance of each step during the analysis, including sample preparation.
- **Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples** – Spike recovery is used to evaluate potential matrix interferences, as well as accuracy. Precision information is also determined by calculating the reproducibility between the recoveries of each spiked parameter.
- **GC/MS Tuning** – The mass spectrum of the tuning compound is evaluated for method compliance. The criteria are established to verify the proper mass assignment and mass resolution.
- **Initial Calibration** – The initial calibration ensures that the instrument is capable of producing acceptable qualitative and quantitative data for the compounds of interest.
- **Continuing Calibration** – The continuing calibration checks satisfactory performance of the instrument and its predicted response to the target compounds.
- **Field Duplicate Samples** – These samples are collected to determine precision between a native and its duplicate. This information can only be determined when target compounds are detected.
- **Internal Standards** – The internal standards (retention time and response) are evaluated for method compliance. The internal standards are used in quantitation of the target parameters and monitor the instrument sensitivity and response for stability during each analysis.
- **Confirmation** – If GCMS methodology is not initially used for analysis, SW-846 method 8000 requires confirmation when the composition of samples is not well characterized. Therefore, even when the identification has been confirmed on a dissimilar column or detector, the agreement of the quantitative results on both columns is evaluated. For

Pesticide and PCB analyses covered in this report, confirmation was performed using a dissimilar analytical column. The laboratory analyzed samples with a gas chromatograph (GC) utilizing simultaneous primary and confirmation data acquisition. Per SW-86 method 8000, 40% RPD criteria was used as the acceptance limit.

Volatile Organic Compounds (VOC) Analyses

The QA/QC parameters for VOC analyses for all of the samples were within acceptable control limits, except as noted below:

Blanks

The VOC target parameters detected in blank samples are listed in Table 2.

TABLE 2
Equipment Blank Contamination: VOCs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC64	2A0123MB	2A0123MB	LB	1,2,4-Trichlorobenzene	1.3	µg/L	6.5 µg/L
CNC64	2A0123MB	2A0123MB	LB	1,2,3-Trichlorobenzene	1.2	µg/L	6.0 µg/L
CNC68	633EB023M1	S240948*4	EB	Acetone	13.0	µg/L	130.0 µg/L; 130.0 µg /Kg
CNC70	1L0304MB	1L0304MB	LB	Acetone	35.0	µg /Kg	350.0 µg /Kg
CNC70	1L0304MB	1L0304MB	LB	2-Butanone	14.0	µg /Kg	140.0 µg /Kg
CNC70	1L0305MB	1L0305MB	LB	Acetone	5.6	µg /Kg	56.0 µg /Kg
CNC70	633EB031M3	S241406*13	EB	Acetone	5.4	µg/L	54.0 µg/L; 54.0 µg /Kg
CNC132	100731MB	100731MB	LB	Vinyl chloride	0.76	µg /Kg	3.8 µg /Kg
CNC132	100731MB	100731MB	LB	1,1-Dichloroethene	0.82	µg /Kg	4.1 µg /Kg
CNC132	100731MB	100731MB	LB	Methylene chloride	2.5	µg /Kg	250.0 µg /Kg
CNC132	100731MB	100731MB	LB	trans-1,2-Dichloroethene	0.86	µg /Kg	4.3 µg /Kg
CNC132	100731MB	100731MB	LB	1,1-Dichloroethane	1.1	µg /Kg	5.5 µg /Kg
CNC132	100731MB	100731MB	LB	Vinyl acetate	1.6	µg /Kg	8.0 µg /Kg
CNC132	100731MB	100731MB	LB	cis-1,2-Dichloroethene	0.95	µg /Kg	4.75 µg /Kg
CNC132	100731MB	100731MB	LB	1,1,1-Trichloroethane	0.62	µg /Kg	3.1 µg /Kg
CNC132	100731MB	100731MB	LB	Carbon tetrachloride	0.55	µg /Kg	2.75 µg /Kg

TABLE 2
Equipment Blank Contamination: VOCs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC132	100731MB	100731MB	LB	Benzene	0.77	µg /Kg	3.85 µg /Kg
CNC132	100731MB	100731MB	LB	1,2-Dichloroethane	0.88	µg /Kg	4.4 µg /Kg
CNC132	100731MB	100731MB	LB	Trichloroethene	0.69	µg /Kg	3.45 µg /Kg
CNC132	100731MB	100731MB	LB	1,2-Dichloropropane	0.81	µg /Kg	4.05 µg /Kg
CNC132	100731MB	100731MB	LB	Bromodichloromethane	0.68	µg /Kg	3.4 µg /Kg
CNC132	100731MB	100731MB	LB	cis-1,3-Dichloropropene	0.81	µg /Kg	4.05 µg /Kg
CNC132	100731MB	100731MB	LB	Toluene	0.63	µg /Kg	3.15 µg /Kg
CNC132	100731MB	100731MB	LB	trans-1,3-Dichloropropene	0.78	µg /Kg	3.9 µg /Kg
CNC132	100731MB	100731MB	LB	1,1,2-Trichloroethane	0.85	µg /Kg	4.25 µg /Kg
CNC132	100731MB	100731MB	LB	Dibromochloromethane	0.78	µg /Kg	3.9 µg /Kg
CNC132	100731MB	100731MB	LB	Chlorobenzene	0.71	µg /Kg	3.55 µg /Kg
CNC132	100731MB	100731MB	LB	Ethyl benzene	1.1	µg /Kg	5.5 µg /Kg
CNC132	100731MB	100731MB	LB	Bromoform	0.87	µg /Kg	4.35 µg /Kg
CNC132	100731MB	100731MB	LB	1,1,2,2-Tetrachloroethane	0.93	µg /Kg	4.65 µg /Kg
CNC132	100731MB	100731MB	LB	1,3-Dichlorobenzene	0.71	µg /Kg	3.55 µg /Kg
CNC132	100731MB	100731MB	LB	1,4-Dichlorobenzene	0.56	µg /Kg	2.8 µg /Kg
CNC132	100731MB	100731MB	LB	1,2-Dichlorobenzene	0.69	µg /Kg	3.45 µg /Kg
CNC132	100731MB	100731MB	LB	1,2,4-Trichlorobenzene	0.70	µg /Kg	3.5 µg /Kg
CNC132	100731MB	100731MB	LB	1,2-dichloroethene (total)	1.8	µg /Kg	.0.9 µg /Kg

If a target parameter determined to be a common contaminant was reported in a field sample, and the concentration was below the level determined to be due to blank contamination, the following actions were taken:

- If the concentration was above the reporting limit, the numeric result was unchanged, but it was flagged "U", as undetected.
- If the concentration was below the reporting limit, the numeric result was changed to the value of the reporting limit, and it was flagged "U", as undetected.

The results qualified due to blank contamination are listed in Attachment 1.

Recoveries - Surrogate, MS/MSD and LCS/LCSD

All Surrogate, Matrix Spike (MS), Matrix Spike Duplicate (MSD), Laboratory Control Sample (LCS), and Laboratory Control Sample Duplicate (LCSD) recoveries were within acceptable quality control limits, except as noted in [redacted] below.

TABLE 3
Surrogate, MS/MSD and LCS/LCSD Recoveries Out of QC Limits: VOCs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

61538	VBLK01LCS	1,2,3-Trichlorobenzene	132*	70-130			61538001	Detects only - J
CNC64	2A0123MBLCS	Bromomethane	68*	70-130			S240444*1	Detects-J, non-detects-UJ
		Acetone	140*					Detects only - J
		2-Chloroethyl vinyl ether	140*					
CNC68	1L0214MBLCS	2-Choroethyl vinyl ether	160*	70-130			S240948*1-4	Detects only - J
CNC70	1L0304MB LCS/LCSD	2-Chloroethyl vinyl ether	0* / 0*	70-130			S241406*5, 6	Detects-J, non-detects-R
		Acetone	55* / 105		43*	28		Detects-J, non-detects-UJ
		2-Butanone	50* / 106		61*	39		
		2-Hexanone	55* / 110		67*	32		
		4-Methyl-2-pentanone			50*	37		
		Bromoform			38*	28		
		1,2,4-Trichlorobenzene			40*	35		
		1,2,3-Trichlorobenzene			48*	26		
CNC70	1L0305MB LCS/LCSD	2-Chloroethyl vinyl ether	0* / 0*	70-130			S241406*1-4, 7-13, 5RE, 6RE	Detects-J, non-detects-R
		1,2,4-Trichlorobenzene	148* / 92		47*	35		Detects-J, non-detects-UJ
		1,2,3-Trichlorobenzene	152* / 94		47*	26		
CNC132	100731MBLCS	Vinyl acetate	29*	70-130			S245278*1	Detects-J, non-detects-UJ

* - out of control limits

Initial and Continuing Calibration Criteria

All initial calibration criteria and continuing calibration criteria were met, except as listed in [redacted].

