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SUPPLEMENTAL ASSESSMENT REPORT FORMER AST45-S781 SITE 84 MCB CAMP
LEJEUNE NC
7/1/2011
CH2M HILL

Supplemental Assessment Report Former AST45-S781 at IR Site 84

**Marine Corps Base Camp Lejeune
Jacksonville, Onslow County, North Carolina**

Contract Task Order Number: WE31

July 2011

Prepared for

**Department of the Navy
Naval Facilities Engineering Command
Mid-Atlantic**

Under

**NAVFAC CLEAN 1000 Program
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Prepared by



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Acronyms and Abbreviations

AS	air sparging
AST	above ground storage tank
ATEC	ATEC Environmental, Inc.
bgs	below ground surface
CamLej	Camp Lejeune
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CP&L	Carolina Power and Light
DoD	Department of Defense
DOT	Department of Transportation
DRO	diesel range organics
EPH	extractable petroleum hydrocarbon
Fm	formation
ft	foot/feet
ft/day	feet per day
GRO	gasoline range organics
IDW	investigation-derived waste
IR	Installation Restoration
IRP	Installation Restoration Program
LSA	Limited Site Assessment
LUC	land use control
µg/kg	micrograms per kilogram
MADEP	Massachusetts Department of Environmental Protection
mg/kg	milligrams per kilogram
MCB	Marine Corps Base
MSCC	Maximum Soil Contaminant Concentration
NAVFAC	Naval Facilities Engineering Command Mid-Atlantic
NCDENR	North Carolina Department of Environment and Natural Resources
NCGWQS	North Carolina Groundwater Quality Standards
NFA	No Further Action
NRP	Notice of Residual Petroleum
NTCRA	non-time critical removal action
O&G	Oil & Grease
OBG	O'Brien & Gere Engineers, Inc.
ONWASA	Onslow County Water and Sewer Authority
ORP	oxidation reduction potential

OU	Operable Unit
PCB	polychlorinated biphenyl
SAR	Supplemental Assessment Report
SVE	Soil Vapor Extraction
SVOC	semivolatile organic compound
TPH	total petroleum hydrocarbon
U.S.	United States
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
VPH	volatile petroleum hydrocarbons

Purpose of Investigation

The purpose of this Supplemental Assessment Report (SAR) is to provide the North Carolina Department of Environment and Natural Resources (NCDENR) Underground Storage Tank (UST) section with the necessary information to classify the level of environmental risk associated with a petroleum release at former above ground storage tank (AST) 45-S781 within the existing Operable Unit (OU)-14, Installation Restoration (IR) Site 84. This SAR was conducted by CH2M HILL for the Naval Facilities Engineering Command Mid-Atlantic (NAVFAC), in accordance with the July 2007 NCDENR UST Section *Guidelines for the Investigation and Remediation of Contamination from Non-UST Petroleum Releases (AST Guidelines)* with soil and groundwater regulatory standards updated in January 2010 (NCDENR, 2010a and 2010b) and the *Work Plan for Phase I Limited Site Assessments and Administrative Closure at UST/AST Sites* (CH2M HILL, 2010).

Site Information

1.1 Site Identification

Date of Report:	June 2011
EPA ID#	NC6170022580
Incident #	94030
Site Name:	Former AST45-S781 at Installation Restoration (IR) Site-84
Location:	MCB Camp Lejeune, Onslow County, North Carolina
Nearest City/Town:	Jacksonville
Risk Classification/ Priority Ranking:	Pending
Land Use Category:	Commercial/Industrial
Responsible Party/ Current Property Owner	Commanding Officer – MCB Camp Lejeune I&E/EMD/EQB PSC 20004 MCB CamLej, NC 28542-0004
Contact:	Ms. Erin Atkins (910) 451-9641
Consultant/Contractor:	CH2M HILL, Inc. 11301 Carmel Commons Blvd., Suite 304 Charlotte, NC 28226

1.2 Release Information

Date Release Discovered:	1992
Estimated Quantity of Release:	Unknown
Potential Source of Release:	Former AST and associated piping
Size and Content of UST:	176,000-gallons of fuel/waste oil
Latitude and Longitude:	N 34° 43' 53.04" W 77° 21' 5.04"

1.3 Report Certification

Report Prepared by:

David Lubell for

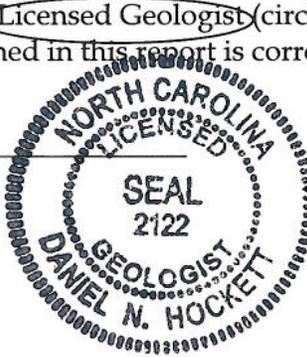
David Lubell
Associate Hydrogeologist

Report Reviewed/Certified by:

I, Daniel Hockett a certified Professional Engineer/Licensed Geologist (circle one) for CH2M HILL, do certify that the information contained in this report is correct and accurate to the best of my knowledge.

Daniel Hockett

Daniel Hockett, P.G.
NC License No. 2122



Site Information

2.1 Site Description

Marine Corps Base Camp Lejeune (MCB CamLej or Base) encompasses approximately 236 square miles of land in Onslow County, North Carolina, adjacent to the southern boundary of the City of Jacksonville (**Figure 1-1**). Jacksonville is the largest city near MCB CamLej and contains approximately half of the county's total population. Since 1990, much of the MCB CamLej complex has been part of Jacksonville. The remaining areas adjacent to the Base are generally rural. The Base is bordered by the Atlantic Ocean to the south, United States (U.S.) Route 17 to the west, State Route 24 to the north, the town of Hubert, North Carolina, to the east, and is bisected by the New River, which flows into the Atlantic Ocean in a southeasterly direction.

The former AST45-S781 was located near Midway Park at MCB CamLej (**Figure 1-2**). The site is currently an open, grassy area located along the northern boundary of MCB CamLej, immediately south of the former railroad line, and parallel to North Carolina Highway 24 (Lejeune Boulevard). The site is located within the bounds of an IR Program (IRP) site, managed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program, known as Site 84.

2.2 Site History

AST45-S781 was a 176,000 gallon AST located near Building 45, which was constructed by the Navy in 1941. Building 45, AST45-S781, and the surrounding property were leased to Tidewater Electric (later Carolina Power and Lighting [CP&L]) for power plant operations from 1941 until 1965. During this time, AST45-S781 was used to store fuel oil. Two electrical substations still exist and operate approximately 400 feet (ft) south of the current site. Four USTs, UST45, UST45-1, UST S941-1, and UST S941-2, were also associated with Building 45. These tanks, removed between 1992 and 1999, are discussed in detail in Section 2.3.

Following transfer of the property back to the Navy in 1965 upon lease expiration, Building 45 was converted to a maintenance facility and used to service large machinery operated by the Marines. Building 45 operated until 1992 and was demolished in 1999. During its operation by the Marines, AST45-S781 was used to store waste oil, primarily related to diesel engine maintenance and repair activities. The AST45-S781 system consisted of the AST, a pump house, and associated product lines connecting the tank to former Building 45. A pump leak occurred in 1988 and reportedly resulted in excavation of impacted soils within the immediate area of the tank. AST45-S781 was taken out of service and emptied in 1988 (OBG, 1992).

In November 1990, Dewberry & Davis conducted preliminary site investigations to evaluate soil and groundwater quality and detected total petroleum hydrocarbons (TPHs) in three subsurface soil samples at concentrations exceeding North Carolina action levels (Dewberry & Davis, 1991). The highest detected concentration of TPH, 2,200 milligrams per kilogram

(mg/kg), was detected in a sample collected from along the underground piping northwest of Building 45, from 0 to 5 ft below ground surface (bgs). Contaminants were not detected above method detection limits in the groundwater samples collected during the investigations.

Additional site investigations to assess subsurface impacts in the vicinity of former AST45-S781 were conducted in 1991 and 1992 by O'Brien & Gere Engineers, Inc. (OBG) and by ACS Environmental Management in 1992. In 1991, OBG collected soil samples that contained TPH at concentrations ranging from 4.32 to 12,000 mg/kg, with the highest concentration detected in a sample collected from soil boring B-4, located immediately downgradient, or west, of former AST45-S781. As a result, OBG recommended soil excavation in the vicinity of the former AST. In April 1992, ACS Environmental Management collected additional soil samples from 0 to 5 ft bgs in the area south of the tank, near the pipeline leading to the pump house and south of the pump house. TPH was detected at concentrations ranging from 1,200 to 2,400 mg/kg. In October 1992, OBG conducted soil and groundwater assessments, which reported TPH concentrations in soil ranging from 2.0 mg/kg to 59.0 mg/kg, exceeding TPH action levels. Concentrations of target analytes in groundwater samples were reported to be below method detection limits. The tank, foundation, and the associated brick retaining wall were all dismantled and removed from the site in 1992. The pump house was excavated and all piping was capped and abandoned in-place. Soils were not removed or excavated (OBG, 1992).

In a letter dated April 4, 1994 (**Appendix A**), the site was transferred from the UST Program to the IRP due to its location within the IRP Site 84 boundary where soil removal actions were taking place in the vicinity of Building 45 UST locations.

A Phase I non-time critical removal action (NTCRA) was conducted in 2002, and included excavation of soil from beneath former Building 45 and the vicinity of UST-45 and UST-45-1. Additional soil removal actions outside of this area were recommended based upon detection of polychlorinated biphenyls (PCBs) in soil. Thus, Phase II and III NTCRAs were conducted in 2004 and 2006, near the location of former AST45-S781 (RHEA, 2007). Following removal of approximately 18,000 tons of PCB- and TPH-impacted soil, the Phase II NTCRA confirmatory sample results indicated TPH was detected at a concentration greater than 10 mg/kg in one sample collected from the vicinity of AST45-S781 (TMS/Baker, 2005). The Phase III NTCRA focused on PCBs in soils and did not further evaluate TPH impacts at the site (RHEA, 2007).

In a letter dated May 3, 2007 (**Appendix A**), the site was transferred back to the UST Program in response to the completion of remedial actions at IRP Site 84. The NCDENR AST Incident Management Database indicates that former AST45-S781 is identified as incidents #85357 and #94030. TPHs detected in soil along the former railroad line near North Carolina Highway 24 were associated with Incident #85357, addressed under IRP Site 84, and closed out on December 27, 2005. Additional petroleum hydrocarbon impacts related to the former AST45-S781 were associated with incident #94030.

2.3 Associated Release Information

Four former USTs, UST-45, UST 45-1, UST S941-1, and UST S941-2, were associated with former Building 45 (**Figure 1-2**). UST-45 (Incident #32317; also referred to in historical

documentation as UST-45-2) was a 500-gallon #2 heating oil tank supplying Building 45 that was installed in 1980 and removed in 1999 (Catlin Engineers and Scientists [Catlin], 2008). UST 45-1 (Incident #21669) was a 1,000-gallon waste oil storage tank that was installed in 1980, taken out of service in 1989, and removed in 1993. USTs S941-1 and S941-2 and their associated piping (Incident #22890) were originally installed in 1941. UST S941-1 was a 6,000-gallon diesel tank and S941-2 was a 1,000-gallon gasoline tank. Both UST S941-1 and S941-2 were excavated and removed in October 1992.

According to the 2008 *Catlin UST 45 – Soil Summary Letter*, sites UST-45 (Incident #32371), UST-45-1 (Incident #21669), and UST S941-1/2 (Incident #22890) were recommended for No Further Action (NFA) status (Catlin, 2008). An electronic correspondence from the UST Section Wilmington Regional office, dated November 3, 2008, indicates these subject site incidents could be closed with a Notice of Residual Petroleum (NRP). The NRP associated with former Building 45 USTs was completed by Catlin, approved by NCDENR, and recorded in the Onslow County Register of Deeds office on March 30, 2011. The NRP restricts land use for soil and groundwater, and includes the former AST-45/S781 site (**Appendix A**).

2.3.1 UST-45 Investigation

Former UST-45 (**Figure 1-2**) was located adjacent to Building 45. The tank was removed by J.A. Jones Environmental Services in July 1999, at which time confirmatory soil samples were collected from the base and sidewalls of the UST excavation. Approximately 8 tons of impacted soil was removed during UST removal activities (J.A. Jones, 1999). TPH-diesel range organics (DRO) were detected at concentrations exceeding the North Carolina action level in three of the five soil samples. TPH-gasoline range organics (GRO) were detected at concentrations exceeding the North Carolina action level in one of the five soil samples.

In a letter dated August 7, 2000, MCB CamLej notified NCDENR that Site UST-45 would be transferred to the IRP because the UST site was located within the boundary of Site 84. The letter further stated that a Limited Site Assessment (LSA) would not be conducted, and all additional investigations in the vicinity of UST-45 would be conducted under the IRP. In May 2007, the site was transferred back to the UST Program following completion of remedial actions at IRP Site 84.

2.3.2 UST 45-1 Investigation

UST 45-1 was located adjacent to the south side of Building 45 (**Figure 1-2**). The UST was removed in June 1993 by Peele's Pump and Tank Company (Peele's, 1993). The UST Closure Report (ARM, 1993) noted leakage and staining in the tank-pit excavation, and TPH Oil & Grease (O&G) was detected in one confirmatory soil sample (4,500 mg/kg) collected from the base of the excavation, exceeding the respective NCDENR action level. Groundwater samples were not collected at the time of the UST removal. Approximately 83 tons of petroleum-impacted soil was excavated during UST closure activities.

In June 1994, soil and groundwater in the vicinity of the former UST were assessed by R.E. Wright Associates, Inc (REWAI, 1994). TPH O&G concentrations were detected above the North Carolina action level (250 mg/kg) in five soil samples collected during monitoring well installation. Benzene was detected in one groundwater sample at a concentration exceeding the North Carolina Groundwater Quality Standards (NCGWQS).

In a letter dated September 20, 2000, MCB CamLej notified NCDENR that Site UST 45-1 would be transferred to the IRP and managed under Site 84 because the UST site was located within the boundary of Site 84. The letter further stated that an LSA would not be conducted, and all additional investigations in the vicinity UST 45-1 would be conducted within the guidelines of the IRP. In May 2007, UST 45-1 was transferred back to the UST Program following completion of remedial actions at Site 84.

2.3.3 UST S941-1/2 Investigation

USTs S941-1 and S941-2 were located approximately 100 ft southeast of former Building 45 (**Figure 1-2**). In June 1990, UST S-941-2 reportedly failed a leak detection test, and a subsequent test of the tank indicated the leak was from a product pipe associated with the tank. Both USTs S941-1 and UST S941-2 and their associated piping and components were excavated and removed in October 1992 by Jones and Frank, Inc.