TABLE 4
Exceptions to Initial Calibration Criteria and Continuing Calibration Criteria: VOC
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

[redacted]			
VOA2-CCAL-06/06/02, 1941	Choroethane	24.9% high	61538001
	1,2,3-Trichlorobenzene	24.6% high	
VOA9-CCAL-07/29/02, 0709	2-Chloroethyl vinyl ether	38.8% low	64296001-64296005
	1,2,4-Trichlorobenzene	20.4% low	
	1,2,3-Trichlorobenzene	20.2% low	
VOA2-CCAL-07/31/02, 0649	2-Chloroethyl vinyl ether	33.5% low	64298001
MSA5973-CCAL-01/23/02, 1328	Bromomethane	33.3% low	S240444*1
	Acetone	25.4% high	
	Vinyl acetate	21.2% high	
	2-Butanone	22.2% high	
	2-Chloroethyl vinyl ether	36.4% high	
MSP5973-CCAL-02/08/02, 1110	Bromomethane	27.9% low	S240779*1
	Acetone	25.1% low	
	2-Butanone	28.0% low	
	4-Methyl-2-pentanone	28.0% low	
	1,1,2-Trichloroethene	20.9% low	
	2-Hexanone	24.1% low	
MSL5972-ICAL-02/12/02, 1652	2-Chloroethyl vinyl ether	%RSD=64.7	S240948*1-4
MSL5972-CCAL-02/14/02, 0851	Chloroethane	27.9% high	S240948*1-4
	Vinyl acetate	28.0% low	
	2-Chloroethyl vinyl ether	64.5% low	
MSL5972-ICAL-03/04/02, 1231	Bromomethane	%RSD=22.2	S241406*1-14
	Acetone	R^2=0.986	

TABLE 4
Exceptions to Initial Calibration Criteria and Continuing Calibration Criteria: VOC
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

MSL5972-ICAL-03/04/02, 1231	2-Butanone	R^2=0.987	S241406*1-14
	2-Chloroethyl vinyl ether	%RSD=0	
MSL5972-CCAL-03/05/02, 0730	Chloromethane	23.0% low	S241406*1-4, 7-14, 5RE, 6RE
	Bromomethane	40.5% low	
	Acetone	44.7% low RRF=0.03	
	2-Butanone	60.7% low	
	4-Methyl-2-pentanone	22.2% low	
	2-Hexanone	48.1% low	
MSO5973-ICAL-07/11/02, 1353	Acetone	RRF=0.048	S245278*1
MSO5973-CCAL-07/31/02, 0949	Acetone	RRF=0.042	S245278*1
	trans-1,2-Dichloroethene	20.6% high	
	1,1-Dichloroethane	41.9% high	
	2-Chloroethyl vinyl ether	95.2% low RRF=0.0098	
	Tetrachloroethene	21.5% high	

Flags were applied to the compounds in the associated samples in the following manner:

- When the percent Relative Standard Deviation (%RSD) or correlation coefficient (R^2) was out in the initial calibration, all associated samples were qualified. Detected compounds were flagged "J" and non-detected compounds were flagged "UJ", as estimated.
- When the percent difference (%D) was low in the continuing calibration standards, detected compounds were flagged "J" and non-detected compounds were flagged "UJ", as estimated.
- When the percent difference (%D) was high in the continuing calibration standards, detected compounds were flagged "J", as estimated. Non-detected compounds were not flagged.
- When the Relative Response Factor (RRF) was low in the continuing calibration, detected compounds were flagged "J", and non-detected compounds were flagged "UJ", as estimated.

- In extreme cases where the RRF or %RSD was significantly low or there was no response, detected compounds were flagged "J", as estimated, and non-detected compounds were qualified "R", as rejected.

Field Duplicate Samples

All Field Duplicate Samples were within acceptable quality control limits, except as noted in Table 5 below. No flags are applied due to Field Duplicate precision.

TABLE 5
Field Duplicate RPDs Out of QC Limits: VOCs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC70	633SB03303 / 633CB03303	Carbon disulfide	12 µg /Kg ("ND")	30 µg /Kg	85.7*	35
		2-Butanone	53 µg /Kg	34 µg /Kg	43.7*	35
* - out of control limits						

Internal Standard Area

All internal standard areas were within QC limits except as noted in Table 6 below.

TABLE 8
Internal Standard Area out of Criteria: VOCs
Charleston Naval Complex, Zone G, AOC 633 Charleston, SC

CNC70	S241406*10	Chlorobenzene-d5 – 53% low	Detects-J, non-detects-UJ
	S241406*4	Chlorobenzene-d5 – 61% low	

Semivolatile Organic Compounds (SVOC) Analyses

The QA/QC parameters for the SVOC analyses for all of the samples were within acceptable control limits, except as noted below.

Recoveries - Surrogate, MS/MSD and LCS/LCSD

All Surrogate, Matrix Spike (MS), Matrix Spike Duplicate (MSD), Laboratory Control Sample (LCS), and Laboratory Control Sample Duplicate (LCSD) recoveries were within acceptable quality control limits, except as noted below.

- The MS/MSD Relative Percent Difference (RPD) criterion was not met for Acenaphthylene in sample S240948*1MS/MSD in CNC68. The RPD was 20 percent with a 19 percent limit. Acenaphthylene was not detected in sample S240948*1. The result was qualified "UJ".

Initial and Continuing Calibration Criteria

All initial calibration criteria and continuing calibration criteria were met, except as listed in [redacted].

TABLE 7
Exceptions to Initial Calibration Criteria and Continuing Calibration Criteria: SVOC
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

[redacted]			
MSD5-CCAL-06/06/02, 1535	Benzyl alcohol	34.4% low	61539001
	2,4-Dinitrophenol	23.1% high	
	4-Nitrophenol	34.4% low	
	2-Methyl-4,6-dinitrophenol	35.9% high	
MSE5973-ICAL-01/22/02, 2110	2,4-Dinitrotoluene	R^2=0.987	S240444*1
MSE5973-CCAL-01/24/02, 0518	2,6-Dinitrotoluene	24.1% high	S240444*1
	2,4-Dinitrophenol	26.4% high	
	4,6-Dinitro-2-methylphenol	22.2% high	
MSK5972-ICAL-02/07/02, 1831	Benzoic acid	%RSD=33.2	S240779*1
MSJ5971-ICAL-07/29/02, 1308	2,4-Dinitrophenol	R^2=0.986	S245278*1, 1RE
MSJ5971-CCAL-07/30/02, 0936	4-Nitrophenol	21.5% high	S245278*1
MSJ5971-CCAL-07/31/02, 1734	2,4-Dinitrophenol	21.8% low	S245278*1RE
	Indeno(1,2,3-cd)pyrene	21.0% low	

Flags were applied to the compounds in the associated samples in the following manner:

- When the percent Relative Standard Deviation (%RSD) or correlation coefficient (R^2) was out in the initial calibration, all associated samples were qualified. Detected compounds were flagged "J" and non-detected compounds were flagged "UJ", as estimated.

- When the percent difference (%D) was low in the continuing calibration standards, detected compounds were flagged "J" and non-detected compounds were flagged "UJ", as estimated.
- When the percent difference (%D) was high in the continuing calibration standards, detected compounds were flagged "J", as estimated. Non-detected compounds were not flagged.

Field Duplicate Samples

All Field Duplicate Samples were within acceptable quality control limits, except as noted in [redacted] below. No flags are applied due to Field Duplicate precision.

TABLE 8
Field Duplicate RPDs Out of QC Limits: SVOCs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

[redacted]						
CNC70	633SB03303 / 633CB03303	Fluoranthene	80 µg /KG	44 µg /Kg ("ND")	58.1*	35
		Pyrene	79 µg /KG	51 µg /Kg	43.1*	35
		Benzo(a)anthracene	35 µg /KG	24 µg /Kg	37.3*	35
		Chrysene	43 µg /KG	30 µg /Kg	35.6*	35
		Benzo(k)fluoranthen	47 µg /KG	22 µg /Kg	72.5*	35
		Benzo(a)pyrene	34 µg /KG	22 µg /Kg	42.9*	35

* - out of control limits

Internal Standard Area

All internal standard areas were within QC limits except as noted below.

- Sample S245278*1 (633ZB001M6) had low internal standard recovery (51.8% low) for Phenanthrene-d10. Associated analytes in this sample were qualified "J" for positive results and "UJ" for non-detects.

Polychlorinated Biphenyls (PCBs) Analyses

The QA/QC parameters for the PCB analyses for all of the samples were within acceptable control limits, except as noted below:

Recoveries - Surrogate, MS/MSD and LCS/LCSD

All Surrogate, Matrix Spike (MS), Matrix Spike Duplicate (MSD), Laboratory Control Sample (LCS), and Laboratory Control Sample Duplicate (LCSD) recoveries were within acceptable quality control limits, except as noted in [redacted] below.

TABLE 9
Surrogate, MS/MSD and LCS/LCSD Recoveries Out of QC Limits: PCBs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

[redacted]								
61539	61539001	Tetrachloro-m-xylene	55* / 50*	60-150			61539001	Detects-J, non-detects-UJ
		Decachlorobiphenyl	38* / 36*	60-150				
CNC44	S117222*2	Tetrachloro-m-xylene	42* / 45*	60-150			S117222*2	Detects-J, non-detects-UJ
		Decachlorobiphenyl	76 / 57*	60-150				
CNC68	S240948*2	Tetrachloro-m-xylene	39* / 43*	60-150			S240948*2	Detects-J, non-detect. UJ
		Decachlorobiphenyl	48* / 45*	60-150				
CNC68	S240948*1 MS/MSD	Aroclor-1016	52* / 52*	60-150			S240948*1	Detects-J, non-detects-UJ
CNC70	S241406*1	Tetrachloro-m-xylene	37* / 42*	60-150			S241406*1	Detects-J, non-detects-UJ
		2,4-DCAA	47* / 48*	60-150				
		Decachlorobiphenyl	67 / 52*	60-150				
CNC70	S241406*2	Tetrachloro-m-xylene	46* / 52*	60-150			S241406*2	Detects-J, non-detects-UJ
		2,4-DCAA	57* / 57*	60-150				
		Decachlorobiphenyl	62 / 57*	60-150				
CNC70	S241406*3	Tetrachloro-m-xylene	42* / 42*	60-150			S241406*3	Detects-J, non-detects-UJ
		2,4-DCAA	45* / 45*	60-150				
		Decachlorobiphenyl	61 / 52*	60-150				
CNC70	S241406*9	Tetrachloro-m-xylene	27* / 59*	60-150			S241406*9	Detects-J, non-detects-UJ
		2,4-DCAA	29* / 52*	60-150				
		Decachlorobiphenyl	37* / 67	60-150				

* - out of control limits

Initial and Continuing Calibration Criteria

All initial calibration criteria and continuing calibration criteria were met, except as listed in [redacted].

TABLE 10
Exceptions to Initial Calibration Criteria and Continuing Calibration Criteria: PCBs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

[redacted]			
SGKECD1#1-CCAL-03/06/02, 0357	Aroclor-1232	#1 - 17.4% high #2 – 21.8% high	S241406*1-3, 5, 6, 9, 13
SGKECD2#2-CCAL-03/06/02, 0357	Aroclor-1232	#3 – 17.9% high #5 – 17.5% high	S241406*1-3, 5, 6, 9, 13
SGKECD1#1-CCAL-03/06/02, 0442	Aroclor-1248	#4 – 21.1% low	S241406*1-3, 5, 6, 9, 13
SGKECD2#2-CCAL-03/06/02, 0442	Aroclor-1248	#3 – 15.3% high	S241406*1-3, 5, 6, 9, 13
SGKECD1#1-CCAL-03/06/02, 0505	Aroclor-1254	#1 – 18.8% high #2 – 16.0% high	S241406*1-3, 5, 6, 9, 13
SGKECD1#1-CCAL-03/06/02, 1016	Aroclor-1016	#5 – 22.5% high	S241406*1-3, 5, 6, 9, 13
SGKECD2#2-CCAL-03/06/02, 1923	Aroclor-1260	#2 – 16.6% low	S241406*1-3, 5, 6, 9, 13
SGKECD1#1-CCAL-03/12/02, 2242	Aroclor-1260	#4 – 20.0% low	S241406*12
SGKECD1#1-CCAL-03/12/02, 2327	Aroclor-1221	#3 – 16.2% low	S241406*4, 7, 10, 11, 12
SGKECD1#1-CCAL-03/12/02, 2350	Aroclor-1232	#5 – 21.0% low	S241406*4, 7, 10, 11, 12
SGKECD1#1-CCAL-03/13/02, 0012	Aroclor-1242	#5 – 27.7% low	S241406*4, 7, 10, 11, 12
SGKECD1#1-CCAL-03/13/02, 0034	Aroclor-1248	#4 – 28.0% low	S241406*4, 7, 10, 11, 12
SGKECD1#1-CCAL-03/13/02, 0057	Aroclor-1254	#1 – 17.6% low	S241406*4, 7, 10, 11, 12
SGKECD1#1-CCAL-03/14/02, 1409	Aroclor-1016	#5 – 18.4% high	S241406*4, 7
SGKECD1#1-CCAL-07/26/02, 1306	Aroclor-1232	#2 – 34.5% low	S245278*1

TABLE 10
Exceptions to Initial Calibration Criteria and Continuing Calibration Criteria: PCBs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

SGKECD1#1-CCAL-07/26/02, 1349	Aroclor-1248	#1 – 76.7% high	S245278*1
SGKECD2#2-CCAL-07/29/02, 1934	Aroclor-1260	#4 – 16.7% high	S245278*1

Flags were applied to the compounds in the associated samples in the following manner:

- When the percent difference (%D) was low in the continuing calibration standards, detected compounds were flagged "J" and non-detected compounds were flagged "UJ", as estimated.
- When the percent difference (%D) was high in the continuing calibration standards, detected compounds were flagged "J", as estimated. Non-detected compounds were not flagged.

Second Column Confirmation

The second column confirmation percent difference (%D) for some detected parameters, exceeded the 40 %D criteria. Those results were flagged "J", as estimated. The laboratory reported the lower of the two concentrations. The individual samples and specific compounds that were flagged are listed in Table 11 below.

TABLE 11
Second Column Confirmation out of Criteria: PCBs
Charleston Naval Complex, Zone G, AOC 633 Charleston, SC

[illegible]	[illegible]	[illegible]	[illegible]
CNC70	633CB03303	S241406*4	Aroclor-1254
CNC70	633SB03603	S241406*7	Aroclor-1254
CNC70	633SB03903	S241406*9	Aroclor-1260

Field Duplicate Samples

All Field Duplicate Samples were within acceptable quality control limits, except as noted in Table 12 below. No flags are applied due to Field Duplicate precision.

TABLE 12
Field Duplicate RPDs Out of QC Limits: PCBs
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC70	633SB03303 / 633CB03303	Aroclor-1260	420 µg/Kg	1100 µg/Kg	89.5*	35
* - out of control limits						

Fuel Fingerprinting by GC/FID Analyses

The QA/QC parameters for the Fuel Fingerprinting analyses for all of the samples were within acceptable control limits.

Rejected Data

The majority of rejected data were associated with re-runs and dilutions (you can only have a single valid result per parameter per sample). However, there were selected results qualified as "R", rejected, due to associated QC parameters out of criteria. The rejected data are summarized in [redacted] below.

TABLE 13
Data Qualification Summary: Rejected Data
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC70	633SB04303	VOA	2-Chloroethyl vinyl ether	10	U	10	R	ug/kg	IC
CNC70	633SB03203	VOA	2-Chloroethyl vinyl ether	11	U	11	R	ug/kg	IC
CNC70	633SB03303	VOA	2-Chloroethyl vinyl ether	23	U	23	R	ug/kg	IC
CNC70	633CB03303	VOA	2-Chloroethyl vinyl ether	20	U	20	R	ug/kg	IC
CNC70	633SB03403	VOA	2-Chloroethyl vinyl ether	12	U	12	R	ug/kg	IC
CNC70	633SB03503	VOA	2-Chloroethyl vinyl ether	10	U	10	R	ug/kg	IC
CNC70	633SB03603	VOA	2-Chloroethyl vinyl ether	27	U	27	R	ug/kg	IC
CNC70	633SB03803	VOA	2-Chloroethyl vinyl ether	11	U	11	R	ug/kg	IC
CNC70	633SB03903	VOA	2-Chloroethyl vinyl ether	15	U	15	R	ug/kg	IC

TABLE 13
Data Qualification Summary: Rejected Data
Charleston Naval Complex, Zone G, AOC 633, Charleston, SC

CNC70	633SB04003	VOA	2-Chloroethyl vinyl ether	20	U	20	R	ug/kg	IC
CNC70	633SB04103	VOA	2-Chloroethyl vinyl ether	9.7	U	9.7	R	ug/kg	IC
CNC70	633SB04203	VOA	2-Chloroethyl vinyl ether	21	U	21	R	ug/kg	IC
CNC132	633ZB001M6	VOA	2-Chloroethyl vinyl ether	20000	U	20000	R	ug/kg	CC

Conclusion

A review of the analytical data submitted regarding the investigation of Zone G, AOC 633 at the Charleston Naval Complex, Charleston, South Carolina by CH2M HILL has been completed. An overall evaluation of the data indicates that the sample handling, shipment, and analytical procedures have been adequately completed, and that the analytical results should be considered usable as qualified.

The analytical data had minor QC concerns as indicated above, however, it did not affect data usability for those specific results. The validation review demonstrated that the analytical systems were generally in control and the data results can be used in the decision making process.