In August 1991, an investigation conducted by ATEC Environmental, Inc. (ATEC) indicated that soil and groundwater near USTs S941-1 and S941-2 were impacted with petroleum hydrocarbons. Additional site investigations were conducted to delineate the extent of the effects on soil and groundwater. The findings of these investigations were utilized in the development of a Corrective Action Plan (CAP) by Law Engineering, Inc. in 1996, which recommended air sparging/soil vapor extraction (AS/SVE) as the remediation strategy. An AS/SVE system operated south of AST45-S781 from April 1998 through November 2006 (Catlin, 2008).

In June 2002, Shaw Infrastructure and Environmental, Inc. (Shaw) excavated soils to a depth of approximately 12 ft bgs from the tank basins of former USTs S941-1 and S941-2 (**Figure 1-2**). This effort was intended to remove remaining vadose zone petroleum-hydrocarbon-impacted soil. In May 2006, Catlin collected soil samples from two soil borings installed in the tank basins of former USTs S941-1 and UST S941-2. Laboratory data indicated contaminants were detected below the Respective Maximum Soil Contaminant Concentrations (MSCCs).

Receptor Information

3.1 Water Supply Wells

There are no water supply wells located within 1,500-ft of former AST45-S781 (**Figure 2-1**). The nearest water supply well is PSW-HP704, located approximately 1,850 ft to the south.

3.2 Public Water Supplies

There are no public water supply sources present within 1,500-ft of former AST45-S781. The nearest public supply well is PSW-HP704, located approximately 1,850 ft south of the site (**Figure 2-1**). Potable water is primarily supplied by five separate Base water supply systems and the Onslow County Water and Sewer Authority (ONWASA). The site and surrounding area are supplied by the Holcomb Boulevard Water Treatment System (Public Water Supply Identification# 04-67-043).

The Holcomb Boulevard community water system obtains groundwater from 21 supply wells located on-Base. Groundwater is pumped from the Castle Hayne aquifer, approximately 180 ft bgs, to the Holcomb Boulevard Water Treatment Plant prior to distribution to customers. Although freshwater is present within the Surficial, Castle Hayne, Beaufort, and Peedee aquifers, all of which are present beneath MCB CamLej, only the Castle Hayne aquifer is used by MCB CamLej as a water supply source (Cardinell et al., 1993).

3.3 Surface Water

There is no surface water body located within 500 ft of former AST45-S781. The nearest surface water body is Northeast Creek, located approximately 650 ft west of the former AST location (**Figure 2-2**).

3.4 Wellhead Protection Area

The nearest wellhead protection area associated with MCB CamLej water supply well PSW-HP704, is located approximately 1,250 ft south of AST45-S781 (AHEC, 2002). There are no other wellhead protection areas within 1,500 ft (**Figure 2-1**).

3.5 Deep Aquifers in the Coastal Plain Physiographic Region

Southeastern North Carolina and MCB CamLej are within the Tidewater region of the Atlantic Coastal Plain physiographic province. Within the MCB CamLej area, approximately 1,500 ft of sediment overlies the basement rock. These sediments contain seven aquifers and their associated confining units, including the Surficial, Castle Hayne, Beaufort, Peedee, Black Creek, and Upper and Lower Cape Fear aquifers (Cardinell et al., 1993).

A generalized summary of aquifers in the vicinity of the source area is listed in **Table 3-1**.

TABLE 3-1
Deep Aquifers of the Coastal Plain

Hydrogeologic Unit	Approximate Depth Interval (ft bgs)
Surficial Unit	8 to 25
Castle Hayne Confining Unit	25 to 45
Castle Hayne Aquifer	45 to 180

The nearest area of groundwater discharge downgradient from the site is Northwest Creek, located approximately 720 ft west of the source area.

3.6 Subsurface Structures

Subsurface utilities such as water, gas, telephone, power, and cable are typically constructed at shallow depths in this area (often 3- to 5-ft below grade). Several utilities are located in the vicinity of former AST45-S781, near the former Building 45 footprint (Figure 1-2 and 2-1). There were no basement structures observed in the surrounding area. The threat of an explosion caused by the accumulation of vapors emanating from an underground contaminant source into a confined space is not likely. Because the concentrations of volatile contaminants were so low, vapors from an underground source of contamination are not likely to pose a serious threat to public health, public safety, or the environment.

3.7 Property Owners and Occupants

MCB CamLej is U.S. Government property and owned and operated by the Department of Defense (DoD). AST45-S781 was located near the former Building 45 footprint within the IRP Site 84 boundary. Property owner and occupant information is presented in **Table 3-2**.

TABLE 3-2
Property Owners and Occupants

Tax Parcel Number	Owner/Occupant Name	Address
Unknown – 236 square miles of land within MCB CamLej	Commanding General – MCB CamLej, NC	I&E/EMD/EQD PSC 20004 MCB Camp Lejeune, NC 28542

Geology and Hydrogeology

Site geology and hydrogeology information is based on previous investigations and information collected as part of this SAR.

4.1 Site Geology

Most investigations at Site 84 and AST45-S781 have been conducted within the shallow soils of the undifferentiated formation (Fm). These shallow sediments consist of varying amounts of sands and silts with minor amounts of clay extending to approximately 20 ft bgs. Varying amounts of fill material associated with former Building 45 have been observed at shallow depths, down to roughly 2 ft. Investigations across MCB CamLej indicate the undifferentiated Fm is underlain by fine- to medium-grained sands with intermittent beds of partially cemented and shelly sand associated with the River Bend and Castle Hayne Fms.

The soil boring log associated with AST45-S781-SB01 is included in **Appendix B**.

4.2 Site Hydrogeology

Previous investigations conducted at the site have focused upon the Surficial aquifer and the underlying Castle Hayne aquifer, which occur within the shallow deposits of the undifferentiated Fm, and the River Bend and Castle Hayne Fms, respectively. The Belgrade Fm, which acts as a confining unit between the Surficial and the Castle Hayne aquifers in some areas of MCB CamLej, is encountered only in localized areas and is not present at AST45-S781.

The hydraulic conductivity values for the upper Surficial aquifer in the vicinity of the former Building 45 at IRP Site 84 range from 0.48 feet per day (ft/day) to 1.0 ft/day. Those for the Castle Hayne aquifer range from 14 to 91 ft/day. Linear seepage velocity values have been calculated using effective porosity values for silts and sands in the range of 20 percent. The seepage velocity within the Surficial aquifer in the vicinity of former Building 45 was estimated to range from 0.13 ft/day to 0.2 ft/day (Baker, 2002).

During the December 2010 sampling event, depth to water was measured in monitoring well IR84-MW17 at 10.43 ft bgs, while the historic high water table elevation for IR84-MW17 was measured at 8.30 ft bgs. Shallow groundwater flows generally westward towards Northeast Creek.

Soil Investigation

The SAR investigation included the installation and sampling of one soil boring, AST45S781-SB01, and groundwater sampling of one existing monitoring well, IR84-MW17.

5.1 Soil Sampling

The sample location was selected to evaluate subsurface soil conditions by risk-based methods to determine if TPH-related impacts detected during the 1990 investigation were still present at Site AST45-S781. The soil sample was collected immediately downgradient (west) of former AST45-S781, near the former location of soil boring B-4, which had a TPH concentration of 12,000 mg/kg during the 1991 OBG investigation, exceeding NCDENR TPH action levels. According to the AST Guidelines, “contaminated soil must be cleaned up to the soil-to-groundwater maximum soil contaminant concentrations” (NCDENR, 2010a), therefore risk based analytical methods were selected in place of TPH method analyses as part of this SAR. Additionally, TPH and PCB impacted soil were removed as part of the Phase II and III NTCRA as previously discussed (RHEA, 2007). Pesticides analysis was not performed because pesticides were characterized and addressed as part of the IR84 Remedial Investigation (CH2M HILL, 2002).

The subsurface soil sample (AST45S781-SB01-4-5-10D) was collected using a stainless steel hand auger from 4 to 5 ft bgs. This sample interval was selected because it was approximately 3 ft above the historic minimum depth to water (8.30 ft bgs) recorded in nearby monitoring well IR84-MW17.

The soil sample was analyzed for the following compounds by the following laboratory methods:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260B
- Semivolatile organic compounds (SVOCs) by USEPA Method 8270D
- Volatile petroleum hydrocarbons (Massachusetts Department of Environmental Protection [MADEP] VPH)
- Extractable petroleum hydrocarbon (MADEP EPH)
- Total chromium and lead by USEPA 3050C with 3051A preparation

A portion of the sample intended for VOC analysis was field-preserved by field preparation method 5035 to limit volatilization of VOCs. The remaining soil sample was placed into a stainless steel bowl, homogenized, and then transferred into the appropriate bottleware. The soil samples were placed into an ice-filled sample cooler, accompanied by chain-of-custody information, and shipped by overnight courier to Katahdin Analytical Services in Scarborough, Maine.

5.1.1 Soil Analytical Results

A summary of analytes detected in soil is presented in **Table 5-1**. The complete analytical laboratory report is included in **Appendix C**. The appropriate soil cleanup criteria for AST releases is the Soil-to-Groundwater MSCCs specified in Table 3 of the NCDENR *Guidelines for the Investigation and Remediation of Contamination from Non-UST Petroleum Releases* (NCDENR, 2007).

The soil analytical results included:

- One VOC, acetone, was detected above method detection limits; however, the concentration was below the Soil-to-Groundwater MSCC.
- There were no SVOCs detected above method detection limits.
- Chromium and lead were detected in the soil sample; however, only the total chromium concentration (7.1 mg/kg) exceeded the Soil-to-Groundwater MSCC. This was below the two times mean Base Background concentration of 14.5 mg/kg. Therefore, the chromium concentration in the soil sample is likely naturally occurring and not anthropogenic.
- Aliphatic hydrocarbon fraction ranges C9-C18 (360 mg/kg) and C19-C36 (560 mg/kg) were detected above method detection limits; however, the C9-C18 fraction range is below the respective Soil-to-Groundwater MSCC (540 mg/kg) and the C19-C36 fraction is considered immobile with no applicable standard.
- The aromatic hydrocarbon fraction, C11-C22, was detected at 37,000 micrograms per kilogram ($\mu\text{g}/\text{kg}$) and exceeded the Soil-to-Groundwater MSCC of 31,000 $\mu\text{g}/\text{kg}$. The C11-C22 aromatic concentration is also below the Residential MSCC and Industrial/Commercial MSCCs currently applicable to UST petroleum releases.

5.2 Groundwater Sampling

One groundwater sample was collected from monitoring well IR84-MW17 on December 1, 2010 (**Figure 2-1**). This monitoring well is located adjacent to the former AST footprint and was considered the source area monitoring well for this SAR investigation.

The monitoring well was purged and sampled using a submersible bladder pump equipped with new ¼-inch inner diameter polyethylene tubing. The sample intake was placed in the middle of the water column within each well. Water quality parameters including pH, temperature, oxidation reduction potential (ORP), turbidity, and conductivity were monitored using a calibrated YSI 556 multi-parameter flow-through cell and recorded on groundwater sampling data sheets. Groundwater sampling sheets are included in **Appendix D**.

After well purging, a groundwater sample was collected for laboratory analysis of:

- VOCs by USEPA Method 620B
- SVOCs by USEPA Method 625
- Aliphatic and aromatic hydrocarbon fractions by MADEP VPH and EPH

- Total and dissolved chromium and lead by USEPA 6010B with USEPA 3030C preparation

The groundwater samples were placed in laboratory-supplied bottleware, placed into an ice-filled cooler, accompanied by chain-of-custody information, and shipped by Federal Express to Katahdin Laboratories in Scarborough, Maine.

5.2.1 Groundwater Analytical Results

A summary of groundwater analytical results from well IR84-MW17 is presented as **Table 5-2**. The complete analytical laboratory report is included as **Appendix C**.

There were no analytes detected above method detection limits in the groundwater sample collected from IR84-MW17.

5.3 Free Product Investigation and Recovery

Free product was not detected in monitoring well IR84-MW17; therefore, this section is not applicable.

5.4 Investigation-derived Waste Management

Soil and water investigation-derived waste (IDW) generated during SAR field activities was containerized in Department of Transportation (DOT)-approved 55-gallon steel drums and staged at the temporary storage facility located at Parachute Tower Road at the Mainside area of MCB CamLej. IDW was transported and disposed of at an approved waste disposal facility following completion of this project.

Conclusions and Recommendations

6.1 Conclusions

Based on the results of this SAR for the former AST45/S781 tank, the following conclusions are presented:

- There are no water supply wells within 1,500 ft of the former AST45 source area.
- Potable water is supplied by public water supply wells that pump groundwater to the Base water treatment plant prior to distribution.
- The site is not located in a designated well head protection area.
- There is no surface water body located within 500 ft of the source area.
- Free product has not been detected in source area well IR84-MW17.
- The site is currently a vacant grassy area, formerly occupied by Building 45 and associated UST and AST systems, and currently located within the boundary of IRP Site 84. The nearest residential properties are military base housing located approximately 500 ft northeast of the former source area, across Highway 24. LUCs are currently in place, restricting soil and groundwater use and residential or commercial land use development.
- The appropriate cleanup standards are the Soil-to-Water MSCCs and the NCGWQS standards for soil and groundwater, respectively.
- The concentration of total chromium detected in soil samples exceeded the Soil-to-Groundwater MSCC. However, the detected concentration is consistent with background conditions.
- The C11-C22 aromatic concentrations only slightly exceeded the Soil-to-Groundwater MSCC.
- All target analytes for groundwater were detected at concentrations below their respective NCGWQS.

6.2 Recommendations

Based on the field activities and data collected as part of this SAR investigation, **No Further Action** is recommended for this site. Any risks posed by the exceedance of the Soil-to-Groundwater MSCC for C11-C22 aromatics in soil will be managed by the IRP Site 84 Non-Industrial Use LUC boundary and UST45 NRP.

References

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Catlin Engineers and Scientists. 2008. *UST-45 – Soil Summary Letter Report, Marine Corps Base, Camp Lejeune, North Carolina*. October.