61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	5	U	5	UJ	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	5	U	5	UJ	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	5	U	5	UJ	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	5	U	5	UJ	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	5	U	5	UJ	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	1.6	J	1.6	J	ug/L	SS
61539	633ZA001M4	61539001	WG	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	9.5	J	9.5	J	ug/L	SS
61539	633ZA001M4	61539001	WG	SVOA	SW8270C	4-NITROPHENOL	208	U	208	UJ	ug/L	CC
61539	633ZA001M4	61539001	WG	SVOA	SW8270C	Benzyl alcohol	41.7	U	41.7	UJ	ug/L	CC
64296	633SB04504	64296001	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	6.8	U	6.8	UJ	ug/kg	CC
64296	633SB04604	64296002	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	6.8	U	6.8	UJ	ug/kg	CC
64296	633SB04704	64296003	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	6.1	U	6.1	UJ	ug/kg	CC
64296	633SB04804	64296004	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	6	U	6	UJ	ug/kg	CC
64296	633SB04901	64296005	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.9	U	5.9	UJ	ug/kg	CC
64296	633SB04504	64296001	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	6.8	U	6.8	UJ	ug/kg	CC
64296	633SB04604	64296002	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	6.8	U	6.8	UJ	ug/kg	CC
64296	633SB04704	64296003	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	6.1	U	6.1	UJ	ug/kg	CC
64296	633SB04804	64296004	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	6	U	6	UJ	ug/kg	CC
64296	633SB04901	64296005	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	5.9	U	5.9	UJ	ug/kg	CC
64296	633SB04504	64296001	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	13.6	U	13.6	UJ	ug/kg	CC
64296	633SB04604	64296002	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	13.7	U	13.7	UJ	ug/kg	CC
64296	633SB04704	64296003	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	12.1	U	12.1	UJ	ug/kg	CC
64296	633SB04804	64296004	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	12	U	12	UJ	ug/kg	CC
64296	633SB04901	64296005	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	11.8	U	11.8	UJ	ug/kg	CC
64298	633VADRMM6	64298001	WG	VOA	SW8260B	2-Chloroethyl vinyl ether	10	U	10	UJ	ug/L	CC
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	41	U	41	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	41	U	41	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	41	U	41	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	41	U	41	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	41	U	41	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	84	U	84	UJ	ug/kg	SS
CNC44	633SB02303	S117222*2	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	740	=	740	J	ug/kg	SS

NC64	633GA001M1	S240444*1	WG	SVOA	SW8270	2,4-DINITROTOLUENE	1000	U	1000	UJ	ug/l	IC
NC64	633GA001M1	S240444*1	WG	VOA	SW8260	ACETONE	28	=	28	J	ug/l	CC, BS
NC64	633GA001M1	S240444*1	WG	VOA	SW8260	BROMOMETHANE	10	U	10	UJ	ug/l	CC, BS
NC65	633WA001M1	S240779*1	LO	SVOA	SW8270C	Benzoic acid	2E+06	U	2E+06	UJ	ug/kg	IC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	1,1,2-TRICHLOROETHANE	2000	U	2000	UJ	ug/kg	CC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	2-BUTANONE (MEK)	4000	U	4000	UJ	ug/kg	CC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	2-HEXANONE	4000	U	4000	UJ	ug/kg	CC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	4000	U	4000	UJ	ug/kg	CC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	ACETONE	4200	=	4200	J	ug/kg	CC
NC65	633WA001M1	S240779*1	LO	VOA	SW8260B	BROMOMETHANE	4000	U	4000	UJ	ug/kg	CC
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	38	U	38	UJ	ug/kg	SS
NC68	633SB04403	S240948*1	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	80	U	80	UJ	ug/kg	MS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	38	U	38	UJ	ug/kg	SS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	38	U	38	UJ	ug/kg	SS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	38	U	38	UJ	ug/kg	SS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	38	U	38	UJ	ug/kg	SS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	76	U	76	UJ	ug/kg	SS
NC68	633SB024M1	S240948*2	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	310	=	310	J	ug/kg	SS
NC68	633SB04403	S240948*1	SO	SVOA	SW8270C	ACENAPHTHENE	8.1	U	8.1	UJ	ug/kg	MD
NC68	633SB024M1	S240948*2	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	9.5	U	9.5	UJ	ug/kg	IC, CC
NC68	633SB04403	S240948*1	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	12	U	12	UJ	ug/kg	IC, CC
NC68	633VA001M1	S240948*3	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	12	U	12	UJ	ug/kg	IC, CC
NC68	633SB024M1	S240948*2	SO	VOA	SW8260B	ACETONE	28	=	28	U	ug/kg	BL
NC68	633SB04403	S240948*1	SO	VOA	SW8260B	ACETONE	45	=	45	U	ug/kg	BL
NC68	633VA001M1	S240948*3	SO	VOA	SW8260B	ACETONE	20	=	20	U	ug/kg	BL
NC68	633SB024M1	S240948*2	SO	VOA	SW8260B	Vinyl acetate	9.5	U	9.5	UJ	ug/kg	CC
NC68	633SB04403	S240948*1	SO	VOA	SW8260B	Vinyl acetate	12	U	12	UJ	ug/kg	CC
NC68	633VA001M1	S240948*3	SO	VOA	SW8260B	Vinyl acetate	12	U	12	UJ	ug/kg	CC
NC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	42	U	42	UJ	ug/kg	SS
NC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	62	U	62	UJ	ug/kg	SS
NC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	54	U	54	UJ	ug/kg	SS
NC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1016 (AROCHLOR 1016)	41	U	41	UJ	ug/kg	SS

CNC70	633CB03303	S241406*4	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	110	U	110	UJ	ug/kg	CC
CNC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	42	U	42	UJ	ug/kg	SS
CNC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	62	U	62	UJ	ug/kg	SS
CNC70	633SB03603	S241406*7	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	140	U	140	UJ	ug/kg	CC
CNC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	54	U	54	UJ	ug/kg	SS
CNC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04103	S241406*11	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	80	U	80	UJ	ug/kg	CC
CNC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1221 (AROCHLOR 1221)	41	U	41	UJ	ug/kg	SS
CNC70	633CB03303	S241406*4	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	110	U	110	UJ	ug/kg	CC
CNC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	42	U	42	UJ	ug/kg	SS
CNC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	62	U	62	UJ	ug/kg	SS
CNC70	633SB03603	S241406*7	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	140	U	140	UJ	ug/kg	CC
CNC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	54	U	54	UJ	ug/kg	SS
CNC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04103	S241406*11	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	80	U	80	UJ	ug/kg	CC
CNC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	41	U	41	UJ	ug/kg	SS
CNC70	633CB03303	S241406*4	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	110	U	110	UJ	ug/kg	CC
CNC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	42	U	42	UJ	ug/kg	SS
CNC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	62	U	62	UJ	ug/kg	SS
CNC70	633SB03603	S241406*7	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	140	U	140	UJ	ug/kg	CC
CNC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	54	U	54	UJ	ug/kg	SS
CNC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04103	S241406*11	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	80	U	80	UJ	ug/kg	CC
CNC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	120	U	120	UJ	ug/kg	CC
CNC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1242 (AROCHLOR 1242)	41	U	41	UJ	ug/kg	SS
CNC70	633CB03303	S241406*4	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	110	U	110	UJ	ug/kg	CC
CNC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	42	U	42	UJ	ug/kg	CC, SS
CNC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	62	U	62	UJ	ug/kg	CC, SS
CNC70	633SB03403	S241406*5	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	80	U	80	UJ	ug/kg	CC
CNC70	633SB03503	S241406*6	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	180	U	180	UJ	ug/kg	CC

NC70	633SB03603	S241406*7	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	140	U	140	UJ	ug/kg	CC
NC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	54	U	54	UJ	ug/kg	SS
NC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	120	U	120	UJ	ug/kg	CC
NC70	633SB04103	S241406*11	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	80	U	80	UJ	ug/kg	CC
NC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	120	U	120	UJ	ug/kg	CC
NC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1248 (AROCHLOR 1248)	41	U	41	UJ	ug/kg	CC, SS
NC70	633CB03303	S241406*4	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	190	JP	190	J	ug/kg	2C
NC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	86	U	86	UJ	ug/kg	SS
NC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	130	U	130	UJ	ug/kg	SS
NC70	633SB03603	S241406*7	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	93	JP	93	J	ug/kg	2C
NC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	110	U	110	UJ	ug/kg	SS
NC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	240	U	240	UJ	ug/kg	CC
NC70	633SB04103	S241406*11	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	160	U	160	UJ	ug/kg	CC
NC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	240	U	240	UJ	ug/kg	CC
NC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1254 (AROCHLOR 1254)	84	U	84	UJ	ug/kg	SS
NC70	633SB03203	S241406*2	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	86	U	86	UJ	ug/kg	CC, SS
NC70	633SB03303	S241406*3	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	420	=	420	J	ug/kg	SS
NC70	633SB03403	S241406*5	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	960	=	960	J	ug/kg	CC
NC70	633SB03503	S241406*6	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	2400	=	2400	J	ug/kg	CC
NC70	633SB03903	S241406*9	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	66	JP	66	J	ug/kg	2C, CC, SS
NC70	633SB04003	S241406*10	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	240	U	240	UJ	ug/kg	CC
NC70	633SB04203	S241406*12	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	240	U	240	UJ	ug/kg	CC
NC70	633SB04303	S241406*1	SO	PCB	SW8082	PCB-1260 (AROCHLOR 1260)	350	=	350	J	ug/kg	SS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,1,1-TRICHLOROETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,1,1-TRICHLOROETHANE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,1,2,2-TETRACHLOROETHANE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,1,2,2-TETRACHLOROETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,1,2,2-TETRACHLOROETHANE	5.1	U	5.1	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,1,2,2-TETRACHLOROETHANE	10	U	10	UJ	ug/kg	IS
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,1,2-TRICHLOROETHANE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,1,2-TRICHLOROETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,1,2-TRICHLOROETHANE	5.1	U	5.1	R	ug/kg	RE

CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,1,2-TRICHLOROETHANE	10	U	10	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,1-DICHLOROETHANE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,1-DICHLOROETHANE	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,1-DICHLOROETHENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,1-DICHLOROETHENE	5.1	U	5.1	R	ug/kg	RE
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	9.8	U	9.8	UJ	ug/kg	IS, BD
CNC70	633SB03203	S241406*2	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.7	U	5.7	UJ	ug/kg	BD
CNC70	633SB03303	S241406*3	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	12	U	12	UJ	ug/kg	BD
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	6	U	6	UJ	ug/kg	BD
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5	U	5	UJ	ug/kg	BD
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB03603	S241406*7	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	14	U	14	UJ	ug/kg	BD
CNC70	633SB03803	S241406*8	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.6	U	5.6	UJ	ug/kg	BD
CNC70	633SB03903	S241406*9	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	7.6	U	7.6	UJ	ug/kg	BD
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	10	U	10	UJ	ug/kg	IS, BD
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	4.8	U	4.8	UJ	ug/kg	BD
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	10	U	10	UJ	ug/kg	BD
CNC70	633SB04303	S241406*1	SO	VOA	SW8260B	1,2,3-Trichlorobenzene	5.3	U	5.3	UJ	ug/kg	BD
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	9.8	U	9.8	UJ	ug/kg	IS, BD
CNC70	633SB03203	S241406*2	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	5.7	U	5.7	UJ	ug/kg	BD
CNC70	633SB03303	S241406*3	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	12	U	12	UJ	ug/kg	BD
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	6.9	=	6.9	J	ug/kg	BD
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	7.2	=	7.2	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	5	U	5	UJ	ug/kg	BD
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	4.4	J	4.4	R	ug/kg	RE
CNC70	633SB03603	S241406*7	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	14	U	14	UJ	ug/kg	BD
CNC70	633SB03803	S241406*8	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	5.6	U	5.6	UJ	ug/kg	BD
CNC70	633SB03903	S241406*9	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	7.6	U	7.6	UJ	ug/kg	BD
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	10	U	10	UJ	ug/kg	IS, BD
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	4.8	U	4.8	UJ	ug/kg	BD
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	10	U	10	UJ	ug/kg	BD

NC70	633SB04303	S241406*1	SO	VOA	SW8260B	1,2,4-TRICHLOROBENZENE	5.3	U	5.3	UJ	ug/kg	BD
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,2-DICHLOROBENZENE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2-DICHLOROBENZENE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2-DICHLOROBENZENE	5.1	U	5.1	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,2-DICHLOROBENZENE	10	U	10	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2-DICHLOROETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2-DICHLOROETHANE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,2-Dichloroethene (total)	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2-Dichloroethene (total)	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2-Dichloroethene (total)	5.1	U	5.1	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,2-Dichloroethene (total)	10	U	10	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,2-DICHLOROPROPANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,2-DICHLOROPROPANE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,3-DICHLOROBENZENE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,3-DICHLOROBENZENE	1.9	J	1.9	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,3-DICHLOROBENZENE	27	=	27	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,3-DICHLOROBENZENE	10	U	10	UJ	ug/kg	IS
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	1,4-DICHLOROBENZENE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	1,4-DICHLOROBENZENE	5	J	5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	1,4-DICHLOROBENZENE	100	=	100	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	1,4-DICHLOROBENZENE	10	U	10	UJ	ug/kg	IS
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	2-BUTANONE (MEK)	34	=	34	J	ug/kg	IC, CC
NC70	633SB03203	S241406*2	SO	VOA	SW8260B	2-BUTANONE (MEK)	11	U	11	UJ	ug/kg	IC, CC
NC70	633SB03303	S241406*3	SO	VOA	SW8260B	2-BUTANONE (MEK)	53	=	53	J	ug/kg	IC, CC
NC70	633SB03403	S241406*5	SO	VOA	SW8260B	2-BUTANONE (MEK)	10	JB	12	UJ	ug/kg	BL, IC, BD
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	2-BUTANONE (MEK)	13	=	13	R	ug/kg	RE
NC70	633SB03503	S241406*6	SO	VOA	SW8260B	2-BUTANONE (MEK)	18	B	18	UJ	ug/kg	BL, IC, BD
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	2-BUTANONE (MEK)	16	=	16	R	ug/kg	RE
NC70	633SB03603	S241406*7	SO	VOA	SW8260B	2-BUTANONE (MEK)	56	=	56	J	ug/kg	IC, CC
NC70	633SB03803	S241406*8	SO	VOA	SW8260B	2-BUTANONE (MEK)	11	J	11	J	ug/kg	IC, CC
NC70	633SB03903	S241406*9	SO	VOA	SW8260B	2-BUTANONE (MEK)	23	=	23	J	ug/kg	IC, CC
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	2-BUTANONE (MEK)	25	=	25	J	ug/kg	IC, CC

	Sample ID	Lab Sample ID	Matrix	Analytical Group	Analytical Method	Analyte	Result	Qual	Final	Qual	Units	Reason
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	2-BUTANONE (MEK)	6.9	J	6.9	J	ug/kg	IC, CC
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	2-BUTANONE (MEK)	37	=	37	J	ug/kg	IC, CC
CNC70	633SB04303	S241406*1	SO	VOA	SW8260B	2-BUTANONE (MEK)	10	U	10	UJ	ug/kg	IC, CC
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	20	U	20	R	ug/kg	IC
CNC70	633SB03203	S241406*2	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	11	U	11	R	ug/kg	IC
CNC70	633SB03303	S241406*3	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	23	U	23	R	ug/kg	IC
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	12	U	12	R	ug/kg	IC
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	11	U	11	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	10	U	10	R	ug/kg	IC
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	10	U	10	R	ug/kg	RE
CNC70	633SB03603	S241406*7	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	27	U	27	R	ug/kg	IC
CNC70	633SB03803	S241406*8	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	11	U	11	R	ug/kg	IC
CNC70	633SB03903	S241406*9	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	15	U	15	R	ug/kg	IC
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	20	U	20	R	ug/kg	IC
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	9.7	U	9.7	R	ug/kg	IC
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	21	U	21	R	ug/kg	IC
CNC70	633SB04303	S241406*1	SO	VOA	SW8260B	2-Chloroethyl vinyl ether	10	U	10	R	ug/kg	IC
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	2-HEXANONE	20	U	20	UJ	ug/kg	CC, IS
CNC70	633SB03203	S241406*2	SO	VOA	SW8260B	2-HEXANONE	11	U	11	UJ	ug/kg	CC
CNC70	633SB03303	S241406*3	SO	VOA	SW8260B	2-HEXANONE	23	U	23	UJ	ug/kg	CC
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	2-HEXANONE	12	U	12	UJ	ug/kg	BD
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	2-HEXANONE	11	U	11	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	2-HEXANONE	10	U	10	UJ	ug/kg	BD
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	2-HEXANONE	10	U	10	R	ug/kg	RE
CNC70	633SB03603	S241406*7	SO	VOA	SW8260B	2-HEXANONE	27	U	27	UJ	ug/kg	CC
CNC70	633SB03803	S241406*8	SO	VOA	SW8260B	2-HEXANONE	11	U	11	UJ	ug/kg	CC
CNC70	633SB03903	S241406*9	SO	VOA	SW8260B	2-HEXANONE	15	U	15	UJ	ug/kg	CC
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	2-HEXANONE	20	U	20	UJ	ug/kg	CC, IS
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	2-HEXANONE	9.7	U	9.7	UJ	ug/kg	CC
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	2-HEXANONE	21	U	21	UJ	ug/kg	CC
CNC70	633SB04303	S241406*1	SO	VOA	SW8260B	2-HEXANONE	10	U	10	UJ	ug/kg	CC
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	20	U	20	UJ	ug/kg	CC