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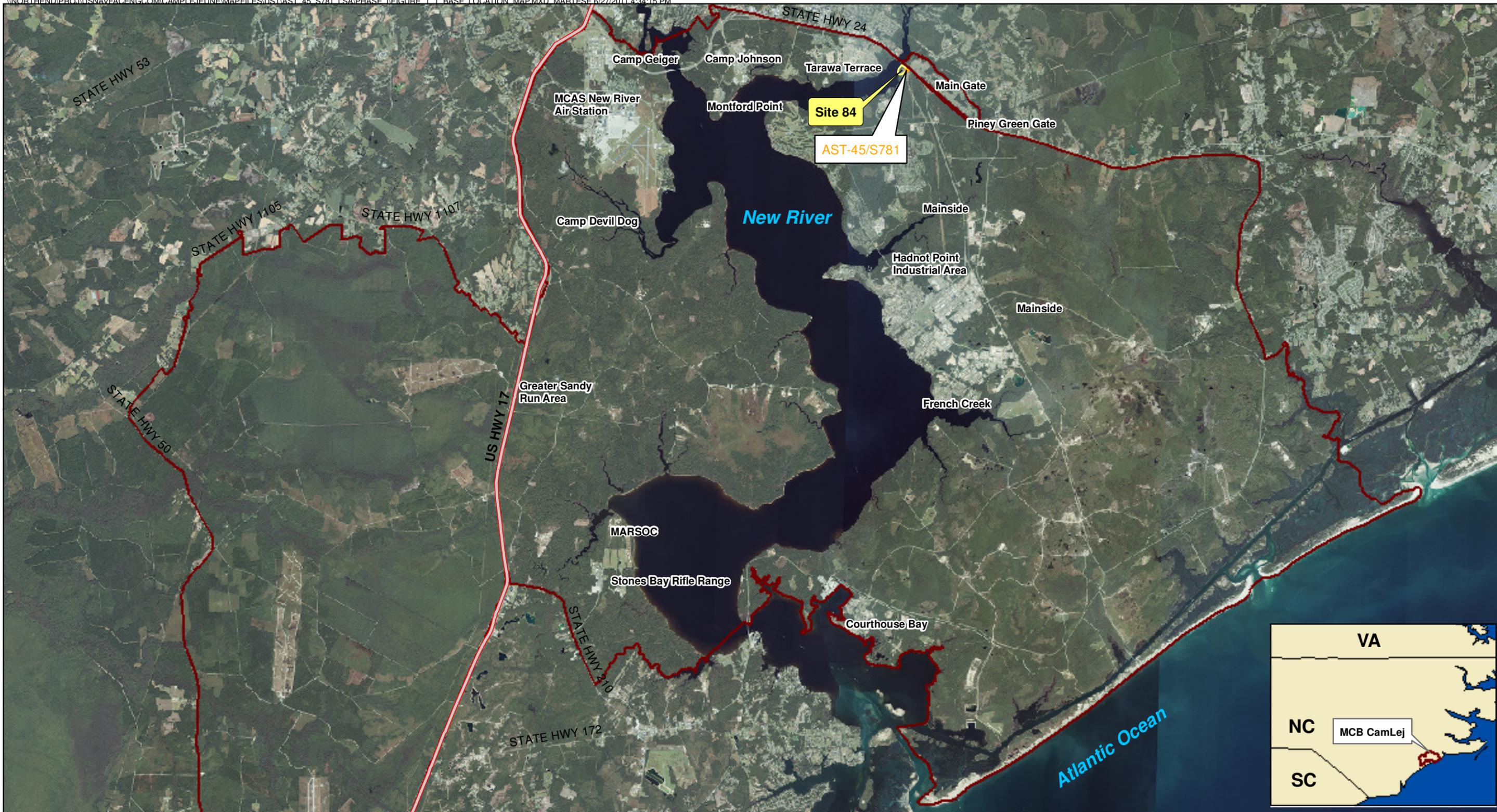
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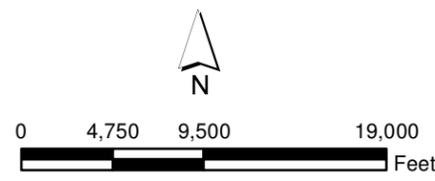
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Figures



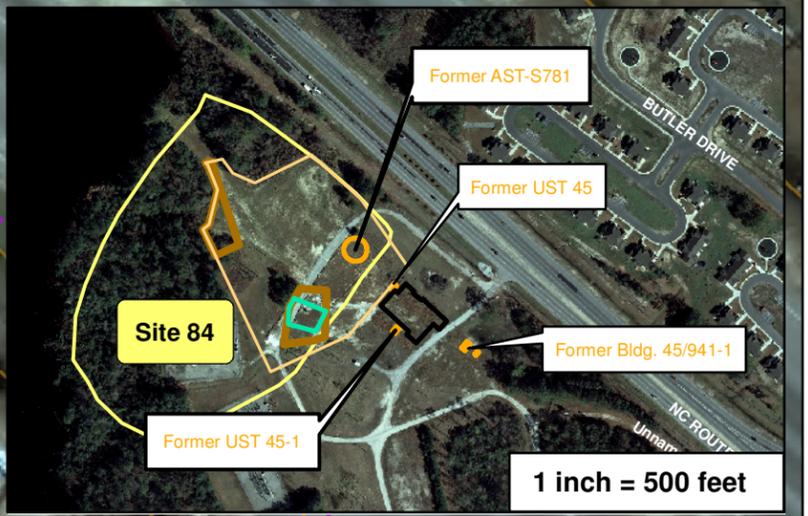
- Legend**
- Highways
 - LSA Sites
 - IR Site Boundaries
 - Installation Boundary



1 inch = 9,500 feet



Figure 1-1
 Base Location Map
 Former AST-45/S781 at IR Site 84
 MCB CamLej
 North Carolina



- Legend**
- Monitoring Well Location
 - Soil Sample Location
 - Storm Sewer Utility Line
 - Storm Sewer Drainage Line
 - Water Utility Line
 - Electrical Utility Line
 - Demolished Buildings
 - Non-Industrial Use Control Boundary
 - Intrusive Activities Control Boundary (Soil)
 - Access Control Boundary
 - Former AS SVE Structure
 - Former AS SVE Line
 - Former AS SVE Point

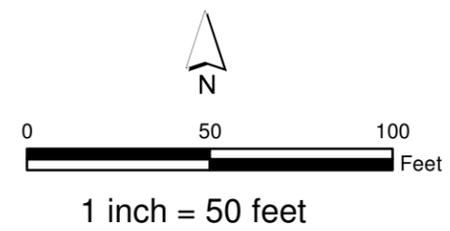
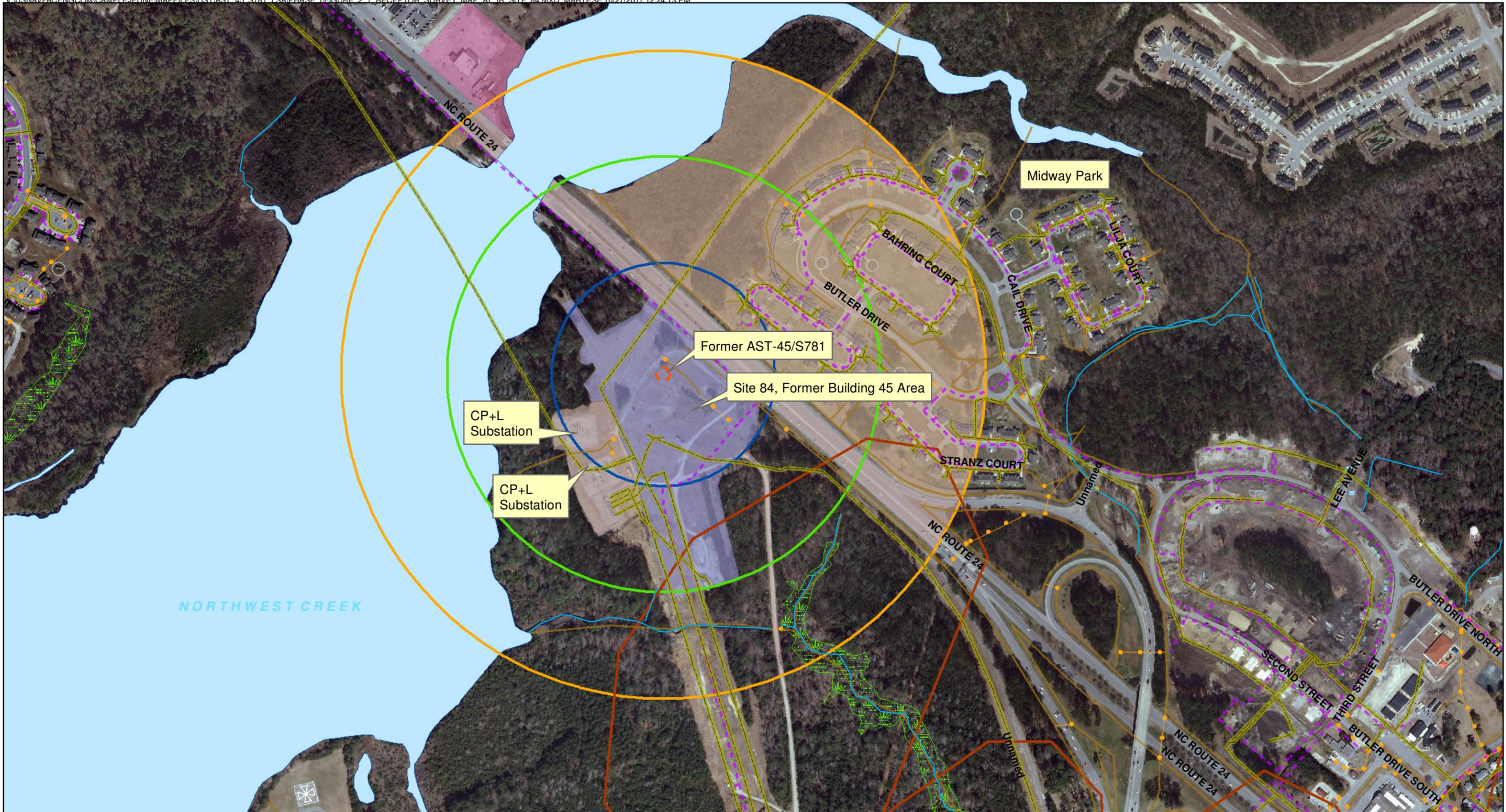


Figure 1-2
Site Map
Former AST-45/S781 at IR Site 84
MCB CamLej
North Carolina

This document contains Controlled Unclassified Information (CUI). The CUI in this document is not for public release and is not to be released to personnel who do not have a valid "need-to-know" without prior approval of an authorized DoD official.





Legend		
Active Public Supply Well	500 foot buffer	Federal Land Use Area
Electrical Utility Line	1,500 foot buffer	Housing and Community Facilities
Water Utility Line	1,000 foot buffer	Supply Facilities
Storm Sewer Utility Line	Wellhead Protection Area	Utilities and Ground Improvements
Storm Sewer Drainage Line		City of Jacksonville Zoning
Surface Water Centerline		Commerical
Surface Water Body Area		
Jurisdictional Wetland Area		

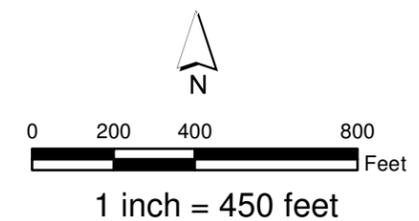
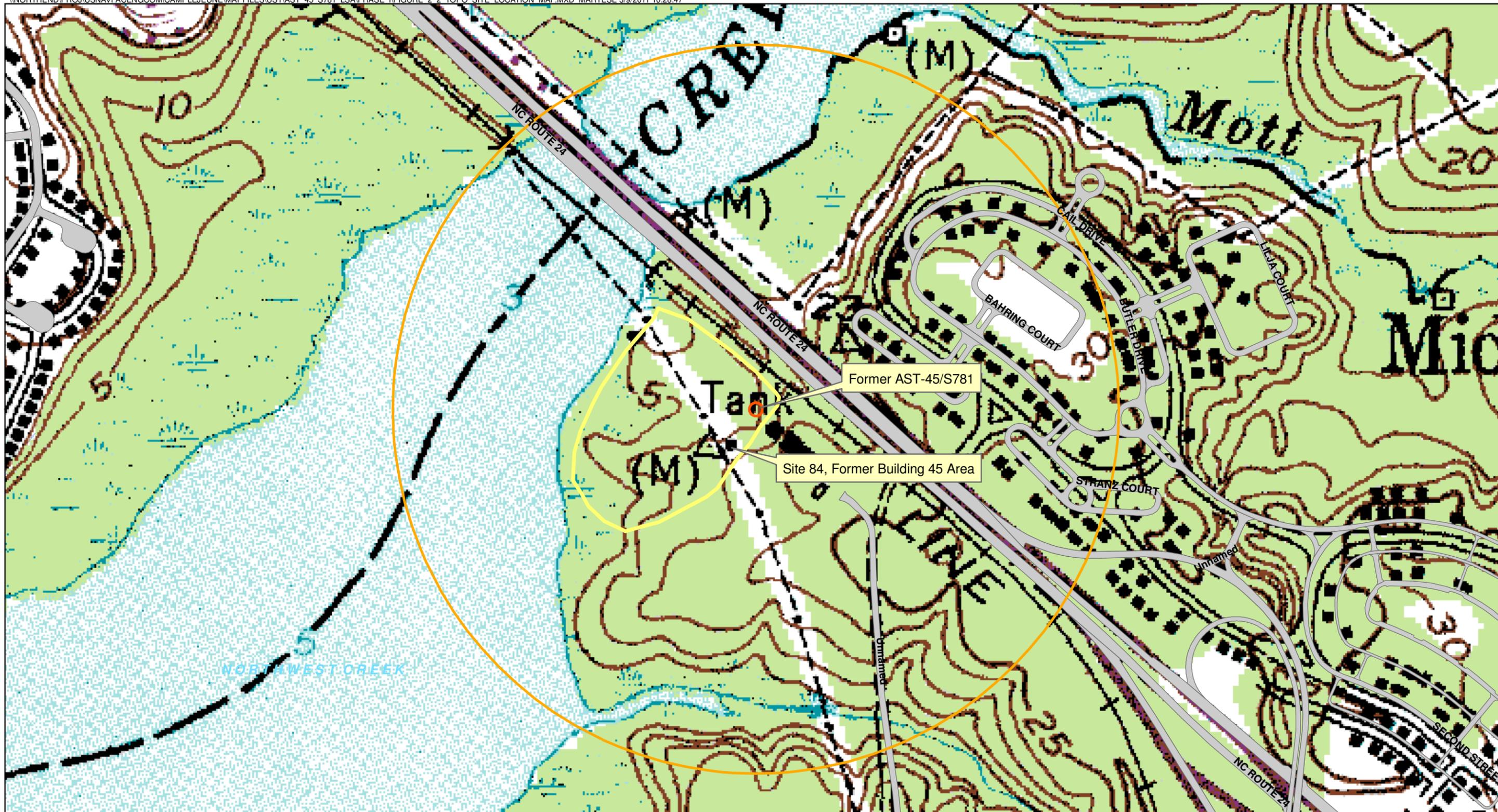


Figure 2-1
 Receptor Survey Map
 Former AST-45/S781 at IR Site 84
 MCB CamLej
 North Carolina

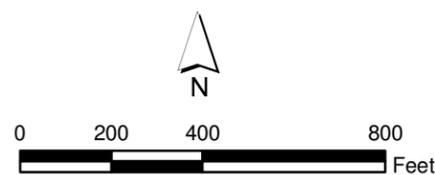
This document contains Controlled Unclassified Information (CUI). The CUI in this document is not for public release and is not to be released to personnel who do not have a valid "need-to-know" without prior approval of an authorized DoD official.