NC70	633SB03203	S241406*2	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	11	U	11	UJ	ug/kg	CC
NC70	633SB03303	S241406*3	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	23	U	23	UJ	ug/kg	CC
NC70	633SB03403	S241406*5	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	12	U	12	UJ	ug/kg	BD
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	11	U	11	R	ug/kg	RE
NC70	633SB03503	S241406*6	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	10	U	10	UJ	ug/kg	BD
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	10	U	10	R	ug/kg	RE
NC70	633SB03603	S241406*7	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	27	U	27	UJ	ug/kg	CC
NC70	633SB03803	S241406*8	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	11	U	11	UJ	ug/kg	CC
NC70	633SB03903	S241406*9	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	15	U	15	UJ	ug/kg	CC
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	20	U	20	UJ	ug/kg	CC
NC70	633SB04103	S241406*11	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	9.7	U	9.7	UJ	ug/kg	CC
NC70	633SB04203	S241406*12	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	21	U	21	UJ	ug/kg	CC
NC70	633SB04303	S241406*1	SO	VOA	SW8260B	4-METHYL-2-PENTANONE (MIBK)	10	U	10	UJ	ug/kg	CC
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	ACETONE	290	B	290	J	ug/kg	IC, CC
NC70	633SB03203	S241406*2	SO	VOA	SW8260B	ACETONE	33	B	33	UJ	ug/kg	BL, IC, CC
NC70	633SB03303	S241406*3	SO	VOA	SW8260B	ACETONE	240	B	240	J	ug/kg	IC, CC
NC70	633SB03403	S241406*5	SO	VOA	SW8260B	ACETONE	110	B	110	UJ	ug/kg	BL, IC, BD
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	ACETONE	240	B	240	R	ug/kg	RE
NC70	633SB03503	S241406*6	SO	VOA	SW8260B	ACETONE	110	B	110	UJ	ug/kg	BL, IC, BD
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	ACETONE	120	B	120	R	ug/kg	RE
NC70	633SB03603	S241406*7	SO	VOA	SW8260B	ACETONE	400	B	400	J	ug/kg	IC, CC
NC70	633SB03803	S241406*8	SO	VOA	SW8260B	ACETONE	95	B	95	J	ug/kg	IC, CC
NC70	633SB03903	S241406*9	SO	VOA	SW8260B	ACETONE	130	B	130	J	ug/kg	IC, CC
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	ACETONE	140	B	140	J	ug/kg	IC, CC
NC70	633SB04103	S241406*11	SO	VOA	SW8260B	ACETONE	52	B	52	UJ	ug/kg	BL, IC, CC
NC70	633SB04203	S241406*12	SO	VOA	SW8260B	ACETONE	210	B	210	J	ug/kg	IC, CC
NC70	633SB04303	S241406*1	SO	VOA	SW8260B	ACETONE	25	B	25	UJ	ug/kg	BL, IC, CC
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	BENZENE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	BENZENE	5.1	U	5.1	R	ug/kg	RE
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	BROMODICHLOROMETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	BROMODICHLOROMETHANE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	BROMOFORM	9.8	U	9.8	UJ	ug/kg	IS

[illegible]	Sample ID	Lab Sample ID	Matrix	[illegible]	[illegible]	Parameter	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	BROMOFORM	6	U	6	UJ	ug/kg	BD
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	BROMOFORM	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	BROMOFORM	5	U	5	UJ	ug/kg	BD
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	BROMOFORM	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	BROMOFORM	10	U	10	UJ	ug/kg	IS
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	BROMOMETHANE	20	U	20	UJ	ug/kg	IC, CC
CNC70	633SB03203	S241406*2	SO	VOA	SW8260B	BROMOMETHANE	11	U	11	UJ	ug/kg	IC, CC
CNC70	633SB03303	S241406*3	SO	VOA	SW8260B	BROMOMETHANE	24	=	24	J	ug/kg	IC, CC
CNC70	633SB03403	S241406*5	SO	VOA	SW8260B	BROMOMETHANE	12	U	12	UJ	ug/kg	IC
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	BROMOMETHANE	4.1	J	4.1	R	ug/kg	RE
CNC70	633SB03503	S241406*6	SO	VOA	SW8260B	BROMOMETHANE	10	U	10	UJ	ug/kg	IC
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	BROMOMETHANE	10	U	10	R	ug/kg	RE
CNC70	633SB03603	S241406*7	SO	VOA	SW8260B	BROMOMETHANE	31	=	31	J	ug/kg	IC, CC
CNC70	633SB03803	S241406*8	SO	VOA	SW8260B	BROMOMETHANE	11	U	11	UJ	ug/kg	IC, CC
CNC70	633SB03903	S241406*9	SO	VOA	SW8260B	BROMOMETHANE	15	U	15	UJ	ug/kg	IC, CC
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	BROMOMETHANE	20	U	20	UJ	ug/kg	IC, CC
CNC70	633SB04103	S241406*11	SO	VOA	SW8260B	BROMOMETHANE	9.7	U	9.7	UJ	ug/kg	IC, CC
CNC70	633SB04203	S241406*12	SO	VOA	SW8260B	BROMOMETHANE	21	U	21	UJ	ug/kg	IC, CC
CNC70	633SB04303	S241406*1	SO	VOA	SW8260B	BROMOMETHANE	10	U	10	UJ	ug/kg	IC, CC
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CARBON DISULFIDE	3.6	J	3.6	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CARBON DISULFIDE	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CARBON TETRACHLORIDE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CARBON TETRACHLORIDE	5.1	U	5.1	R	ug/kg	RE
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	CHLOROBENZENE	9.8	U	9.8	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CHLOROBENZENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CHLOROBENZENE	2.1	J	2.1	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	CHLOROBENZENE	10	U	10	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CHLOROETHANE	11	U	11	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CHLOROETHANE	10	U	10	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CHLOROFORM	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CHLOROFORM	5.1	U	5.1	R	ug/kg	RE
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	CHLOROMETHANE	20	U	20	UJ	ug/kg	CC

NC70	633SB03203	S241406*2	SO	VOA	SW8260B	CHLOROMETHANE	11	U	11	UJ	ug/kg	CC
NC70	633SB03303	S241406*3	SO	VOA	SW8260B	CHLOROMETHANE	23	U	23	UJ	ug/kg	CC
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	CHLOROMETHANE	11	U	11	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	CHLOROMETHANE	10	U	10	R	ug/kg	RE
NC70	633SB03603	S241406*7	SO	VOA	SW8260B	CHLOROMETHANE	27	U	27	UJ	ug/kg	CC
NC70	633SB03803	S241406*8	SO	VOA	SW8260B	CHLOROMETHANE	11	U	11	UJ	ug/kg	CC
NC70	633SB03903	S241406*9	SO	VOA	SW8260B	CHLOROMETHANE	15	U	15	UJ	ug/kg	CC
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	CHLOROMETHANE	20	U	20	UJ	ug/kg	CC
NC70	633SB04103	S241406*11	SO	VOA	SW8260B	CHLOROMETHANE	9.7	U	9.7	UJ	ug/kg	CC
NC70	633SB04203	S241406*12	SO	VOA	SW8260B	CHLOROMETHANE	21	U	21	UJ	ug/kg	CC
NC70	633SB04303	S241406*1	SO	VOA	SW8260B	CHLOROMETHANE	10	U	10	UJ	ug/kg	CC
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	cis-1,2-DICHLOROETHYLENE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	cis-1,2-DICHLOROETHYLENE	5.1	U	5.1	R	ug/kg	RE
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	cis-1,3-DICHLOROPROPENE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	cis-1,3-DICHLOROPROPENE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	DIBROMOCHLOROMETHANE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	DIBROMOCHLOROMETHANE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	DIBROMOCHLOROMETHANE	5.1	U	5.1	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	DIBROMOCHLOROMETHANE	10	U	10	UJ	ug/kg	IS
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	ETHYLBENZENE	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	ETHYLBENZENE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	ETHYLBENZENE	5.4	=	5.4	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	ETHYLBENZENE	10	U	10	UJ	ug/kg	IS
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	m+p Xylene	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	m+p Xylene	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	m+p Xylene	25	=	25	R	ug/kg	RE
NC70	633SB04003	S241406*10	SO	VOA	SW8260B	m+p Xylene	10	U	10	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	METHYLENE CHLORIDE	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	METHYLENE CHLORIDE	5.1	U	5.1	R	ug/kg	RE
NC70	633CB03303	S241406*4	SO	VOA	SW8260B	o-Xylene	9.8	U	9.8	UJ	ug/kg	IS
NC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	o-Xylene	5.5	U	5.5	R	ug/kg	RE
NC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	o-Xylene	11	=	11	R	ug/kg	RE

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	o-Xylene	10	U	10	UJ	ug/kg	IS
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	STYRENE	9.8	U	9.8	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	STYRENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	STYRENE	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	STYRENE	10	U	10	UJ	ug/kg	IS
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	TETRACHLOROETHYLENE(PCE)	9.8	U	9.8	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	TETRACHLOROETHYLENE(PCE)	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	TETRACHLOROETHYLENE(PCE)	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	TETRACHLOROETHYLENE(PCE)	10	U	10	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	TOLUENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	TOLUENE	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	trans-1,2-DICHLOROETHENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	trans-1,2-DICHLOROETHENE	5.1	U	5.1	R	ug/kg	RE
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	trans-1,3-DICHLOROPROPENE	9.8	U	9.8	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	trans-1,3-DICHLOROPROPENE	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	trans-1,3-DICHLOROPROPENE	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	trans-1,3-DICHLOROPROPENE	10	U	10	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	TRICHLOROETHYLENE (TCE)	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	TRICHLOROETHYLENE (TCE)	5.1	U	5.1	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	Vinyl acetate	11	U	11	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	Vinyl acetate	10	U	10	R	ug/kg	RE
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	VINYL CHLORIDE	11	U	11	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	VINYL CHLORIDE	10	U	10	R	ug/kg	RE
CNC70	633CB03303	S241406*4	SO	VOA	SW8260B	XYLENES, TOTAL	9.8	U	9.8	UJ	ug/kg	IS
CNC70	633SB03403RE	S241406*5*RE	SO	VOA	SW8260B	XYLENES, TOTAL	5.5	U	5.5	R	ug/kg	RE
CNC70	633SB03503RE	S241406*6*RE	SO	VOA	SW8260B	XYLENES, TOTAL	36	=	36	R	ug/kg	RE
CNC70	633SB04003	S241406*10	SO	VOA	SW8260B	XYLENES, TOTAL	10	U	10	UJ	ug/kg	IS
CNC132	633ZB001M6	S245278*1	LO	PCB	SW8082	PCB-1232 (AROCHLOR 1232)	250	U	250	UJ	mg/kg	CC
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4,5-TRICHLOROPHENOL	5E+06	U	5E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4,6-TRICHLOROPHENOL	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4-DICHLOROPHENOL	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4-DIMETHYLPHENOL	1E+06	U	1E+06	R	ug/kg	RE

NC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	2,4-DINITROPHENOL	5E+06	U	5E+06	UJ	ug/kg	IC
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4-DINITROPHENOL	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,4-DINITROTOLUENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2,6-DINITROTOLUENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-CHLOROETHYL ETHER	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-CHLORONAPHTHALENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-CHLOROPHENOL	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-METHYLNAPHTHALENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-METHYLPHENOL (o-CRESOL)	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-NITROANILINE	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	2-NITROPHENOL	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	3,3'-DICHLOROBENZIDINE	2E+06	U	2E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	3-NITROANILINE	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	4,6-DINITRO-2-METHYLPHENOL	5E+06	U	5E+06	UJ	ug/kg	IS
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4,6-DINITRO-2-METHYLPHENOL	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	4-BROMOPHENYL PHENYL ETHER	1E+06	U	1E+06	UJ	ug/kg	IS
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-BROMOPHENYL PHENYL ETHER	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-CHLORO-3-METHYLPHENOL	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-CHLOROANILINE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-CHLOROPHENYL PHENYL ETHER	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-METHYLPHENOL (p-CRESOL)	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-NITROANILINE	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	4-NITROPHENOL	5E+06	U	5E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	ACENAPHTHENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	ACENAPHTHYLENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	ANTHRACENE	1E+06	U	1E+06	UJ	ug/kg	IS
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	ANTHRACENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZO(a)ANTHRACENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZO(a)PYRENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZO(b)FLUORANTHENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZO(g,h,i)PERYLENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZO(k)FLUORANTHENE	1E+06	U	1E+06	R	ug/kg	RE

CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	Benzoic acid	5E+06	U	5E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	Benzyl alcohol	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	BENZYL BUTYL PHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	bis(2-CHLOROETHOXY) METHANE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	Bis(2-Chloroisopropyl)Ether	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	bis(2-ETHYLHEXYL) PHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	CARBAZOLE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	CHRYSENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DIBENZ(a,h)ANTHRACENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DIBENZOFURAN	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DIETHYL PHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DIMETHYL PHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	DI-n-BUTYL PHTHALATE	1E+06	U	1E+06	UJ	ug/kg	IS
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DI-n-BUTYL PHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	DI-n-OCTYLPHTHALATE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	FLUORANTHENE	1E+06	U	1E+06	UJ	ug/kg	IS
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	FLUORANTHENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	FLUORENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	HEXACHLOROBENZENE	1E+06	U	1E+06	UJ	ug/kg	IS
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	HEXACHLOROBENZENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	HEXACHLOROBUTADIENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	HEXACHLOROCYCLOPENTADIENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	HEXACHLOROETHANE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	INDENO(1,2,3-c,d)PYRENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	ISOPHORONE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	NAPHTHALENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	NITROBENZENE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	N-NITROSODI-n-PROPYLAMINE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	N-NITROSODIPHENYLAMINE	1E+06	U	1E+06	UJ	ug/kg	IS
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	N-NITROSODIPHENYLAMINE	1E+06	U	1E+06	R	ug/kg	RE
CNC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	PENTACHLOROPHENOL	5E+06	U	5E+06	UJ	ug/kg	IS
CNC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	PENTACHLOROPHENOL	5E+06	U	5E+06	R	ug/kg	RE

NC132	633ZB001M6	S245278*1	LO	SVOA	SW8270C	PHENANTHRENE	1E+06	U	1E+06	UJ	ug/kg	IS
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	PHENANTHRENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	PHENOL	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6RE	S245278*1*RE	LO	SVOA	SW8270C	PYRENE	1E+06	U	1E+06	R	ug/kg	RE
NC132	633ZB001M6	S245278*1	LO	VOA	SW8260B	2-Chloroethyl vinyl ether	20000	U	20000	R	ug/kg	CC
NC132	633ZB001M6	S245278*1	LO	VOA	SW8260B	ACETONE	20000	U	20000	UJ	ug/kg	CC
NC132	633ZB001M6	S245278*1	LO	VOA	SW8260B	METHYLENE CHLORIDE	4100	BJ	10000	U	ug/kg	BL
NC132	633ZB001M6	S245278*1	LO	VOA	SW8260B	Vinyl acetate	20000	U	20000	UJ	ug/kg	BS

CH2M L Chain of Custody/ Laboratory Analysis Form

COC Tracking #: ZG633-092801-01 page 2 of 2

Laboratory: STL (Savannah, GA)

Project Name: Charleston Navy Complex

Site Name: Zone G, AOC 633

Project Number: 158814.PM.04

TAT: 14 day results, std. Package

Project Manager: Tom Beisel/ATL

Level: Level 3

Address: GNV: 3011 SW Williston Rd., Gainesville, FL 32605

ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278

Send Report To: see last page of COC

EDD: CNC format

Lab Batch/SDG:

Sample ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	PCBs (SW8082) 1 - 4ounce jar	PCBs (SW8082) 2 - 1L amber									Comments
633SB02203	G633SB022			11-6-01/1105	SO	1	X										
633SB02303	G633SB023			11-6-01/1040	SO	1	X										
633SB02403	G633SB024			11-6-01/1120	SO	1	X										
633CB02403	G633SB024			11-6-01/1121	SO	1	X										
633SB02503	G633SB025			Not Sampled	SO		X										
633SB02603	G633SB026			11-6-01/1050	SO	1	X										
633SB02703	G633SB027			11-6-01/0920	SO	1	X										
633SB02803	G633SB028			11-6-01/0910	SO	1	X										
633SB02903	G633SB029			11-6-01/0946	SO	1	X										
633SB03003	G633SB030			11-6-01/1000	SO	1	X										
633SB03103	G633SB031			11-6-01/1020	SO	1	X										
633EB022L1	G633EB022			11-6-01/1130	SQ	2		X									EB
																	End of Job
																	RCRA Job

Sampled By: Chris Blundy

Date/Time: 11-6-01

Relinquished by: Chris Blundy

Date/Time: 11-6-01/1500

Additional Samplers: Anthony Cain

Received By Lab: [signature]

Date/Time: 11/07/01

Relinquished by:

Date/Time

Received By:

Date/Time

Shipped Via: UPS FedEx Hand Other Tracking#:

Remarks: FAX results to Tom Beisel & Herb Kelly. 9:45

Temperature:

Reports SI-17222

Receipt Exceptions:

CH2M HILL Chain of Custody/ Laboratory Analysis Form

COC Tracking #: **ZG633-022202-01** page 1 of 2

Laboratory:	STL (Savannah, GA)
Project Name:	Charleston Navy Complex
Site Name:	Zone G, AOC 633
Project Number:	158814.PM.04
TAT:	1-QTAT-3
Project Manager:	Tom Beisel
QA Level:	level 3
Address:	GNV: 3011 SW Williston Rd., Gainesville, FL 32605
	ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278
Send Report To:	see last page of COC
EDD:	CNC format

Lab Batch/SDG:

Sample ID	Station ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	PCBs (SW8082) 1 - 4ounce jar	VOCs (SW8260B) 3 - 5g Encore & 1 - 2oz jar	PAHs (SW8270C) 1 - 4 ounce jar	VOCs (SW8260B) 3 - 40mL vial, HCl	PCBs (SW8082) 2 - 1L amber	PAHs (SW8270C) 2 - 1L amber					Comments
633SB03103	G633SB031	F	3	4	2-28-02/0945	SO	6	X	X	X								
633SB03203	G633SB032	G	3	4	2-28-02/1035	SO	6	X	X	X								
633SB03303	G633SB033	H	5	6	2-28-02/1100	SO	6	X	X	X								Odor
633CB03303	G633SB033	—	—	—	2-28-02/1105	SO	6	X	X	X								
633SB03403	G633SB034	I	4	5	2-28-02/1125	SO	6	X	X	X								Odor
633SB03503	G633SB035	J	4	5	2-28-02/1140	SO	6	X	X	X								Odor
633SB03603	G633SB036	K	4	5	2-28-02/1205	SO		X	X	X								Odor
~~633SB03703~~	~~G633SB037~~				~~2-28-02/~~	~~SO~~		~~X~~	~~X~~	~~X~~	Not	Sampled						
633SB03803	G633SB038	A	4	5	2-28-02/1415	SO	6	X	X	X								
633SB03903	G633SB039	B	4	5	2-28-02/1435	SO	6	X	X	X								
633SB04003	G633SB040	C	4	5	2-28-02/1455	SO	6	X	X	X			RUSH!					
633SB04103	G633SB041	D	4	5	2-28-02/1510	SO	6	X	X	X								
633SB04203	G633SB042	E	3	4	2-28-02/1530	SO	6	X	X	X								
633EB031M3	G633EB031				2-28-02/1420	SQ	6				X	X	X					EB
633TB031M3	G633TB031				Lab	SQ	3				X							TB
																		RCRA Complete