- Legend**
- Approximate Former 176,000 Gallon AST-45/S781 Location
 - 1,500 foot buffer
 - IR Site Boundaries

Topo Source: USGS 7.5 min
Camp Lejeune Quadrangle
North Carolina - Onslow Co.
Photo inspected in 1971
5 - foot contour interval



1 inch = 400 feet

Figure 2-2
Topographic Site Location Map
Former AST-45/S781 at IR Site 84
MCB CamLej
North Carolina



Tables

TABLE 5-1

Groundwater Analytical Detections
 Former AST45-S781 IAR Report
 MCB CamLej, North Carolina

Station ID	Soil-to-Groundwater MSCC	Residential MSCC	Industrial/Commerical MSCC	IR84-MW17
Sample ID				AST45-S781-SB01-4-5-10D
Sample Date				12/14/10
Chemical Name				
Volatile Organic Compounds (µg/kg)				
Acetone	24,000	14,000,000	360,000,000	1,100 J
Semivolatile Organic Compounds (µg/kg)				
No Detections				
Total Metals (mg/kg)				
Chromium	5.4	47	1,226	7.1
Lead	270	400	400	5.2
Wet Chemistry (pct)				
% Solids	--	--	--	89
Total Petroleum Hydrocarbons (µg/kg)				
Aliphatics C19-C36	#	31,000,000	810,000,000	560,000
Aliphatics C9-C18	540,000	1,500,000	40,000,000	360,000
Aromatics C11-C22	31,000*	469,000*	12,264,000*	37,000
Aromatics C11-C22 Unadjusted	31,000*	469,000*	12,264,000*	37,000

Notes:

Bold text indicates exceedance of Soil-to-Groundwater MSCC

Bold box indicates exceedance of Industrial/Commercial MSCC

J - Analyte present, value may or may not be accurate or precise

mg/kg - Milligrams per kilogram

pct - Percent

µg/kg - Micrograms per kilogram

- Health based level >100%

* - Aromatics, C9-C22 used as surrogate

TABLE 5-2

Groundwater Analytical Detections
Former AST45-S781 IAR Report
MCB CamLej, North Carolina

Station ID	IR84-MW17
Sample ID	IR84-GW17-10D
Sample Date	12/01/10
Chemical Name	
Volatile Organic Compounds (µg/l)	
No Detections	
Semivolatile Organic Compounds (µg/l)	
No Detections	
Total Metals (µg/l)	
No Detections	
Dissolved Metals (µg/l)	
No Detections	
Total Petroleum Hydrocarbons (µg/l)	
No Detections	

Notes:

µg/l - Micrograms per liter

Appendix A

Historical Documents



UNITED STATES MARINE CORPS

MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

IN REPLY REFER TO:

6287

BEMD

APR 08 1994

Mr. Patrick Waters
North Carolina Department of Environment,
Health, and Natural Resources
Division of Solid Waste Management
Superfund Section
Post Office Box 27687
Raleigh, North Carolina 27611-7687

Dear Mr. Waters:

This letter is to acknowledge your concurrence with the request to Mr. Shiver, Division of Environmental Management, Department of Environment, Health, and Natural Resources, to transfer the investigation of several underground storage tank (UST) sites to the Installation Restoration Program (IRP). Due to the impinging of several UST sites on IRP sites, the Leaking Underground Storage Tank Program will discontinue at these locations. Comprehensive investigation and remediation of these areas will be performed through the IRP.

The UST sites at the following buildings are requested to be transferred: #A-47, #A-2, #A-10, and #A-12 will be investigated as part of IRP Site #73; #903 and #1601 as part of IRP Site #78; #S-781 as part of IRP Site #84; and #AS-419, #AS-420, and #AS-421 as part of IRP Site #86. *A-13/SA-2*
Closed as UST site

If you have questions or comments, please contact Mr. Neal Paul, Director, Installation Restoration Division, Environmental Management Department, at telephone (910) 451-5068.

Sincerely,

ROBERT L. WARREN
Assistant Chief of Staff
Environmental Management
By direction of
the Commanding General



UNITED STATES MARINE CORPS
MARINE CORPS BASE
PSC BOX 20004
CAMP LEJEUNE, NORTH CAROLINA 28542-0004

READ FILE

IN REPLY REFER TO:
5090.10
BEMD
MAY 03 2007

Mr. Randy McElveen
North Carolina Department of Environment
and Natural Resources
Division of Waste Management
Superfund Section
Suite 150
401 Oberlin Road
Raleigh, North Carolina 27605

Dear Mr. McElveen:

This letter is to inform you that Marine Corps Base (MCB), Camp Lejeune, North Carolina is transferring the following 12 underground storage tank (UST) sites back to the Base UST Program. The UST sites were previously transferred to the Installation Restoration (IR) Program to be included with on-going assessments/remedial actions regulated by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). As the remedial actions at the IR Sites have been completed for CERCLA contaminants, the UST Sites must be properly closed under the appropriate Resource Conservation and Recovery Act (RCRA) regulated UST guidelines. The specific reasons for the transfer of each respective Site back to the UST Program are listed below:

- **UST-45-1 Maintenance Facility** - transferred back to the UST Program due to completion of remedial actions for IR Site 84 under the IR Program
- **UST-45 (new) Fuel Oil UST** - transferred back to the UST Program due to completion of remedial actions for IR Site 84 under the IR Program
- **UST-S781 Maintenance Facility** - transferred back to the UST Program due to completion of remedial actions for IR Site 84 under the IR Program
- **UST-A-10/SA-26 Grease Rack** - after completion of the Amended Remedial Investigation (RI) for IR Site 73, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.

- **UST-A-12-1,-2 Fueling Area** - after completion of the Amended Remedial Investigation (RI) for IR Site 73, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.
- **UST-A-13/SA2 Maintenance Shed** - after completion of the Amended Remedial Investigation (RI) for IR Site 73, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.
- **UST-A-47/SA-21 Amphibious Vehicle Maintenance Facility** - after completion of the Amended Remedial Investigation (RI) for IR Site 73, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.
- **UST-A-47-3 Maintenance Shop** - after completion of the Amended Remedial Investigation (RI) for IR Site 73, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.
- **UST-BB-9 Base Utilities Boiler House** - transferred back to the UST Program due to achieving the status of No Further Action (NFA) for IR Site 90 under the IR Program
- **UST-BB-46 Special Services Boathouse** - transferred back to the UST Program due to achieving the status of NFA for IR Site 92 under the IR Program
- **UST-BB-51 USMC Engineer Instruction Building** - transferred back to the UST Program due to achieving the status of NFA for IR Site 91 under the IR Program
- **UST-G480 Maintenance Shop** - after completion of the Amended Remedial Investigation (RI) for IR Site 35, it was determined that this UST site does not fall within the CERCLA contaminant boundary as delineated in the RI.

Provided as enclosures are the transfer letters submitted to the North Carolina Department of Environment and Natural Resources

5090.10
BEMD
MAY 03 2007

(NCDENR), UST Program Representative with the respective site maps.

If you have any questions, please contact Mr. Robert Lowder, Environmental Quality Branch, Environmental Management Division, Installations and Environmental Department, at (910) 451-9607.

Sincerely,



JOHN R. TOWNSON
Director, Environmental Management
By direction of
the Commanding Officer

- Enclosures:
1. Transfer Submittal Letter to NCDENR Superfund Section dated April 5, 1994 for UST Sites A-10/SA-26, A-12-1,-2, A-13/SA2, A-47/SA-21, A-47-3, and S781 with Site Map
 2. Transfer Submittal Letter to NCDENR UST Section dated August 7, 2000 for UST Site 45 (new) with Site Map
 3. Transfer Submittal Letter to NCDENR UST Section dated September 20, 2000 for UST Site 45-1
 4. Transfer Submittal Letter to NCDENR UST Section dated August 9, 1995 for UST Sites BB-9, BB-46, and BB-5 with Site Map
 5. Letter to NCDENR Confirming Transfer of Various UST Sites to the IR Program with Site Map for UST-G480

Copy to: (w/ encl)
NCDENR (Mr. Bruce Reed)
NAVFAC (Mr. Hood Code OPCEV) (w/o encl)
EPA (Ms. Gena Townsend)

5090.10

BEMD

~~MAY~~ 08 1968

Blind copy to: (w/o encl)
EMD EQB (Mr. Andrew Smith)

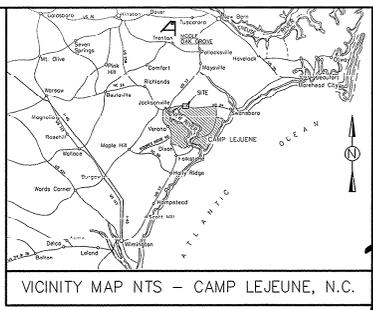
*Approved for the purposes of N.C.G.S. 143B-279.9 and 143B-279.11

Notary Public section containing name and seal of Beverly A. Riverbank, Notary Public for Onslow County, N.C., dated 1/15/2011.

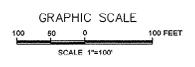


NCSS MONUMENT 'PARK' and 'DRAIN' coordinates and NAD 83/2011, NAVD 88 data.

CONTROL CORNER 'A' and 'B' coordinates and NAD 83/2001, NAVD 88 data.



Slide N-7 Certificate of Record by: Rachelle A. Campbell (Asst) Register of Deeds



- I, L. SCOTT BAGGIE, PROFESSIONAL LAND SURVEYOR NO. 3450, CERTIFY TO ONE OR MORE OF THE FOLLOWING AS INDICATED. A. THAT THIS PLAT IS OF A SURVEY THAT CREATES A SUBDIVISION OF LAND... B. THAT THIS PLAT IS OF A SURVEY THAT IS LOCATED IN SUCH PORTION OF A COUNTY OR MUNICIPALITY THAT IS UNREGULATED AS TO AN ORDINANCE THAT REGULATES PARCELS OF LAND... C. THAT THIS PLAT IS OF A SURVEY OF AN EXISTING PARCEL OR PARCELS OF LAND... D. THAT THIS PLAT IS OF A SURVEY OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS... E. THAT THE INFORMATION AVAILABLE TO THIS SURVEYOR IS SUCH THAT I AM UNABLE TO MAKE A DETERMINATION TO THE BEST OF MY PROFESSIONAL ABILITY AS TO PROVISIONS CONTAINED IN (A) THROUGH (D) ABOVE.

CERTIFICATE FOR BOUNDARY SURVEY USING GPS. I, L. SCOTT BAGGIE, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY PERFORMED UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 144, PAGE 145A, ETC.) OTHER THAN THE BOUNDARIES NOT SURVEYED AND CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK 144, PAGE 145A, THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000. THAT THE GPS/RTK POSITIONING SYSTEM (GPS) OBSERVATIONS WERE PERFORMED TO THE GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 2 - STANDARDS FOR GEODETIC NETWORKS AT THE 1 CM ACCURACY CLASSIFICATION (95% CONFIDENCE) USING RTK STATIC. I WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS DATE, 6/11/10, DAY OF JUNE 2010.



- NOTES: 1. USE SITE 45 INCIDENT NUMBERS = 21659, 22890 AND 32371. REPORTS PERTAINING TO THESE INCIDENT NUMBERS ARE ON FILE AT THE INCIDENTS INVESTIGATION REGIONAL OFFICE. 2. AREAS OF SOIL CONTAMINATION DEPICTED ON THIS PLAT CONTAIN PETROLEUM RELATED CONTAMINANTS ABOVE THE INCIDENT INVESTIGATION LEVELS AND/OR RESIDENTIAL MSOCs. 3. AREAS OF GROUNDWATER CONTAMINATION DEPICTED ON THIS PLAT CONTAIN PETROLEUM RELATED CONTAMINANTS ABOVE THE NC 2L GWQSOs. 4. BOUNDARY OF SOIL AND GROUNDWATER LAND USE CONTROL DEPICTED BY CATLIN ENGINEERS AND SCIENTISTS WAS ESTABLISHED BY REVIEWING MOST RECENT ANALYTICAL RESULTS. 5. BASS MAPS SOURCE: MCR CAMP LEJEUNE INSTALLATION GEOSPATIAL INFORMATION AND SERVICES OFFICE. 6. MAP COORDINATE SYSTEM: N.C. GRID NAVD 83. 7. ALL DISTANCES ARE HORIZONTAL GROUND. 8. COMBINED SCALE FACTOR = 0.99991785. 9. AREA CALCULATED BY COORDINATES. 10. PLANIMETRICS PROVIDED BY CATLIN ENGINEERS AND SCIENTISTS.

EXHIBIT MAP BOUNDARY OF LAND USE CONTROLS UNDERGROUND STORAGE TANK SITE 45



- LEGEND: BOUNDARY OF SOIL AND GROUNDWATER LAND USE CONTROL (solid line), FENCE (dashed line), AREA OF GROUNDWATER CONTAMINATION (hatched pattern), AREA OF SOIL CONTAMINATION (cross-hatched pattern), EXISTING STRUCTURE/BUILDING (rectangle with diagonal lines), FORMER STRUCTURE/BUILDING (rectangle with horizontal lines), NCSS CONTROL STATION (triangle with 'X').

WK DICKSON community infrastructure consultants

909 MARKET STREET WILMINGTON, NC 28401 (910) 762-4200 Office Locations: North Carolina, South Carolina, Georgia, NC LICENSE NO. F-0374

SHOWING PROPERTY OF: UNITED STATES OF AMERICA MARINE CORPS BASE CAMP LEJEUNE ONSLOW COUNTY, NORTH CAROLINA DECEMBER 6, 2010

W-16-K-D

Appendix B
Soil Boring Log

Appendix C
Soil and Groundwater Analytical Laboratory
Reports

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-1RA
Client ID: WE31-FB113010-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 09-DEC-10
Extracted By: TTC
Extraction Method: SW846 8260B
Lab Prep Batch: WG86093

Analysis Date: 09-DEC-10
Analyst: TTC
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride		6.1	ug/L	1	5	5.0	1.1	2.5
Acetone		5.2	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform		1.4	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	J	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene		7.5	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-1RA
Client ID: WE31-FB113010-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 30-NOV-10
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Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	J	0.49	ug/L	1	1	1.0	0.21	0.50
Styrene	J	0.25	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	J	0.72	ug/L	1	2	2.0	0.59	1.0
o-Xylene	J	0.28	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		98.9	%					
Toluene-d8		96.6	%					
1,2-Dichloroethane-d4		109.	%					
Dibromofluoromethane		103.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-2
Client ID: E31-EB120110-10D-GW
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	2.7	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	0.96	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	J	0.33	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene		4.6	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-2
Client ID: E31-EB120110-10D-GW
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	J	0.27	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		101.	%					
Toluene-d8		109.	%					
1,2-Dichloroethane-d4		114.	%					
Dibromofluoromethane		109.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-4
Client ID: IR84-GW17-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-4
Client ID: IR84-GW17-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		95.3	%					
Toluene-d8		97.3	%					
1,2-Dichloroethane-d4		118.	%					
Dibromofluoromethane		109.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-6
Client ID: IR78-GW09-1D-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene		1.6	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	0.81	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		51.	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-6
Client ID: IR78-GW09-1D-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		108.	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4		120	%					
Dibromofluoromethane		113.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-8
Client ID: UST1817-GW01-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene		1.6	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	E	240	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	0.41	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		160	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	E	1300	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-8
Client ID: UST1817-GW01-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 06-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG85941

Analysis Date: 06-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		99.8	%					
Toluene-d8		94.5	%					
1,2-Dichloroethane-d4		116.	%					
Dibromofluoromethane		104.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-8DL
Client ID: UST1817-GW01-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 12-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86195

Analysis Date: 12-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	10.	ug/L	10	2	20.	2.4	10.
Chloromethane	U	10.	ug/L	10	2	20.	3.6	10.
Vinyl Chloride	U	10.	ug/L	10	2	20.	2.5	10.
Bromomethane	U	10.	ug/L	10	2	20.	4.9	10.
Chloroethane	U	10.	ug/L	10	2	20.	5.5	10.
Trichlorofluoromethane	U	10.	ug/L	10	2	20.	2.4	10.
1,1-Dichloroethene	U	5.0	ug/L	10	1	10.	3.5	5.0
Carbon Disulfide	U	5.0	ug/L	10	1	10.	2.5	5.0
Freon-113	U	5.0	ug/L	10	1	10.	3.1	5.0
Methylene Chloride	U	25.	ug/L	10	5	50.	11.	25.
Acetone	U	25.	ug/L	10	5	50.	22.	25.
trans-1,2-Dichloroethene	U	5.0	ug/L	10	1	10.	2.5	5.0
Methyl tert-butyl Ether	U	5.0	ug/L	10	1	10.	3.6	5.0
1,1-Dichloroethane	U	5.0	ug/L	10	1	10.	2.1	5.0
cis-1,2-Dichloroethene		260	ug/L	10	1	10.	2.1	5.0
Chloroform	U	5.0	ug/L	10	1	10.	3.2	5.0
1,1,1-Trichloroethane	U	5.0	ug/L	10	1	10.	2.0	5.0
2-Butanone	U	25.	ug/L	10	5	50.	13.	25.
Cyclohexane	U	5.0	ug/L	10	1	10.	3.1	5.0
Carbon Tetrachloride	U	5.0	ug/L	10	1	10.	2.2	5.0
Benzene	U	5.0	ug/L	10	1	10.	2.6	5.0
1,2-Dichloroethane	U	5.0	ug/L	10	1	10.	2.0	5.0
Trichloroethene		150	ug/L	10	1	10.	2.8	5.0
1,2-Dichloropropane	U	5.0	ug/L	10	1	10.	2.5	5.0
Bromodichloromethane	U	5.0	ug/L	10	1	10.	3.3	5.0
cis-1,3-Dichloropropene	U	5.0	ug/L	10	1	10.	1.9	5.0
Toluene	U	5.0	ug/L	10	1	10.	2.7	5.0
4-Methyl-2-Pentanone	U	25.	ug/L	10	5	50.	13.	25.
trans-1,3-Dichloropropene	U	5.0	ug/L	10	1	10.	2.0	5.0
1,1,2-Trichloroethane	U	5.0	ug/L	10	1	10.	3.3	5.0
Tetrachloroethene		1700	ug/L	10	1	10.	4.0	5.0
Dibromochloromethane	U	5.0	ug/L	10	1	10.	3.0	5.0
1,2-Dibromoethane	U	5.0	ug/L	10	1	10.	2.2	5.0
2-Hexanone	U	25.	ug/L	10	5	50.	17.	25.
Chlorobenzene	U	5.0	ug/L	10	1	10.	2.2	5.0

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-8DL
Client ID: UST1817-GW01-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 01-DEC-10
Received Date: 02-DEC-10
Extract Date: 12-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86195

Analysis Date: 12-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	5.0	ug/L	10	1	10.	2.1	5.0
Styrene	U	5.0	ug/L	10	1	10.	2.3	5.0
Bromoform	U	5.0	ug/L	10	1	10.	2.3	5.0
Isopropylbenzene	U	5.0	ug/L	10	1	10.	2.3	5.0
1,1,2,2-Tetrachloroethane	U	5.0	ug/L	10	1	10.	3.8	5.0
1,3-Dichlorobenzene	U	5.0	ug/L	10	1	10.	2.6	5.0
1,4-Dichlorobenzene	U	5.0	ug/L	10	1	10.	2.4	5.0
1,2-Dichlorobenzene	U	5.0	ug/L	10	1	10.	1.5	5.0
1,2-Dibromo-3-Chloropropane	U	10.	ug/L	10	2	20.	5.0	10.
1,2,4-Trichlorobenzene	U	5.0	ug/L	10	1	10.	3.7	5.0
Methyl Acetate	U	7.5	ug/L	10	1	10.	5.3	7.5
Methylcyclohexane	U	5.0	ug/L	10	1	10.	3.0	5.0
1,2,4-Trimethylbenzene	U	5.0	ug/L	10	1	10.	1.9	5.0
1,3,5-Trimethylbenzene	U	5.0	ug/L	10	1	10.	2.0	5.0
Di-Isopropyl Ether	U	5.0	ug/L	10	1	10.	2.1	5.0
n-Butylbenzene	U	5.0	ug/L	10	1	10.	2.3	5.0
sec-Butylbenzene	U	5.0	ug/L	10	1	10.	2.1	5.0
tert-Butylbenzene	U	5.0	ug/L	10	1	10.	3.1	5.0
m+p-Xylene	U	10.	ug/L	10	2	20.	5.9	10.
o-Xylene	U	5.0	ug/L	10	1	10.	2.5	5.0
Naphthalene	U	5.0	ug/L	10	1	10.	3.0	5.0
P-Bromofluorobenzene		95.6	%					
Toluene-d8		93.0	%					
1,2-Dichloroethane-d4		102.	%					
Dibromofluoromethane		97.8	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-10
Client ID: IR88-GW31-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 09-DEC-10
Extracted By: TTC
Extraction Method: SW846 8260B
Lab Prep Batch: WG86093

Analysis Date: 09-DEC-10
Analyst: TTC
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Toluene		44.	ug/L	1	1	1.0	0.27	0.50
Benzene		120	ug/L	1	1	1.0	0.26	0.50
Ethylbenzene		7.3	ug/L	1	1	1.0	0.21	0.50
m+p-Xylenes		14.	ug/L	1	2	2.0	0.59	1.0
o-Xylene		27.	ug/L	1	1	1.0	0.25	0.50
Dibromofluoromethane		89.8	%					
Toluene-d8		95.0	%					
p-Bromofluorobenzene		104.	%					
1,2-Dichloroethane-d4		91.5	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-12RA
Client ID: IR78-GW09-1-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 09-DEC-10
Extracted By: TTC
Extraction Method: SW846 8260B
Lab Prep Batch: WG86093

Analysis Date: 09-DEC-10
Analyst: TTC
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide		2.7	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	U	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	U	2.5	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene		1.9	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	1.0	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane		2.2	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene		53.	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	U	0.50	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7472-12RA
Client ID: IR78-GW09-1-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 30-NOV-10
Received Date: 02-DEC-10
Extract Date: 09-DEC-10
Extracted By: TTC
Extraction Method: SW846 8260B
Lab Prep Batch: WG86093

Analysis Date: 09-DEC-10
Analyst: TTC
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		102.	%					
Toluene-d8		99.8	%					
1,2-Dichloroethane-d4		109.	%					
Dibromofluoromethane		107.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-1
Client ID: ST1817-SB01-5-7-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 86.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
Chloromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.8	6.5
Vinyl Chloride	U	6.5	ug/Kgdrywt	1	10	13.	1.1	6.5
Bromomethane	U	6.5	ug/Kgdrywt	1	10	13.	1.4	6.5
Chloroethane	U	6.5	ug/Kgdrywt	1	10	13.	1.7	6.5
Trichlorofluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
1,1-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Carbon Disulfide	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Freon-113	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Methylene Chloride	U	16.	ug/Kgdrywt	1	25	32.	10.	16.
Acetone	J	15.	ug/Kgdrywt	1	25	32.	6.6	16.
trans-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.92	3.2
Methyl tert-butyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	1.4	3.2
1,1-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
cis-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Chloroform	U	3.2	ug/Kgdrywt	1	5	6.5	0.46	3.2
Carbon Tetrachloride	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
1,1,1-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.55	3.2
2-Butanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Benzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Cyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
1,2-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Trichloroethene	J	1.8	ug/Kgdrywt	1	5	6.5	0.77	3.2
1,2-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
Bromodichloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.78	3.2
cis-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	0.94	3.2
Toluene	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
4-Methyl-2-Pentanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Tetrachloroethene		28.	ug/Kgdrywt	1	5	6.5	1.6	3.2
trans-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,1,2-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Dibromochloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
1,2-Dibromoethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
2-Hexanone	U	16.	ug/Kgdrywt	1	25	32.	6.2	16.
Chlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-1
Client ID: ST1817-SB01-5-7-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 86.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.84	3.2
Styrene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Bromoform	U	3.2	ug/Kgdrywt	1	5	6.5	0.91	3.2
Isopropylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,1,2,2-Tetrachloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.81	3.2
1,4-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.57	3.2
1,2-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
1,2-Dibromo-3-Chloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	2.0	3.2
1,2,4-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Methyl Acetate	U	3.9	ug/Kgdrywt	1	5	6.5	3.5	3.9
Methylcyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,2,4-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3,5-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.87	3.2
Di-isopropyl ether	U	3.2	ug/Kgdrywt	1	5	6.5	2.7	3.2
n-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
sec-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
tert-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
m+p-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
o-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
Naphthalene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
p-Bromofluorobenzene		91.4	%					
Toluene-D8		113.	%					
1,2-Dichloroethane-D4		127.	%					
Dibromofluoromethane		121.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-2RA
Client ID: 1817-SB01-10-12-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 88.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
Chloromethane	U	9.0	ug/Kgdrywt	1	10	18.	2.5	9.0
Vinyl Chloride	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
Bromomethane	U	9.0	ug/Kgdrywt	1	10	18.	2.0	9.0
Chloroethane	U	9.0	ug/Kgdrywt	1	10	18.	2.3	9.0
Trichlorofluoromethane	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
1,1-Dichloroethene	U	4.5	ug/Kgdrywt	1	5	9.0	1.7	4.5
Carbon Disulfide	JB	2.1	ug/Kgdrywt	1	5	9.0	1.4	4.5
Freon-113	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
Methylene Chloride	U	22.	ug/Kgdrywt	1	25	45.	14.	22.
Acetone		47.	ug/Kgdrywt	1	25	45.	9.2	22.
trans-1,2-Dichloroethene	U	4.5	ug/Kgdrywt	1	5	9.0	1.3	4.5
Methyl tert-butyl Ether	U	4.5	ug/Kgdrywt	1	5	9.0	2.0	4.5
1,1-Dichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	3.1	4.5
cis-1,2-Dichloroethene		12.	ug/Kgdrywt	1	5	9.0	1.6	4.5
Chloroform	U	4.5	ug/Kgdrywt	1	5	9.0	0.63	4.5
Carbon Tetrachloride	U	4.5	ug/Kgdrywt	1	5	9.0	2.3	4.5
1,1,1-Trichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	0.76	4.5
2-Butanone	U	22.	ug/Kgdrywt	1	25	45.	11.	22.
Benzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
Cyclohexane	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
1,2-Dichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.8	4.5
Trichloroethene	J	6.0	ug/Kgdrywt	1	5	9.0	1.1	4.5
1,2-Dichloropropane	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
Bromodichloromethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.1	4.5
cis-1,3-Dichloropropene	U	4.5	ug/Kgdrywt	1	5	9.0	1.3	4.5
Toluene	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
4-Methyl-2-Pentanone	U	22.	ug/Kgdrywt	1	25	45.	11.	22.
Tetrachloroethene		54.	ug/Kgdrywt	1	5	9.0	2.2	4.5
trans-1,3-Dichloropropene	U	4.5	ug/Kgdrywt	1	5	9.0	1.5	4.5
1,1,2-Trichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.7	4.5
Dibromochloromethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.8	4.5
1,2-Dibromoethane	U	4.5	ug/Kgdrywt	1	5	9.0	2.2	4.5
2-Hexanone	U	22.	ug/Kgdrywt	1	25	45.	8.6	22.
Chlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	0.92	4.5

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-2RA
Client ID: 1817-SB01-10-12-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 88.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
Chloromethane	U	9.0	ug/Kgdrywt	1	10	18.	2.5	9.0
Vinyl Chloride	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
Bromomethane	U	9.0	ug/Kgdrywt	1	10	18.	2.0	9.0
Chloroethane	U	9.0	ug/Kgdrywt	1	10	18.	2.3	9.0
Trichlorofluoromethane	U	9.0	ug/Kgdrywt	1	10	18.	1.6	9.0
1,1-Dichloroethene	U	4.5	ug/Kgdrywt	1	5	9.0	1.7	4.5
Carbon Disulfide	J	2.1	ug/Kgdrywt	1	5	9.0	1.4	4.5
Freon-113	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
Methylene Chloride	U	22.	ug/Kgdrywt	1	25	45.	14.	22.
Acetone		47.	ug/Kgdrywt	1	25	45.	9.2	22.
trans-1,2-Dichloroethene	U	4.5	ug/Kgdrywt	1	5	9.0	1.3	4.5
Methyl tert-butyl Ether	U	4.5	ug/Kgdrywt	1	5	9.0	2.0	4.5
1,1-Dichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	3.1	4.5
cis-1,2-Dichloroethene		12.	ug/Kgdrywt	1	5	9.0	1.6	4.5
Chloroform	U	4.5	ug/Kgdrywt	1	5	9.0	0.63	4.5
Carbon Tetrachloride	U	4.5	ug/Kgdrywt	1	5	9.0	2.3	4.5
1,1,1-Trichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	0.76	4.5
2-Butanone	U	22.	ug/Kgdrywt	1	25	45.	11.	22.
Benzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
Cyclohexane	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
1,2-Dichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.8	4.5
Trichloroethene	J	6.0	ug/Kgdrywt	1	5	9.0	1.1	4.5
1,2-Dichloropropane	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
Bromodichloromethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.1	4.5
cis-1,3-Dichloropropene	U	4.5	ug/Kgdrywt	1	5	9.0	1.3	4.5
Toluene	U	4.5	ug/Kgdrywt	1	5	9.0	2.5	4.5
4-Methyl-2-Pentanone	U	22.	ug/Kgdrywt	1	25	45.	11.	22.
Tetrachloroethene		54.	ug/Kgdrywt	1	5	9.0	2.2	4.5
trans-1,3-Dichloropropene	U	4.5	ug/Kgdrywt	1	5	9.0	1.5	4.5
1,1,2-Trichloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.7	4.5
Dibromochloromethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.8	4.5
1,2-Dibromoethane	U	4.5	ug/Kgdrywt	1	5	9.0	2.2	4.5
2-Hexanone	U	22.	ug/Kgdrywt	1	25	45.	8.6	22.
Chlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	0.92	4.5