Sampled By: Chris Blundy Date/Time: 2-28-02/

Additional Samplers: A. OConor

Relinquished by: [signature] Date/Time: 2-28-02/170

Received By Lab: [signature] Date/Time: 3/1/02 0835

Relinquished by: Date/Time

Received: Date/Time

Shipped Via: UPS FedEx Hand Other Tracking#:

Special Exceptions:

CH HILL Chain of Custody/ Laboratory Analysis Form

COC Tracking #: ZG633-071702-01

Laboratory: GEL

Project Name: Charleston Navy Complex

Site Name: Zone G, AOC 633

Project Number: 158814.PM.04

TAT: ASAP

Project Manager: Tom Beisel

QA Level: level 3

Address: GNV: 3011 SW Williston Rd., Gainesville, FL 32605

ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278

Send Report To: see last page of COC

EDD: CNC format

Lab Batch/SDG: 162027 - 162027

Sample ID	Station ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	VOCs (SW8260B) 3 - 40mL vial, HCl	PCBs (SW8082) 2 - 1L amber	VOCs (SW8260B) 3 - 5g Encore & 1 - 2oz. Jar	PCBs (SW8082) 1 - 4 ounce jar	VOC's encore	PCB's amber					Comments
633SB045_04	G633SB045	Contamination			7-26 0730	SO	4			X	X							
633SB046_04	G633SB046	"			7-26 0735	SO	4			X	X							
633SB047_04	G633SB047	"			7-26 0740	SO	4			X	X							
633SB048_04	G633SB048	"			7-26 0745	SO	4			X	X							
~~633SB048_~~	~~G633SB048~~					~~SO~~				~~X~~	~~X~~							
633SB049_01	G633SB049				7-26 0750	SO	4			X	X							Dumpster Sample
~~633SB050_~~	~~G633SB050~~					~~SO~~				~~X~~	~~X~~							
633EB045M5	G633EB045	NOT PROVIDED				~~SO~~		~~X~~	~~X~~									~~EB~~
~~633TB045M5~~	~~G633TB045~~					~~SO~~	~~5~~	~~X~~				~~X~~	~~X~~					~~TB~~
633VADRMMW	G633VADRM	Water			7/26/02 1100	W	5					X	X					

↳ 200207332584-64299

↳ 200207332585-64298

Sampled By: Brian Crawford

Date/Time: 7-26-02 / 1300

Relinquished by: [signature]

Date/Time: 7/26/02 1235

Additional Samplers:

Received By Lab: J M Harley

Date/Time: 7/26/02 1235

Relinquished by:

Date/Time

Received By:

Date/Time

Shipped Via: UPS FedEx Hand Other Tracking#:

Receipt Exceptions:

CH2M HILL Chain of Custody/ Laboratory Analysis Form

COC Tracking #: **ZG633-051602-01** page 1 of 2

Laboratory: GEL

Project Name: Charleston Navy Complex

Site Name: Zone G, AOC 633

Project Number: 158814.PM.04

TAT: ~~14 day results~~ 24 for VOCs 72 for SVOCs

Project Manager: Tom Beisel

QA Level: level 3

Address: GNV: 3011 SW Williston Rd., Gainesville, FL 32605

ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278

Send Report To: see last page of COC

EDD: CNC format

Lab Batch/SDG: 61538%/61539%

61538%

Sample ID	Station ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	VOCs (SW8260B) 3 - 40mL vial, HCl 61538%	SVOCs (SW8270C) 1L amber 61539%	PCBs (SW8082)									Comments
633ZA001M4	G633ZA001	elec conduit water			6-5-02 / 1300	WW	5	X	X	X									only 2 1L amber collected b/c of lack of water
																			FAX Results to Brian Crawford (843) 740-2785

Sampled By: BC

Date/Time: ~~5/6/02~~ 1600 June 5 2002

Relinquished by: Date/Time

Additional Samplers:

Received By Lab: Julie Robinson

Date/Time 6/5/02 1600

Relinquished by: Date/Time

Received By: Date/Time

Shipped Via: UPS FedEx Hand Other Tracking#:

Receipt Exceptions:

CH HILL Chain of Custody/ Laboratory Analysis Form

COC Tracking #: ZG633-012102-01

2

Lab Batch/SDG:

Laboratory: STL

Project Name: Charleston Navy Complex

Site Name: Zone G, AOC 633

Project Number: 158814.PM.04

TAT: 1-QTAT-3

Project Manager:

QA Level: level 3

Address: GNV: 3011 SW Williston Rd., Gainesville, FL 32605

ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278

Send Report To: see last page of COC

EDD: CNC format

Sample ID	Station ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	PCBs (SW8082) 1 - 1L amber	SVOCs (SW8270C0 1 - 1L amber	VOCs (SW8260B) 3 - 40mL vial, HCl								Comments
633GA001M1	G633GA001	grab			1-21-02 1300	WG	5	X	X	X								sample collected during soil excavation
																		* Sample has small amount of product x * *
																		RCRA finished surface

Sampled By: Brian Crawford Date/Time: 1-21-02 1400

Relinquished by: Andrew O'Connor Date/Time: 1-21-02/1510

Additional Samplers: Chris Day

Received By Lab: [signature] Date/Time: 1-22-02 8:34

Relinquished by: Date/Time

Receipt Exceptions: S2-40444

CH2M HILL Chain of Custody/ Laboratory Analysis Form

COC Tracking #: ZG633-013102-01 page 1 of 2

Laboratory:	STL
Project Name:	Charleston Navy Complex
Site Name:	Zone G, AOC 633
Project Number:	158814.PM.04
TAT:	1-QTAT-3
Project Manager:	
QA Level:	level 3
Address:	GNV: 3011 SW Williston Rd., Gainesville, FL 32605
	ATL: 115 Perimeter Center Place NE, Suite 700, Atlanta, GA 30346-1278
Send Report To:	see last page of COC
EDD:	CNC format

Lab Batch/SDG:

Sample ID	Station ID	Sample Description	Depth Begin	Depth End	Date & Time Collected	Matrix	# of containers	PCBs (SW8082)	SVOCs (SW8270C)	FID Fuel Fingerprint	VOCs (SW8260B)							Comments
								1 - 125 glass jar			1 - 125mL jar							
633WA001M1	G633WA001	grab			2-4-02/1435	OL	2	X	X	X	X							non-aqueous liquid
																		Sample product only
																	→	RCRA
																		sample complete

Sampled By: ANDREW O'CONOR Date/Time: 2-4-02/1435

Relinquished by: [signature] Date/Time: 2-4-02/1600

Additional Samplers:

Received By Lab: [signature] Date/Time: 020502 0953

Relinquished by: Date/Time

Received By: Date/Time

Shipped Via: UPS FedEx Hand Other Tracking#:

Re[illegible]t Exceptions:

WASTE MANAGEMENT

OAKRIDGE LANDFILL
2183 Highway 78, Dorchester, SC 29437
Tel 843-563-2607 Fax 843-563-3378

Fax copy to
843-740-2785
AOC 653

SPECIAL WASTE MANIFEST
APPROVAL # OR 0204001
EXPIRATION 04/01/2003

WASTE ID #'S 5V01-70 (Southern Division Naval Facility)

Generator: PEPPERHILL PROCESSING TSF FACILITY

Account Number: 490-148

Location / Address: 141 FENNELL RD N CHARLESTON SC 29418

Tele Number: 843-552-8306 **Contact:** JENNIFER CRIM

Generator Signature:

********** TO BE COMPLETED BY TRANSPORTER **********

Transporter of Waste: FENN VAC **Truck #** 110

Date: 8-21-02 **Driver Signature:**

********** TO BE COMPLETED BY OAKRIDGE LANDFILL **********

Disposal Site: Oakridge Landfill DWP 130

Description of Waste: SLD/NON REGULATED SLUDGE (SOLIDFIED)

Ticket Number: 99 1653 **Tonnage:** 17.84

Received by: J Roane **Date:** 8/21/02

OAKRIDGE LANDFILL
2183 Highway 78, Dorchester, SC 29437
Tel 843-563-2607 Fax 843-563-3375

Dumpster # FV115
AOC 633

SPECIAL WASTE MANIFEST
APPROVAL # OR 0104004
EXPIRATION 04/06/2002

WASTE ID #'S FV01-70 (Sludge Division)

Generator: FENNELL PROCESSING & TRANSFER

Account Number: 490-148

Location / Address: 141 FENNEL ROAD N CHARLESTON SC (18)

Tele Number: 843-552-8506 **Contact:** JENNIFER CRIM

Generator Signature: [signature]

********** TO BE COMPLETED BY TRANSPORTER **********

Transporter of Waste: FENN – VAC **Truck #** 382

Date: 3-20-02 **Driver Signature:** [signature]

********** TO BE COMPLETED BY OAKRIDGE LANDFILL **********

Disposal Site: Oakridge Landfill DWP 130

Description of Waste: SLD / NON-REGULATED SLUDGES

Ticket Number: 979504 **Tonnage:** 8.89

Received by: [signature] **Date:** 3/20/02