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-2RA
Client ID: 1817-SB01-10-12-10D
Project: MCB Camp Lejeune CTO-W1
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 88.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.2	4.5
Styrene	U	4.5	ug/Kgdrywt	1	5	9.0	0.92	4.5
Bromoform	U	4.5	ug/Kgdrywt	1	5	9.0	1.3	4.5
Isopropylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
1,1,2,2-Tetrachloroethane	U	4.5	ug/Kgdrywt	1	5	9.0	1.5	4.5
1,3-Dichlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.1	4.5
1,4-Dichlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	0.79	4.5
1,2-Dichlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.4	4.5
1,2-Dibromo-3-Chloropropane	U	4.5	ug/Kgdrywt	1	5	9.0	2.7	4.5
1,2,4-Trichlorobenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.4	4.5
Methyl Acetate	U	5.4	ug/Kgdrywt	1	5	9.0	4.9	5.4
Methylcyclohexane	U	4.5	ug/Kgdrywt	1	5	9.0	1.7	4.5
1,2,4-Trimethylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
1,3,5-Trimethylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.2	4.5
Di-isopropyl ether	U	4.5	ug/Kgdrywt	1	5	9.0	3.8	4.5
n-Butylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
sec-Butylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
tert-Butylbenzene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
m+p-Xylene	U	4.5	ug/Kgdrywt	1	5	9.0	3.1	4.5
o-Xylene	U	4.5	ug/Kgdrywt	1	5	9.0	2.3	4.5
Naphthalene	U	4.5	ug/Kgdrywt	1	5	9.0	1.6	4.5
p-Bromofluorobenzene		109.	%					
Toluene-D8		115	%					
1,2-Dichloroethane-D4		126.	%					
Dibromofluoromethane		117.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-3RA
Client ID: 1817-SB01-15-17-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 89.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
Chloromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.8	6.5
Vinyl Chloride	U	6.5	ug/Kgdrywt	1	10	13.	1.1	6.5
Bromomethane	U	6.5	ug/Kgdrywt	1	10	13.	1.4	6.5
Chloroethane	U	6.5	ug/Kgdrywt	1	10	13.	1.7	6.5
Trichlorofluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
1,1-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Carbon Disulfide	J	1.5	ug/Kgdrywt	1	5	6.5	1.0	3.2
Freon-113	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Methylene Chloride	U	16.	ug/Kgdrywt	1	25	32.	10.	16.
Acetone	J	10.	ug/Kgdrywt	1	25	32.	6.6	16.
trans-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.92	3.2
Methyl tert-butyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	1.4	3.2
1,1-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
cis-1,2-Dichloroethene	J	1.6	ug/Kgdrywt	1	5	6.5	1.2	3.2
Chloroform	U	3.2	ug/Kgdrywt	1	5	6.5	0.46	3.2
Carbon Tetrachloride	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
1,1,1-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.55	3.2
2-Butanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Benzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Cyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
1,2-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Trichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.77	3.2
1,2-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
Bromodichloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.78	3.2
cis-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	0.94	3.2
Toluene	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
4-Methyl-2-Pentanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Tetrachloroethene		8.3	ug/Kgdrywt	1	5	6.5	1.6	3.2
trans-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,1,2-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Dibromochloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
1,2-Dibromoethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
2-Hexanone	U	16.	ug/Kgdrywt	1	25	32.	6.2	16.
Chlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2

Report of Analytical Results

Client: CH2MHill
 Lab ID: SD7749-3RA
 Client ID: 1817-SB01-15-17-10D
 Project: MCB Camp Lejeune CTO-WI
 SDG: WE31-1

Sample Date: 13-DEC-10
 Received Date: 15-DEC-10
 Extract Date: 17-DEC-10
 Extracted By: JSS
 Extraction Method: SW846 8260B
 Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
 Analyst: JSS
 Analysis Method: SW846 8260B
 Matrix: SL
 % Solids: 89.
 Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.84	3.2
Styrene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Bromoform	U	3.2	ug/Kgdrywt	1	5	6.5	0.91	3.2
Isopropylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,1,2,2-Tetrachloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.81	3.2
1,4-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.57	3.2
1,2-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
1,2-Dibromo-3-Chloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	2.0	3.2
1,2,4-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Methyl Acetate	U	3.9	ug/Kgdrywt	1	5	6.5	3.5	3.9
Methylcyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,2,4-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3,5-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.87	3.2
Di-isopropyl ether	U	3.2	ug/Kgdrywt	1	5	6.5	2.7	3.2
n-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
sec-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
tert-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
m+p-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
o-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
Naphthalene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
p-Bromofluorobenzene		100.	%					
Toluene-D8		108.	%					
1,2-Dichloroethane-D4		119.	%					
Dibromofluoromethane		112.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-4RA
Client ID: ST1601-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 90.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	10.	ug/Kgdrywt	1	10	20.	1.8	10.
Chloromethane	U	10.	ug/Kgdrywt	1	10	20.	2.8	10.
Vinyl Chloride	U	10.	ug/Kgdrywt	1	10	20.	1.7	10.
Bromomethane	U	10.	ug/Kgdrywt	1	10	20.	2.2	10.
Chloroethane	U	10.	ug/Kgdrywt	1	10	20.	2.6	10.
Trichlorofluoromethane	U	10.	ug/Kgdrywt	1	10	20.	1.8	10.
1,1-Dichloroethene	U	5.0	ug/Kgdrywt	1	5	10.	1.9	5.0
Carbon Disulfide	J	2.3	ug/Kgdrywt	1	5	10.	1.6	5.0
Freon-113	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
Methylene Chloride	U	25.	ug/Kgdrywt	1	25	50.	16.	25.
Acetone		86.	ug/Kgdrywt	1	25	50.	10.	25.
trans-1,2-Dichloroethene	U	5.0	ug/Kgdrywt	1	5	10.	1.4	5.0
Methyl tert-butyl Ether	U	5.0	ug/Kgdrywt	1	5	10.	2.2	5.0
1,1-Dichloroethane	U	5.0	ug/Kgdrywt	1	5	10.	3.4	5.0
cis-1,2-Dichloroethene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
Chloroform	U	5.0	ug/Kgdrywt	1	5	10.	0.70	5.0
Carbon Tetrachloride	U	5.0	ug/Kgdrywt	1	5	10.	2.6	5.0
1,1,1-Trichloroethane	U	5.0	ug/Kgdrywt	1	5	10.	0.84	5.0
2-Butanone	U	25.	ug/Kgdrywt	1	25	50.	12.	25.
Benzene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
Cyclohexane	U	5.0	ug/Kgdrywt	1	5	10.	2.8	5.0
1,2-Dichloroethane	U	5.0	ug/Kgdrywt	1	5	10.	2.0	5.0
Trichloroethene	J	3.2	ug/Kgdrywt	1	5	10.	1.2	5.0
1,2-Dichloropropane	U	5.0	ug/Kgdrywt	1	5	10.	2.8	5.0
Bromodichloromethane	U	5.0	ug/Kgdrywt	1	5	10.	1.2	5.0
cis-1,3-Dichloropropene	U	5.0	ug/Kgdrywt	1	5	10.	1.4	5.0
Toluene	U	5.0	ug/Kgdrywt	1	5	10.	2.8	5.0
4-Methyl-2-Pentanone	U	25.	ug/Kgdrywt	1	25	50.	12.	25.
Tetrachloroethene	U	5.0	ug/Kgdrywt	1	5	10.	2.4	5.0
trans-1,3-Dichloropropene	U	5.0	ug/Kgdrywt	1	5	10.	1.7	5.0
1,1,2-Trichloroethane	U	5.0	ug/Kgdrywt	1	5	10.	1.9	5.0
Dibromochloromethane	U	5.0	ug/Kgdrywt	1	5	10.	2.0	5.0
1,2-Dibromoethane	U	5.0	ug/Kgdrywt	1	5	10.	2.4	5.0
2-Hexanone	U	25.	ug/Kgdrywt	1	25	50.	9.6	25.
Chlorobenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.0	5.0

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-4RA
Client ID: ST1601-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 90.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.3	5.0
Styrene	U	5.0	ug/Kgdrywt	1	5	10.	1.0	5.0
Bromoform	U	5.0	ug/Kgdrywt	1	5	10.	1.4	5.0
Isopropylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
1,1,2,2-Tetrachloroethane	U	5.0	ug/Kgdrywt	1	5	10.	1.7	5.0
1,3-Dichlorobenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.2	5.0
1,4-Dichlorobenzene	U	5.0	ug/Kgdrywt	1	5	10.	0.88	5.0
1,2-Dichlorobenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.6	5.0
1,2-Dibromo-3-Chloropropane	U	5.0	ug/Kgdrywt	1	5	10.	3.0	5.0
1,2,4-Trichlorobenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.6	5.0
Methyl Acetate	U	6.0	ug/Kgdrywt	1	5	10.	5.4	6.0
Methylcyclohexane	U	5.0	ug/Kgdrywt	1	5	10.	1.9	5.0
1,2,4-Trimethylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.7	5.0
1,3,5-Trimethylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.3	5.0
Di-isopropyl ether	U	5.0	ug/Kgdrywt	1	5	10.	4.2	5.0
n-Butylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
sec-Butylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
tert-Butylbenzene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
m+p-Xylene	U	5.0	ug/Kgdrywt	1	5	10.	3.4	5.0
o-Xylene	U	5.0	ug/Kgdrywt	1	5	10.	2.6	5.0
Naphthalene	U	5.0	ug/Kgdrywt	1	5	10.	1.8	5.0
p-Bromofluorobenzene		103.	%					
Toluene-D8		114.	%					
1,2-Dichloroethane-D4		133.	%					
Dibromofluoromethane		122.	%					

Report of Analytical Results

Client: CH2MHill
 Lab ID: SD7749-5
 Client ID: T1601-SB01D-4-5-10D
 Project: MCB Camp Lejeune CTO-WJ
 SDG: WE31-1

Sample Date: 13-DEC-10
 Received Date: 15-DEC-10
 Extract Date: 16-DEC-10
 Extracted By: JSS
 Extraction Method: SW846 8260B
 Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
 Analyst: JSS
 Analysis Method: SW846 8260B
 Matrix: SL
 % Solids: 90.
 Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	6.0	ug/Kgdrywt	1	10	12.	1.1	6.0
Chloromethane	U	6.0	ug/Kgdrywt	1	10	12.	1.7	6.0
Vinyl Chloride	U	6.0	ug/Kgdrywt	1	10	12.	1.0	6.0
Bromomethane	U	6.0	ug/Kgdrywt	1	10	12.	1.3	6.0
Chloroethane	U	6.0	ug/Kgdrywt	1	10	12.	1.6	6.0
Trichlorofluoromethane	U	6.0	ug/Kgdrywt	1	10	12.	1.1	6.0
1,1-Dichloroethene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
Carbon Disulfide	U	3.0	ug/Kgdrywt	1	5	6.0	0.94	3.0
Freon-113	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
Methylene Chloride	U	15.	ug/Kgdrywt	1	25	30.	9.5	15.
Acetone	J	11.	ug/Kgdrywt	1	25	30.	6.1	15.
trans-1,2-Dichloroethene	U	3.0	ug/Kgdrywt	1	5	6.0	0.85	3.0
Methyl tert-butyl Ether	U	3.0	ug/Kgdrywt	1	5	6.0	1.3	3.0
1,1-Dichloroethane	U	3.0	ug/Kgdrywt	1	5	6.0	2.0	3.0
cis-1,2-Dichloroethene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
Chloroform	U	3.0	ug/Kgdrywt	1	5	6.0	0.42	3.0
Carbon Tetrachloride	U	3.0	ug/Kgdrywt	1	5	6.0	1.6	3.0
1,1,1-Trichloroethane	U	3.0	ug/Kgdrywt	1	5	6.0	0.50	3.0
2-Butanone	U	15.	ug/Kgdrywt	1	25	30.	7.1	15.
Benzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
Cyclohexane	U	3.0	ug/Kgdrywt	1	5	6.0	1.7	3.0
1,2-Dichloroethane	U	3.0	ug/Kgdrywt	1	5	6.0	1.2	3.0
Trichloroethene	J	0.88	ug/Kgdrywt	1	5	6.0	0.71	3.0
1,2-Dichloropropane	U	3.0	ug/Kgdrywt	1	5	6.0	1.7	3.0
Bromodichloromethane	U	3.0	ug/Kgdrywt	1	5	6.0	0.72	3.0
cis-1,3-Dichloropropene	U	3.0	ug/Kgdrywt	1	5	6.0	0.86	3.0
Toluene	U	3.0	ug/Kgdrywt	1	5	6.0	1.7	3.0
4-Methyl-2-Pentanone	U	15.	ug/Kgdrywt	1	25	30.	7.1	15.
Tetrachloroethene		7.4	ug/Kgdrywt	1	5	6.0	1.4	3.0
trans-1,3-Dichloropropene	U	3.0	ug/Kgdrywt	1	5	6.0	1.0	3.0
1,1,2-Trichloroethane	U	3.0	ug/Kgdrywt	1	5	6.0	1.2	3.0
Dibromochloromethane	U	3.0	ug/Kgdrywt	1	5	6.0	1.2	3.0
1,2-Dibromoethane	U	3.0	ug/Kgdrywt	1	5	6.0	1.4	3.0
2-Hexanone	U	15.	ug/Kgdrywt	1	25	30.	5.8	15.
Chlorobenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.61	3.0

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-5
Client ID: T1601-SB01D-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 90.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.78	3.0
Styrene	U	3.0	ug/Kgdrywt	1	5	6.0	0.61	3.0
Bromoform	U	3.0	ug/Kgdrywt	1	5	6.0	0.84	3.0
Isopropylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
1,1,2,2-Tetrachloroethane	U	3.0	ug/Kgdrywt	1	5	6.0	1.0	3.0
1,3-Dichlorobenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.74	3.0
1,4-Dichlorobenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.53	3.0
1,2-Dichlorobenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.94	3.0
1,2-Dibromo-3-Chloropropane	U	3.0	ug/Kgdrywt	1	5	6.0	1.8	3.0
1,2,4-Trichlorobenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.95	3.0
Methyl Acetate	U	3.6	ug/Kgdrywt	1	5	6.0	3.2	3.6
Methylcyclohexane	U	3.0	ug/Kgdrywt	1	5	6.0	1.2	3.0
1,2,4-Trimethylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.0	3.0
1,3,5-Trimethylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	0.80	3.0
Di-isopropyl ether	U	3.0	ug/Kgdrywt	1	5	6.0	2.5	3.0
n-Butylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
sec-Butylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
tert-Butylbenzene	U	3.0	ug/Kgdrywt	1	5	6.0	1.1	3.0
m+p-Xylene	U	3.0	ug/Kgdrywt	1	5	6.0	2.0	3.0
o-Xylene	U	3.0	ug/Kgdrywt	1	5	6.0	1.6	3.0
Naphthalene	U	3.0	ug/Kgdrywt	1	5	6.0	1.0	3.0
p-Bromofluorobenzene		91.1	%					
Toluene-D8		104.	%					
1,2-Dichloroethane-D4		112.	%					
Dibromofluoromethane		104.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-7
Client ID: UST25-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 82.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	7.5	ug/Kgdrywt	1	10	15.	1.4	7.5
Chloromethane	U	7.5	ug/Kgdrywt	1	10	15.	2.1	7.5
Vinyl Chloride	U	7.5	ug/Kgdrywt	1	10	15.	1.3	7.5
Bromomethane	U	7.5	ug/Kgdrywt	1	10	15.	1.6	7.5
Chloroethane	U	7.5	ug/Kgdrywt	1	10	15.	2.0	7.5
Trichlorofluoromethane	U	7.5	ug/Kgdrywt	1	10	15.	1.4	7.5
1,1-Dichloroethene	U	3.8	ug/Kgdrywt	1	5	7.5	1.4	3.8
Carbon Disulfide	J	5.1	ug/Kgdrywt	1	5	7.5	1.2	3.8
Freon-113	U	3.8	ug/Kgdrywt	1	5	7.5	1.4	3.8
Methylene Chloride	U	19.	ug/Kgdrywt	1	25	38.	12.	19.
Acetone		340	ug/Kgdrywt	1	25	38.	7.6	19.
trans-1,2-Dichloroethene	U	3.8	ug/Kgdrywt	1	5	7.5	1.1	3.8
Methyl tert-butyl Ether	U	3.8	ug/Kgdrywt	1	5	7.5	1.6	3.8
1,1-Dichloroethane	U	3.8	ug/Kgdrywt	1	5	7.5	2.6	3.8
cis-1,2-Dichloroethene	J	2.1	ug/Kgdrywt	1	5	7.5	1.4	3.8
Chloroform	U	3.8	ug/Kgdrywt	1	5	7.5	0.52	3.8
Carbon Tetrachloride	U	3.8	ug/Kgdrywt	1	5	7.5	2.0	3.8
1,1,1-Trichloroethane	U	3.8	ug/Kgdrywt	1	5	7.5	0.63	3.8
2-Butanone		40.	ug/Kgdrywt	1	25	38.	8.8	19.
Benzene		17.	ug/Kgdrywt	1	5	7.5	1.4	3.8
Cyclohexane	U	3.8	ug/Kgdrywt	1	5	7.5	2.1	3.8
1,2-Dichloroethane	U	3.8	ug/Kgdrywt	1	5	7.5	1.5	3.8
Trichloroethene		29.	ug/Kgdrywt	1	5	7.5	0.88	3.8
1,2-Dichloropropane	U	3.8	ug/Kgdrywt	1	5	7.5	2.1	3.8
Bromodichloromethane	U	3.8	ug/Kgdrywt	1	5	7.5	0.90	3.8
cis-1,3-Dichloropropene	U	3.8	ug/Kgdrywt	1	5	7.5	1.1	3.8
Toluene		16.	ug/Kgdrywt	1	5	7.5	2.1	3.8
4-Methyl-2-Pentanone	U	19.	ug/Kgdrywt	1	25	38.	8.8	19.
Tetrachloroethene	E	3600	ug/Kgdrywt	1	5	7.5	1.8	3.8
trans-1,3-Dichloropropene	U	3.8	ug/Kgdrywt	1	5	7.5	1.3	3.8
1,1,2-Trichloroethane	U	3.8	ug/Kgdrywt	1	5	7.5	1.4	3.8
Dibromochloromethane	U	3.8	ug/Kgdrywt	1	5	7.5	1.5	3.8
1,2-Dibromoethane	U	3.8	ug/Kgdrywt	1	5	7.5	1.8	3.8
2-Hexanone	U	19.	ug/Kgdrywt	1	25	38.	7.2	19.
Chlorobenzene	U	3.8	ug/Kgdrywt	1	5	7.5	0.76	3.8

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-7
Client ID: UST25-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 82.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene		10.	ug/Kgdrywt	1	5	7.5	0.98	3.8
Styrene	U	3.8	ug/Kgdrywt	1	5	7.5	0.76	3.8
Bromoform	U	3.8	ug/Kgdrywt	1	5	7.5	1.0	3.8
Isopropylbenzene		41.	ug/Kgdrywt	1	5	7.5	1.4	3.8
1,1,2,2-Tetrachloroethane	U	3.8	ug/Kgdrywt	1	5	7.5	1.3	3.8
1,3-Dichlorobenzene	U	3.8	ug/Kgdrywt	1	5	7.5	0.93	3.8
1,4-Dichlorobenzene	J	2.8	ug/Kgdrywt	1	5	7.5	0.66	3.8
1,2-Dichlorobenzene	U	7.8	ug/Kgdrywt	1	5	7.5	1.2	3.8
1,2-Dibromo-3-Chloropropane	U	3.8	ug/Kgdrywt	1	5	7.5	2.2	3.8
1,2,4-Trichlorobenzene	U	3.8	ug/Kgdrywt	1	5	7.5	1.2	3.8
Methyl Acetate	U	4.5	ug/Kgdrywt	1	5	7.5	4.0	4.5
Methylcyclohexane	U	3.8	ug/Kgdrywt	1	5	7.5	1.4	3.8
1,2,4-Trimethylbenzene	E	1100	ug/Kgdrywt	1	5	7.5	1.3	3.8
1,3,5-Trimethylbenzene	E	770	ug/Kgdrywt	1	5	7.5	1.0	3.8
Di-isopropyl ether	U	3.8	ug/Kgdrywt	1	5	7.5	3.2	3.8
n-Butylbenzene		88.	ug/Kgdrywt	1	5	7.5	1.4	3.8
sec-Butylbenzene		170	ug/Kgdrywt	1	5	7.5	1.4	3.8
tert-Butylbenzene		32.	ug/Kgdrywt	1	5	7.5	1.4	3.8
m+p-Xylene		21.	ug/Kgdrywt	1	5	7.5	2.6	3.8
o-Xylene		40.	ug/Kgdrywt	1	5	7.5	2.0	3.8
Naphthalene		44.	ug/Kgdrywt	1	5	7.5	1.3	3.8
p-Bromofluorobenzene	*	299.	%					
Toluene-D8		112.	%					
1,2-Dichloroethane-D4		110.	%					
Dibromofluoromethane	*	10.8	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-7DL2
Client ID: UST25-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 5030
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 82.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	2400	ug/Kgdrywt	1	10	4900	450	2400
Chloromethane	U	2400	ug/Kgdrywt	1	10	4900	690	2400
Vinyl Chloride	U	2400	ug/Kgdrywt	1	10	4900	430	2400
Bromomethane	U	2400	ug/Kgdrywt	1	10	4900	540	2400
Chloroethane	U	2400	ug/Kgdrywt	1	10	4900	640	2400
Trichlorofluoromethane	U	2400	ug/Kgdrywt	1	10	4900	440	2400
1,1-Dichloroethene	U	1200	ug/Kgdrywt	1	5	2400	460	1200
Carbon Disulfide	U	1200	ug/Kgdrywt	1	5	2400	380	1200
Freon-113	U	1200	ug/Kgdrywt	1	5	2400	440	1200
Methylene Chloride	U	6100	ug/Kgdrywt	1	25	12000	3900	6100
Acetone	U	6100	ug/Kgdrywt	1	25	12000	2500	6100
trans-1,2-Dichloroethene	U	1200	ug/Kgdrywt	1	5	2400	350	1200
Methyl tert-butyl Ether	U	1200	ug/Kgdrywt	1	5	2400	540	1200
1,1-Dichloroethane	U	1200	ug/Kgdrywt	1	5	2400	830	1200
cis-1,2-Dichloroethene	U	1200	ug/Kgdrywt	1	5	2400	440	1200
Chloroform	U	1200	ug/Kgdrywt	1	5	2400	170	1200
Carbon Tetrachloride	U	1200	ug/Kgdrywt	1	5	2400	640	1200
1,1,1-Trichloroethane	U	1200	ug/Kgdrywt	1	5	2400	200	1200
2-Butanone	U	6100	ug/Kgdrywt	1	25	12000	2900	6100
Benzene	U	1200	ug/Kgdrywt	1	5	2400	450	1200
Cyclohexane	U	1200	ug/Kgdrywt	1	5	2400	690	1200
1,2-Dichloroethane	U	1200	ug/Kgdrywt	1	5	2400	490	1200
Trichloroethene	U	1200	ug/Kgdrywt	1	5	2400	290	1200
1,2-Dichloropropane	U	1200	ug/Kgdrywt	1	5	2400	690	1200
Bromodichloromethane	U	1200	ug/Kgdrywt	1	5	2400	290	1200
cis-1,3-Dichloropropene	U	1200	ug/Kgdrywt	1	5	2400	350	1200
Toluene	U	1200	ug/Kgdrywt	1	5	2400	690	1200
4-Methyl-2-Pentanone	U	6100	ug/Kgdrywt	1	25	12000	2900	6100
Tetrachloroethene		25000	ug/Kgdrywt	1	5	2400	590	1200
trans-1,3-Dichloropropene	U	1200	ug/Kgdrywt	1	5	2400	420	1200
1,1,2-Trichloroethane	U	1200	ug/Kgdrywt	1	5	2400	480	1200
Dibromochloromethane	U	1200	ug/Kgdrywt	1	5	2400	490	1200
1,2-Dibromoethane	U	1200	ug/Kgdrywt	1	5	2400	590	1200
2-Hexanone	U	6100	ug/Kgdrywt	1	25	12000	2400	6100
Chlorobenzene	U	1200	ug/Kgdrywt	1	5	2400	250	1200

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-7DL2
Client ID: UST25-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 5030
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 82.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	1200	ug/Kgdrywt	1	5	2400	320	1200
Styrene	U	1200	ug/Kgdrywt	1	5	2400	250	1200
Bromoform	U	1200	ug/Kgdrywt	1	5	2400	340	1200
Isopropylbenzene	U	1200	ug/Kgdrywt	1	5	2400	450	1200
1,1,2,2-Tetrachloroethane	U	1200	ug/Kgdrywt	1	5	2400	410	1200
1,3-Dichlorobenzene	U	1200	ug/Kgdrywt	1	5	2400	300	1200
1,4-Dichlorobenzene	U	1200	ug/Kgdrywt	1	5	2400	220	1200
1,2-Dichlorobenzene	U	1200	ug/Kgdrywt	1	5	2400	380	1200
1,2-Dibromo-3-Chloropropane	U	1200	ug/Kgdrywt	1	5	2400	740	1200
1,2,4-Trichlorobenzene	U	1200	ug/Kgdrywt	1	5	2400	390	1200
Methyl Acetate		2500	ug/Kgdrywt	1	5	2400	1300	1500
Methylcyclohexane	U	1200	ug/Kgdrywt	1	5	2400	470	1200
1,2,4-Trimethylbenzene	J	480	ug/Kgdrywt	1	5	2400	430	1200
1,3,5-Trimethylbenzene	U	1200	ug/Kgdrywt	1	5	2400	330	1200
Di-isopropyl ether	U	1200	ug/Kgdrywt	1	5	2400	1000	1200
n-Butylbenzene	U	1200	ug/Kgdrywt	1	5	2400	450	1200
sec-Butylbenzene	U	1200	ug/Kgdrywt	1	5	2400	440	1200
tert-Butylbenzene	U	1200	ug/Kgdrywt	1	5	2400	440	1200
m+p-Xylene	U	1200	ug/Kgdrywt	1	5	2400	830	1200
o-Xylene	U	1200	ug/Kgdrywt	1	5	2400	640	1200
Naphthalene	U	1200	ug/Kgdrywt	1	5	2400	430	1200
p-Bromofluorobenzene		89.8	%					
Toluene-D8	*	83.6	%					
1,2-Dichloroethane-D4		94.9	%					
Dibromofluoromethane		89.9	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-8
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-W1
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
Methylene Chloride	U	12.	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	25.	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene		6.1	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Hexanone	U	12.	ug/Kgdrywt	1	25	25.	4.8	12.
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-8
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
Di-isopropyl ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
p-Bromofluorobenzene		116.	%					
Toluene-D8	*	124.	%					
1,2-Dichloroethane-D4		134	%					
Dibromofluoromethane	*	132.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-8RA
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	J	1.1	ug/Kgdrywt	1	5	5.0	0.78	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
Methylene Chloride	U	12.	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone		260	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Hexanone	U	12.	ug/Kgdrywt	1	25	25.	4.8	12.
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-8RA
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
Di-isopropyl ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
p-Bromofluorobenzene	*	124.	%					
Toluene-D8	*	127.	%					
1,2-Dichloroethane-D4	*	137.	%					
Dibromofluoromethane		129.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-9RA
Client ID: 5-5781-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 89.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
Chloromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.8	6.5
Vinyl Chloride	U	6.5	ug/Kgdrywt	1	10	13.	1.1	6.5
Bromomethane	U	6.5	ug/Kgdrywt	1	10	13.	1.4	6.5
Chloroethane	U	6.5	ug/Kgdrywt	1	10	13.	1.7	6.5
Trichlorofluoromethane	U	6.5	ug/Kgdrywt	1	10	13.	1.2	6.5
1,1-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Carbon Disulfide	J	1.6	ug/Kgdrywt	1	5	6.5	1.0	3.2
Freon-113	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Methylene Chloride	U	16.	ug/Kgdrywt	1	25	32.	10.	16.
Acetone		1100	ug/Kgdrywt	1	25	32.	6.6	16.
trans-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.92	3.2
Methyl tert-butyl Ether	U	3.2	ug/Kgdrywt	1	5	6.5	1.4	3.2
1,1-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
cis-1,2-Dichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Chloroform	U	3.2	ug/Kgdrywt	1	5	6.5	0.46	3.2
Carbon Tetrachloride	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
1,1,1-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.55	3.2
2-Butanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Benzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
Cyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
1,2-Dichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Trichloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	0.77	3.2
1,2-Dichloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
Bromodichloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	0.78	3.2
cis-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	0.94	3.2
Toluene	U	3.2	ug/Kgdrywt	1	5	6.5	1.8	3.2
4-Methyl-2-Pentanone	U	16.	ug/Kgdrywt	1	25	32.	7.7	16.
Tetrachloroethene	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
trans-1,3-Dichloropropene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,1,2-Trichloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
Dibromochloromethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.3	3.2
1,2-Dibromoethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.6	3.2
2-Hexanone	U	16.	ug/Kgdrywt	1	25	32.	6.2	16.
Chlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-9RA
Client ID: 5-5781-SB01-4-5-10D
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 17-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86416

Analysis Date: 17-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 89.
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.84	3.2
Styrene	U	3.2	ug/Kgdrywt	1	5	6.5	0.66	3.2
Bromoform	U	3.2	ug/Kgdrywt	1	5	6.5	0.91	3.2
Isopropylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,1,2,2-Tetrachloroethane	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.81	3.2
1,4-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.57	3.2
1,2-Dichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
1,2-Dibromo-3-Chloropropane	U	3.2	ug/Kgdrywt	1	5	6.5	2.0	3.2
1,2,4-Trichlorobenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.0	3.2
Methyl Acetate	U	3.9	ug/Kgdrywt	1	5	6.5	3.5	3.9
Methylcyclohexane	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
1,2,4-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
1,3,5-Trimethylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	0.87	3.2
Di-isopropyl ether	U	3.2	ug/Kgdrywt	1	5	6.5	2.7	3.2
n-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
sec-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
tert-Butylbenzene	U	3.2	ug/Kgdrywt	1	5	6.5	1.2	3.2
m+p-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	2.2	3.2
o-Xylene	U	3.2	ug/Kgdrywt	1	5	6.5	1.7	3.2
Naphthalene	U	3.2	ug/Kgdrywt	1	5	6.5	1.1	3.2
p-Bromofluorobenzene	*	82.9	%					
Toluene-D8		104.	%					
1,2-Dichloroethane-D4	*	135.	%					
Dibromofluoromethane		124.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-11
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.92	5.0
Chloromethane	U	5.0	ug/Kgdrywt	1	10	10.	1.4	5.0
Vinyl Chloride	U	5.0	ug/Kgdrywt	1	10	10.	0.87	5.0
Bromomethane	U	5.0	ug/Kgdrywt	1	10	10.	1.1	5.0
Chloroethane	U	5.0	ug/Kgdrywt	1	10	10.	1.3	5.0
Trichlorofluoromethane	U	5.0	ug/Kgdrywt	1	10	10.	0.91	5.0
1,1-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.93	2.5
Carbon Disulfide	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
Freon-113	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
Methylene Chloride	U	12.	ug/Kgdrywt	1	25	25.	7.9	12.
Acetone	J	14.	ug/Kgdrywt	1	25	25.	5.1	12.
trans-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.71	2.5
Methyl tert-butyl Ether	U	2.5	ug/Kgdrywt	1	5	5.0	1.1	2.5
1,1-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
cis-1,2-Dichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
Chloroform	U	2.5	ug/Kgdrywt	1	5	5.0	0.35	2.5
Carbon Tetrachloride	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
1,1,1-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.42	2.5
2-Butanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Benzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
Cyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
1,2-Dichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
Trichloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	0.59	2.5
1,2-Dichloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
Bromodichloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.60	2.5
cis-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.72	2.5
Toluene	U	2.5	ug/Kgdrywt	1	5	5.0	1.4	2.5
4-Methyl-2-Pentanone	U	12.	ug/Kgdrywt	1	25	25.	5.9	12.
Tetrachloroethene	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
trans-1,3-Dichloropropene	U	2.5	ug/Kgdrywt	1	5	5.0	0.86	2.5
1,1,2-Trichloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.97	2.5
Dibromochloromethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.0	2.5
1,2-Dibromoethane	U	2.5	ug/Kgdrywt	1	5	5.0	1.2	2.5
2-Hexanone	U	12.	ug/Kgdrywt	1	25	25.	4.8	12.
Chlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-11
Client ID: SOIL TRIP BLANK
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 16-DEC-10
Extracted By: JSS
Extraction Method: SW846 8260B
Lab Prep Batch: WG86371

Analysis Date: 16-DEC-10
Analyst: JSS
Analysis Method: SW846 8260B
Matrix: SL
% Solids: 100
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.65	2.5
Styrene	U	2.5	ug/Kgdrywt	1	5	5.0	0.51	2.5
Bromoform	U	2.5	ug/Kgdrywt	1	5	5.0	0.70	2.5
Isopropylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
1,1,2,2-Tetrachloroethane	U	2.5	ug/Kgdrywt	1	5	5.0	0.84	2.5
1,3-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.62	2.5
1,4-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.44	2.5
1,2-Dichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.78	2.5
1,2-Dibromo-3-Chloropropane	U	2.5	ug/Kgdrywt	1	5	5.0	1.5	2.5
1,2,4-Trichlorobenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.79	2.5
Methyl Acetate	U	3.0	ug/Kgdrywt	1	5	5.0	2.7	3.0
Methylcyclohexane	U	2.5	ug/Kgdrywt	1	5	5.0	0.96	2.5
1,2,4-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.87	2.5
1,3,5-Trimethylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.67	2.5
Di-isopropyl ether	U	2.5	ug/Kgdrywt	1	5	5.0	2.1	2.5
n-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.92	2.5
sec-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.91	2.5
tert-Butylbenzene	U	2.5	ug/Kgdrywt	1	5	5.0	0.90	2.5
m+p-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.7	2.5
o-Xylene	U	2.5	ug/Kgdrywt	1	5	5.0	1.3	2.5
Naphthalene	U	2.5	ug/Kgdrywt	1	5	5.0	0.88	2.5
p-Bromofluorobenzene		102.	%					
Toluene-D8		108.	%					
1,2-Dichloroethane-D4		120.	%					
Dibromofluoromethane		114.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-12
Client ID: WE31-EB121310
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide		1.8	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	2.0	ug/L	1	5	5.0	1.1	2.5
Acetone	J	5.0	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	U	0.50	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	J	0.37	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	J	0.43	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-12
Client ID: WE31-EB121310
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		87.3	%					
Toluene-d8		104.	%					
1,2-Dichloroethane-d4		98.0	%					
Dibromofluoromethane		100.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-13
Client ID: WE31-FB121310
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	U	0.40	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	1.9	ug/L	1	5	5.0	1.1	2.5
Acetone		5.3	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	0.52	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	J	0.36	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-13
Client ID: WE31-FB121310
Project: MCB Camp Lejeune CTO-WJ
SDG: WE31-1

Sample Date: 13-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		94.6	%					
Toluene-d8		106.	%					
1,2-Dichloroethane-d4		102.	%					
Dibromofluoromethane		100.	%					

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-14
Client ID: WE31-EB121410
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Dichlorodifluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
Chloromethane	U	1.0	ug/L	1	2	2.0	0.36	1.0
Vinyl Chloride	U	1.0	ug/L	1	2	2.0	0.25	1.0
Bromomethane	U	1.0	ug/L	1	2	2.0	0.49	1.0
Chloroethane	U	1.0	ug/L	1	2	2.0	0.55	1.0
Trichlorofluoromethane	U	1.0	ug/L	1	2	2.0	0.24	1.0
1,1-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.35	0.50
Carbon Disulfide	J	0.50	ug/L	1	1	1.0	0.25	0.50
Freon-113	U	0.50	ug/L	1	1	1.0	0.31	0.50
Methylene Chloride	J	2.5	ug/L	1	5	5.0	1.1	2.5
Acetone	J	3.6	ug/L	1	5	5.0	2.2	2.5
trans-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Methyl tert-butyl Ether	U	0.50	ug/L	1	1	1.0	0.36	0.50
1,1-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.21	0.50
cis-1,2-Dichloroethene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Chloroform	J	0.79	ug/L	1	1	1.0	0.32	0.50
1,1,1-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
2-Butanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
Cyclohexane	U	0.50	ug/L	1	1	1.0	0.31	0.50
Carbon Tetrachloride	U	0.50	ug/L	1	1	1.0	0.22	0.50
Benzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,2-Dichloroethane	U	0.50	ug/L	1	1	1.0	0.20	0.50
Trichloroethene	U	0.50	ug/L	1	1	1.0	0.28	0.50
1,2-Dichloropropane	U	0.50	ug/L	1	1	1.0	0.25	0.50
Bromodichloromethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
cis-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.19	0.50
Toluene	J	0.74	ug/L	1	1	1.0	0.27	0.50
4-Methyl-2-Pentanone	U	2.5	ug/L	1	5	5.0	1.3	2.5
trans-1,3-Dichloropropene	U	0.50	ug/L	1	1	1.0	0.20	0.50
1,1,2-Trichloroethane	U	0.50	ug/L	1	1	1.0	0.33	0.50
Tetrachloroethene	U	0.50	ug/L	1	1	1.0	0.40	0.50
Dibromochloromethane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2-Dibromoethane	U	0.50	ug/L	1	1	1.0	0.22	0.50
2-Hexanone	U	2.5	ug/L	1	5	5.0	1.7	2.5
Chlorobenzene	U	0.50	ug/L	1	1	1.0	0.22	0.50

Report of Analytical Results

Client: CH2MHill
Lab ID: SD7749-14
Client ID: WE31-EB121410
Project: MCB Camp Lejeune CTO-WI
SDG: WE31-1

Sample Date: 14-DEC-10
Received Date: 15-DEC-10
Extract Date: 21-DEC-10
Extracted By: DJP
Extraction Method: SW846 8260B
Lab Prep Batch: WG86542

Analysis Date: 21-DEC-10
Analyst: DJP
Analysis Method: SW846 8260B
Matrix: AQ
% Solids: NA
Report Date: 04-JAN-11

Compound	Qualifier	Result	Units	Dilution	LOQ	ADJ LOQ	ADJ MDL	ADJ LOD
Ethylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
Styrene	U	0.50	ug/L	1	1	1.0	0.23	0.50
Bromoform	U	0.50	ug/L	1	1	1.0	0.23	0.50
Isopropylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
1,1,2,2-Tetrachloroethane	U	0.50	ug/L	1	1	1.0	0.38	0.50
1,3-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.26	0.50
1,4-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.24	0.50
1,2-Dichlorobenzene	U	0.50	ug/L	1	1	1.0	0.15	0.50
1,2-Dibromo-3-Chloropropane	U	1.0	ug/L	1	2	2.0	0.50	1.0
1,2,4-Trichlorobenzene	U	0.50	ug/L	1	1	1.0	0.37	0.50
Methyl Acetate	U	0.75	ug/L	1	1	1.0	0.53	0.75
Methylcyclohexane	U	0.50	ug/L	1	1	1.0	0.30	0.50
1,2,4-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.19	0.50
1,3,5-Trimethylbenzene	U	0.50	ug/L	1	1	1.0	0.20	0.50
Di-Isopropyl Ether	U	0.50	ug/L	1	1	1.0	0.21	0.50
n-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.23	0.50
sec-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.21	0.50
tert-Butylbenzene	U	0.50	ug/L	1	1	1.0	0.31	0.50
m+p-Xylene	U	1.0	ug/L	1	2	2.0	0.59	1.0
o-Xylene	U	0.50	ug/L	1	1	1.0	0.25	0.50
Naphthalene	U	0.50	ug/L	1	1	1.0	0.30	0.50
P-Bromofluorobenzene		88.2	%					
Toluene-d8		106.	%					
1,2-Dichloroethane-d4		101.	%					
Dibromofluoromethane		103.	%					

Appendix D
Groundwater Sampling Data Sheets



GROUNDWATER SAMPLING DATA SHEET

Client: NAVFAC Mid-Atlantic
 Location: MCB CAMP LEJEUNE
 Event: CTO-WE31 SITES
 Date: 12/11/10
 Weather: Sunny, 60°F, breezy

Project Number: 408943.FI.FS
 Well ID: AST-45/5781-MW01 (NO) 1234-MW17
 Sample ID: AST-45-5781-GW01-10D @ 1445
 Sampling Team: V Cunningham / RDU 1234-GW17-10D

Total Depth: 17 FT.(BTOC)
 Depth to water: (-) 10.43 FT.(BTOC)
 Water Column: 6.57 FT.
 Well Volume: (x) 0.163 GAL/FT.
 Total Purge Vol.: 1.07 GAL. x3 = 3.21
 Purge Device: bladder pump

Measuring Device: YSI 556# 13076
 Hanna # 09010
 Date and Time: see table below

Well Dia. (inches)	Volume (gallons/foot)
0.75	0.023
1	0.041
2	0.163
4	0.653
6	1.469

FIELD PARAMETERS									
Time	Depth to Water (ft bgs)	Temp. °C	Cond. mS/cm	DO mg/L	pH SU	ORP mV	Turbidity NTU	Flow Rate (mL/min)	Color / Odor / Comments
Stabilization Criteria		± 10%	± 3%	± 10%	± 0.1	± 10 mV	± 10% or <10	(300-500)	
1415	10.45	20.49	0.181	4.59	7.13	140.0	31.2	400	
1420	10.44	20.58	0.186	4.01	7.02	141.1	22.5	"	
1425	10.43	20.51	0.190	4.01	6.93	142.1	15.7	"	
1430	10.44	20.47	0.192	4.09	6.86	143.2	9.66	"	
1435	10.44	20.43	0.192	3.90	6.81	144.2	7.04	"	
1440	10.45	20.42	0.192	3.80	6.79	144.6	6.59	"	
1445	10.45	20.41	0.192	3.92	6.78	145.0	5.77	"	

SAMPLE DATA									
Date:	Temp. °C	Cond. mS/cm	DO mg/L	pH SU	ORP mV	Turbidity NTU	Other: _____	Color / Odor / Comments	
12/11/10									
Time: 1445									
Method: low-flow	20.41	0.192	3.92	6.78	145.0	5.77			

Sample information: method, container number, size, and type, preservative used.			
Analysis	Preservative	Container requirements	No. of containers
VOCs	HCL	40 mL VOAs	3
SVOCs (EPA 8270D)	NA	1 Liter Ambers	
MADEP VPH	HCL	40 mL VOAs	2
MADEP EPH	HCL	1 Liter Ambers	2
EPA 625 BNA + 10 TICS	NA	1 Liter Ambers	2
LEAD & CHROMIUM	HNO3	250 mL or 500 mL Poly	2

Observations/Notes:
 Total Volume Purged: 4 pump started @ 1407 FID = 0.0 ppm
 pump set @ 14'
 MS/MSD: YES (NO) MS ID: _____
 SD ID: _____
 Duplicate: YES (NO) Duplicate ID: _____
 Signature(s): Verd Anna Ang